

Tel: 314-889-1100 Fax: 314-889-1101 www.bdo.com

REPORT OF THE INDEPENDENT ACCOUNTANT

To the management of SecureTrust:

Scope

We have examined SecureTrust, a Trustwave Holdings, Inc. division ("SecureTrust"), management's <u>assertion</u> that for its Certification Authority ("CA") operations at Chicago, Illinois in the United States of America, throughout the period October 1, 2019 to September 30, 2020 for its CAs as enumerated in <u>Attachment B</u>, SecureTrust has:

- disclosed its SSL certificate lifecycle management business practices in the applicable versions of its SecureTrust Certificate Policy and Certification Practices Statements enumerated in <u>Attachment A</u>, including its commitment to provide SSL certificates in conformity with the CA/Browser Forum Requirements on its <u>repository</u>, and provided such services in accordance with its disclosed practices
- maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and SSL certificates it manages is established and protected throughout their lifecycles; and
 - SSL subscriber information is properly authenticated
- 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
- maintained effective controls to provide reasonable assurance that it meets the Network and Certificate System Security Requirements as set forth by the CA/Browser Forum

based on the <u>WebTrust Principles and Criteria for Certification Authorities</u> - <u>SSL Baseline with</u> Network Security v2.4.1.

Certification Authority's Responsibilities

SecureTrust's management is responsible for its assertion, including the fairness of its presentation, and the provision of its described services in accordance with the <u>WebTrust</u> <u>Principles and Criteria for Certification Authorities - SSL Baseline with Network Security v2.4.1</u>.

BDO USA, LLP, a Delaware limited liability partnership, is the U.S. member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms.



Independent Accountant's Responsibilities

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 judgement, 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 a reasonable basis for our opinion.

Relative Effectiveness of Controls

The relative effectiveness and significance of specific controls at SecureTrust 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.

Inherent Limitations

Because of the nature and inherent limitations of controls, SecureTrust'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.

Independent Accountant's Opinion

In our opinion management's assertion, as referred to above, is fairly stated, in all material respects.

This report does not include any representation as to the quality of SecureTrust's services other than its CA operations in Chicago, Illinois, in the United States of America, nor the suitability of any of SecureTrust's services for any customer's intended purpose.



Other Matters

Without modifying our opinion, we noted the following other matters during our procedures:

M	atter Topic	Matter Description
1	Certificate Content	Per Mozilla Bug 1646711, SecureTrust was notified of an EV mis- issuance. The single certificate specified in the Certificate Problem Report indicated it contained an invalid serialNumber of "N/A", which does not comply with the specification in EV Guidelines section 9.2.5. Upon investigation, one additional certificate was found to have been mis-issued. This certificate included "metadata-only" in the Subject field. Both certificates were revoked within the required five-day timeline.
		Per Mozilla Bug #1667799, a Certificate Problem Report was submitted for two (2) certificates with invalid Subject stateOrProvince values. A response with a preliminary report was not provided within 24 hours and SecureTrust opened Mozilla Bug #1667842. SecureTrust disclosed it mis-issued two (2) certificates with invalid Subject stateOrProvince values. Both certificates were revoked within the required five-day timeline.
2	Audit Report Inclusion	Per Mozilla Bug 1600844, SecureTrust's 2018 WebTrust Baseline report failed to include one intermediate CA that was technically capable of TLS certificate issuance. Upon discovery, this CA was revoked within the required seven-day timeline.

The World Health Organization classified the COVID-19 outbreak as a pandemic in March 2020. Based on the rapid increase in exposure globally, the gravity or length of the impact of the COVID-19 outbreak cannot be estimated at this time.

Use of the WebTrust Seal

SecureTrust's use of the WebTrust for Certification Authorities - SSL Baseline with Network Security 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.

