BDO

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

101 S Hanley Rd, #800
St. Louis, MO 63105

REPORT OF THE INDEPENDENT ACCOUNTANT

To the management of SecureTrust:

Scope

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

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its SecureTrust Certificate Policy and Certification Practices Statement enumerated in Attachment A

- maintained effective controls to provide reasonable assurance that SecureTrust provides its services in accordance with its SecureTrust Certificate Policy and Certification Practices Statement

- 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 SecureTrust

- 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 the WebTrust Principles and Criteria for Certification Authorities v2.2.

SecureTrust does not escrow its CA keys, does not provide subscriber key lifecycle controls, does not provide certificate suspension services, and does not provide subordinate CA certificate lifecycle management services to third parties. Accordingly, our examination did not extend to controls that would address those criteria.

SecureTrust makes use of external registration authorities for subscriber registration activities of client authentication certificates as disclosed in SecureTrust's business practices. Our examination did not extend to the controls exercised by these external registration authorities.

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 WebTrust Principles and Criteria for Certification Authorities v2.2.

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 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 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

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 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	97552015F5DDFC3C8788C00694455540884450084F100867086BC1A2BB58DC8	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	DD23355C61D599704023004729795CAEF77AFDB39767A795740D4E04CB6158A99	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

S/MIME CAs			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
E = ca@trustwave.com CN = Trustwave S/MIME SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	5C4BC597291AB9C7023FB6445FD60381A65C60DDD404F124E5FA143FE98B05F3	10/1/2014	9/28/2024
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Client CA, Level 1	95811E24BEC41B5F2BCCCAFEEADA7711404EDF6604B8FF119C2E433500990BEB	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-256 Client CA, Level 1	D2BB9489EFACF48AD6B342D339C042953058E8F5DA4226ED3E76CA70C172E053	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-384 Client CA, Level 1	84C15D35B6E2F2F41E4A45E87BD3E96C1953A4FEEF196E425C8046650A75CE07	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Secure Email CA, Level 1	1A948CB5E91C7907430930458891A65A0FAAFE8FB3AF07824AB637F220F66D29	1/29/2019	1/29/2029
C = US O = SecureTrust CN = SecureTrust TWG Secure Email CA, Level 1	15166E3B071EC2E2D28B8571E298D89B2426F2A904EBFA0835585FFD924585C1	9/21/2020	9/21/2030

S/MIME CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-256 Secure Email CA, Level 1	DB83E0E21E77588E7B532F273CD9501C6F0C3D99F7E3899F9D8F3B0D75D22DBD	9/21/2020	9/21/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-384 Secure Email CA, Level 1	BC129EB22959BD5A8C980E4DA4116C4ABD4A36D3A3649F52CCF4A60D6DEDF4C2	9/21/2020	9/21/2030
C = US O = SecureTrust CN = SecureTrust Secure Email CA, Level 2	FC2B3B473BF00DD6110707B622F1727E20EE5665F64ED968AD1DAFCDA5C2787C	9/21/2020	9/21/2030

Client Authentication CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave Client Authentication SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	7FE20CEEE2B6972D862542060AE9A88FEA5E43A977A7FB25C95246F7F76C0668	10/1/2014	9/28/2024
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Client Authentication CA, Level 1	2F50860F968053A7DBA17851341759B0D5C0412F857A2CD19F3731DD3BED1B6B	1/29/2019	1/29/2029
C = US O = SecureTrust CN = SecureTrust TWG Client CA, Level 2	729C7C2819CA196EC3C7E197C32FD930E8FE8B2FF8C78734A03B79535813E186	9/21/2020	9/21/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-256 Client CA, Level 2	435EEEB914C2B19C8077E064B0902030B69258015C31F9CE493447686640F0A4	9/21/2020	9/21/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-384 Client CA, Level 2	397D802B65AFBF7E8F03D83A5F81013DAFF9638B07D9CD0A0AB9EA01A66FD395	9/21/2020	9/21/2030

Code Signing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave Code Signing SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	F420949BB55A462D9B927449E49DA23F683AB4B6166E05815808F5D9FD36646B	10/1/2014	9/28/2024
E = ca@trustwave.com CN = Trustwave Code Signing SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	53A8129F71A9827D03704670720C375061821155C076E86A490D6EB871E03AF0	9/1/2016	9/29/2024
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Code Signing CA, Level 1	4D10A086866731C0E16174192114C6076C7995DD5493006DD2054EFBD169AE2B	2/6/2018	8/21/2042
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-256 Code Signing CA, Level 1	730E02CD3AFD489FDB9D708F674B45FA8CFD73AB926B94855B2C0376F9A528D9	2/6/2018	8/21/2042
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-384 Code Signing CA, Level 1	7F2A890E8D9AFDB9C0F08AF1CB8DDA18C5802C5BEA50E0B18071D3CF973A46BD	2/6/2018	8/21/2042