BDO USA, LLP

November 2, 2020



ATTACHMENT A - CERTIFICATION PRACTICE STATEMENT AND CERTIFICATE POLICY VERSIONS IN-SCOPE

Policy Name	Policy Version	Policy Date
SecureTrust Certificate Policy and Certification Practices Statement	Version 6.3	September 23, 2020
SecureTrust Certificate Policy and Certification Practices Statement	Version 6.2	July 15, 2020
SecureTrust Certificate Policy and Certification Practices Statement	Version 6.1	March 18, 2020
SecureTrust Certificate Policy and Certification Practices Statement	Version 6.0	April 24, 2019



ATTACHMENT B - IN-SCOPE CAs

Root CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
CN = XRamp Global Certification Authority O = XRamp Security Services Inc OU = www.xrampsecurity.com C = US	CECDDC905099D8DADFC5B1D209B737CBE2C18CFB2C10C0FF0BCF0D3286FC1AA2	11/1/2004	1/1/2035
CN = SecureTrust CA O = SecureTrust Corporation C = US	F1C1B50AE5A20DD8030EC9F6BC24823DD367B5255759B4E71B61FCE9F7375D73	11/7/2006	12/31/2029
CN = Secure Global CA O = SecureTrust Corporation C = US	4200F5043AC8590EBB527D209ED1503029FBCBD41CA1B506EC27F15ADE7DAC69	11/7/2006	12/31/2029
CN = Trustwave Global Certification Authority O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	97552015F5DDFC3C8788C006944555408894450084F100867086BC1A2BB58DC8	8/23/2017	8/23/2042
CN = Trustwave Global ECC P256 Certification Authority O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	945BBC825EA554F489D1FD51A73DDF2EA624AC7019A05205225C22A78CCFA8B4	8/23/2017	8/23/2042
CN = Trustwave Global ECC P384 Certification Authority O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	55903859C8C0C3EBB8759ECE4E2557225FF5758BBD38EBD48276601E1BD58097	8/23/2017	8/23/2042



SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave Extended Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	EEA36C0FFA3F54FFDB0CF14B3BD34A53EC7B775F54053DD8B07DFD2F8BEC9083	10/13/2014	10/10/2024
E = ca@trustwave.com CN = Trustwave Extended Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	49C58270F70F1BE0B7C19D1BC2C2EBC41E2FDE0D4885D4FA65EF0370ACEC7A00	9/1/2016	9/29/2024
E = ca@trustwave.com CN = Trustwave Secure Global Extended Validation CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	45B2B08E1B58948A028BE13A67C0E20D4B2466AE2B6EC6250EBB10FD6B7F8239	8/12/2015	8/9/2025
E = ca@trustwave.com CN = Trustwave XRamp Global Extended Validation CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	1D0CD7EF3C19265508E20E58B3538964F4A11ADEC8A71D8AB8A8AFF15683C6AE	8/12/2015	8/9/2025
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Extended Validation CA, Level 1	DD23355C61D59970423004729795CAEF77AFDB39767A795740D4E04CB6158A99	1/29/2019	1/29/2029



SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Extended Validation CA, Level 1	18626A3B7211128D563469C654557D13C9366D7FCEC8B94DB4F0AA7E05944041	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P- 256 Extended Validation CA, Level 1	275BF0046E0270178B13B67E4DB150A10197CB71F9A061FAD36B3D76639FE186	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P- 384 Extended Validation CA, Level 1	29F8E104DF38E612BF4F505365B5D0B0B20DD4E89C908306484EB8374C1E66D8	2/6/2018	2/24/2028
E = ca@trustwave.com CN = Trustwave Organization Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	FF1E0D233196B7EC20BEDFC65988E0AE1985EC6AC332A79ADFFE71B86BC0208A	10/1/2014	9/28/2024
E = ca@trustwave.com CN = Trustwave Organization Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	58EA0688B7909AAA8EAAA2FFF36F3BBE8F4A2AD03BD70243B3903469DB4890F7	9/1/2016	9/29/2024



SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Organization Validation CA, Level 1	11D9330D1A2398508DD50D3094EB28B1B44900D9928F8C22B25EF7A781BDB403	1/29/2019	1/29/2029
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Organization Validation CA, Level 1	2E63DC1BECF427F9902B49DE6330FD3E8EEBF88B14E653B3BA2E37D4E4880965	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P- 256 Organization Validation CA, Level 1	18ABD6E9CA907BB36754D0C046EBB50DD9B95D527824D9581A31B750FCFDBAEF	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P- 384 Organization Validation CA, Level 1	87D42169B2693551CA205CCF17F06F6E6651F7218CD6D26607BF5BA4DD2F26F2	2/6/2018	2/24/2028
E = ca@trustwave.com CN = Trustwave Domain Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	859968F9278B4DC82EE30FD118A5D297D284B687CB64CF9755AB8A9D38F2B70F	10/1/2014	9/28/2024



SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave Domain Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	74F56E1AB339D83E80F2F6E264F894775B426C89B44703DF4FA8A3231163A2BD	9/1/2016	9/29/2024
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Domain Validation CA, Level 1	5E60965804461930AC27B6DBE3445679EAE4131C22AFB88AF7ACF6A1917B5ABA	1/29/2019	1/29/2029
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Domain Validation CA, Level 1	6782C6E9ADBF9216E268306D46333FBC674BDEDF86B67BE777079E2C0E36888E	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P- 256 Domain Validation CA, Level 1	F62E35AAD345FB253863CFC0E65823ACD3E7F0846D19B8326D709C7919A22D7E	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P- 384 Domain Validation CA, Level 1	C63DF9618FBAF48662BA12ABE87B212CF777C27A446A0FA555D7A9D191148ED7	2/6/2018	2/24/2028



Revoked CAs			
Subject DN	SHA2 Thumbprint	Valid From	Revoked On
E = ca@trustwave.com CN = Trustwave Code Signing CA, Level 2 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	95469A45EE12F3A7D1CA880A2F52442E2863593923FEC08AF6BCAB2375459E9B	12/22/2008	12/3/2019

SECURETRUST MANAGEMENT'S ASSERTION

SecureTrust, a Trustwave Holdings, Inc. division ("SecureTrust"), operates the Certification Authority ("CA") services for its CAs enumerated in <u>Attachment B</u> in scope for SSL Baseline and Network Security Requirements and provides SSL CA services.

SecureTrust management has assessed its disclosures of its certificate practices and controls over its SSL CA services. Based on that assessment, in providing its SSL CA services at Chicago, Illinois, in the United States of America, throughout the period October 1, 2019 to September 30, 2020, SecureTrust has:

- disclosed its SSL certificate lifecycle management business practices in the applicable versions of its SecureTrust Certificate Policy and Certification Practices Statements enumerated in <u>Attachment A</u>, including its commitment to provide SSL certificates in conformity with the CA/Browser Forum Requirements on its <u>repository</u>, and provided such services in accordance with its disclosed practices
- maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and SSL certificates it manages is established and protected throughout their lifecycles; and
 - SSL subscriber information is properly authenticated
- 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
- maintained effective controls to provide reasonable assurance that it meets the Network and Certificate System Security Requirements as set forth by the CA/Browser Forum

based on the <u>WebTrust Principles and Criteria for Certification Authorities - SSL Baseline with</u> <u>Network Security v2.4.1</u>.

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Tom Wallace Chief Operating Officer, SecureTrust November <u></u>, 2020

SecureTrust

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CN = SecureTrust CA O = SecureTrust Corporation C = US	F1C1B50AE5A20DD8030EC9F6BC24823DD367B5255759B4E71B61FCE9F7375D73	11/7/2006	12/31/2029
CN = Secure Global CA O = SecureTrust Corporation C = US	4200F5043AC8590EBB527D209ED1503029FBCBD41CA1B506EC27F15ADE7DAC69	11/7/2006	12/31/2029
CN = Trustwave Global Certification Authority O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	97552015F5DDFC3C8788C006944555408894450084F100867086BC1A2BB58DC8	8/23/2017	8/23/2042
CN = Trustwave Global ECC P256 Certification Authority O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	945BBC825EA554F489D1FD51A73DDF2EA624AC7019A05205225C22A78CCFA8B4	8/23/2017	8/23/2042
CN = Trustwave Global ECC P384 Certification Authority O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	55903859C8C0C3EBB8759ECE4E2557225FF5758BBD38EBD48276601E1BD58097	8/23/2017	8/23/2042

Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave Extended Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	EEA36C0FFA3F54FFDB0CF14B3BD34A53EC7B775F54053DD8B07DFD2F8BEC9083	10/13/2014	10/10/2024
E = ca@trustwave.com CN = Trustwave Extended Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	49C58270F70F1BE0B7C19D1BC2C2EBC41E2FDE0D4885D4FA65EF0370ACEC7A00	9/1/2016	9/29/2024
E = ca@trustwave.com CN = Trustwave Secure Global Extended Validation CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	45B2B08E1B58948A028BE13A67C0E20D4B2466AE2B6EC6250EBB10FD6B7F8239	8/12/2015	8/9/2025
E = ca@trustwave.com CN = Trustwave XRamp Global Extended Validation CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	1D0CD7EF3C19265508E20E58B3538964F4A11ADEC8A71D8AB8A8AFF15683C6AE	8/12/2015	8/9/2025
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Extended Validation CA, Level 1	DD23355C61D59970423004729795CAEF77AFDB39767A795740D4E04CB6158A99	1/29/2019	1/29/2029

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C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Extended Validation CA, Level 1	18626A3B7211128D563469C654557D13C9366D7FCEC8B94DB4F0AA7E05944041	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P- 256 Extended Validation CA, Level 1	275BF0046E0270178B13B67E4DB150A10197CB71F9A061FAD36B3D76639FE186	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P- 384 Extended Validation CA, Level 1	29F8E104DF38E612BF4F505365B5D0B0B20DD4E89C908306484EB8374C1E66D8	2/6/2018	2/24/2028
E = ca@trustwave.com CN = Trustwave Organization Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	FF1E0D233196B7EC20BEDFC65988E0AE1985EC6AC332A79ADFFE71B86BC0208A	10/1/2014	9/28/2024
E = ca@trustwave.com CN = Trustwave Organization Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	58EA0688B7909AAA8EAAA2FFF36F3BBE8F4A2AD03BD70243B3903469DB4890F7	9/1/2016	9/29/2024

SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Organization Validation CA, Level 1	11D9330D1A2398508DD50D3094EB28B1B44900D9928F8C22B25EF7A781BDB403	1/29/2019	1/29/2029
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Organization Validation CA, Level 1	2E63DC1BECF427F9902B49DE6330FD3E8EEBF88B14E653B3BA2E37D4E4880965	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P- 256 Organization Validation CA, Level 1	18ABD6E9CA907BB36754D0C046EBB50DD9B95D527824D9581A31B750FCFDBAEF	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P- 384 Organization Validation CA, Level 1	87D42169B2693551CA205CCF17F06F6E6651F7218CD6D26607BF5BA4DD2F26F2	2/6/2018	2/24/2028
E = ca@trustwave.com CN = Trustwave Domain Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	859968F9278B4DC82EE30FD118A5D297D284B687CB64CF9755AB8A9D38F2B70F	10/1/2014	9/28/2024

Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave Domain Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	74F56E1AB339D83E80F2F6E264F894775B426C89B44703DF4FA8A3231163A2BD	9/1/2016	9/29/2024
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Domain Validation CA, Level 1	5E60965804461930AC27B6DBE3445679EAE4131C22AFB88AF7ACF6A1917B5ABA	1/29/2019	1/29/2029
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Domain Validation CA, Level 1	6782C6E9ADBF9216E268306D46333FBC674BDEDF86B67BE777079E2C0E36888E	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P- 256 Domain Validation CA, Level 1	F62E35AAD345FB253863CFC0E65823ACD3E7F0846D19B8326D709C7919A22D7E	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P- 384 Domain Validation CA, Level 1	C63DF9618FBAF48662BA12ABE87B212CF777C27A446A0FA555D7A9D191148ED7	2/6/2018	2/24/2028

Revoked CAs					
Subject DN	SHA2 Thumbprint	Valid From	Revoked On		
E = ca@trustwave.com CN = Trustwave Code Signing CA, Level 2 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	95469A45EE12F3A7D1CA880A2F52442E2863593923FEC08AF6BCAB2375459E9B	12/22/2008	12/3/2019		