Code Signing CAs

Subject DN	SHA2 Thumbprint	Valid From	Valid To
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Code Signing CA, Level 1	5E4FF34628DABED6859BACF2E128A807A08F49B0C259D9BE2E33FEE066AC7AF7	1/29/2019	1/29/2029

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

Timestamping CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
CN = Trustwave Timestamping CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	EF5AE8BBF214337779B8A30730962638BB3AFE100C615A49730F709A2518861B	1/25/2017	12/25/2034
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Timestamping CA, Level 1	643B81C90B3505BFAFF80EAAC9EE28C9F406362A8F56DD26ECFA29335958C856	2/6/2018	8/21/2042
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-256 Timestamping CA, Level 1	7FC29B856B23EEFC3A5E68775E0B37DC320627FD5C19368BB68397EE219A667A	2/6/2018	8/21/2042
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-384 Timestamping CA, Level 1	F75E65420AD6C018D915BBBA40A77122B30ACFD417DA3A885E4C4CD9E065A415	2/6/2018	8/21/2042
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Timestamping CA, Level 1	090DF1220A60E8E865F8607B9A24BC3BE00D933D438FB686A3173DEFC5BFBB40	1/29/2019	12/31/2034

SECURETRUST MANAGEMENT'S ASSERTION

SecureTrust, a Trustwave Holdings, Inc. division ("SecureTrust"), operates the Certification Authority ("CA") services for its CAs enumerated in Attachment B, and provides the following CA services:

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

The management of SecureTrust is responsible for establishing and maintaining effective controls over its CA operations, including its CA business practices disclosure on its repository, 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.

SecureTrust makes use of external registration authorities for subscriber registration activities of client authentication certificates as disclosed in SecureTrust's business practices. Our assertion does not extend to the controls exercised by these external registration authorities.

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 only provide reasonable assurance with respect to SecureTrust's CA operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

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

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environment control practices in its applicable versions of its SecureTrust Certificate Policy and Certification Practices Statement enumerated in Attachment A

- maintained effective controls to provide reasonable assurance that SecureTrust provides its services in accordance with its SecureTrust Certificate Policy and Certification Practices Statement

- 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 SecureTrust

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

based on the WebTrust Principles and Criteria for Certification Authorities v2.2, including the following:

CA Business Practices Disclosure

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

CA Business Practices Management

- Certification Practice Statement Management
- Certificate Policy Management

CA Environmental Controls

- Security Management
- Asset Classification and Management
- Personnel Security
- Physical and Environmental Security
- Operations Management
- System Access Management
- System Development, Maintenance, and Change Management
- Disaster Recovery, Backups, and 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
- CA Key Destruction
- CA Key Compromise
- CA Cryptographic Hardware Lifecycle Management
- CA Key Transportation
- CA Key Migration

Certificate Lifecycle Management Controls

- Subscriber Registration
- Certificate Renewal
- Certificate Rekey

- Certificate Issuance
- Certificate Distribution
- Certificate Revocation
- Certificate Validation

SecureTrust does not escrow its CA keys, does not provide subscriber key lifecycle controls, does not provide certificate suspension services, and does not provide subordinate CA certificate lifecycle management services. Accordingly, our assertion does not extend to controls that would address those criteria.

Tom Wallace
Chief Operating Officer, SecureTrust
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	DD23355C61D599704230047297 95CAEF77AFDB39767A795740D4E04CB6158A99	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

S/MIME CAs

Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave S/MIME SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	5C4BC597291AB9C7023FB6445FD60381A65C60DDD404F124E5FA143FE98B05F3	10/1/2014	9/28/2024
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Client CA, Level 1	95811E24BEC41B5F2BCCCAFEEADA7711404EDF6604B8FF119C2E433500990BEB	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-256 Client CA, Level 1	D2BB9489EFACF48AD6B342D339C042953058E8F5DA4226ED3E76CA70C172E053	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-384 Client CA, Level 1	84C15D35B6E2F2F41E4A45E87BD3E96C1953A4FEEF196E425C8046650A75CE07	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Secure Email CA, Level 1	1A948CB5E91C7907430930458891A65A0FAAFE8FB3AF07824AB637F220F66D29	1/29/2019	1/29/2029
C = US O = SecureTrust CN = SecureTrust TWG Secure Email CA, Level 1	15166E3B071EC2E2D28B8571E298D89B2426F2A904EBFA0835585FFD924585C1	9/21/2020	9/21/2030

S/MIME CAs			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-256 Secure Email CA, Level 1	DB83E0E21E77588E7B532F273CD9501C6F0C3D99F7E3899F9D8F3B0D75D22DBD	9/21/2020	9/21/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-384 Secure Email CA, Level 1	BC129EB22959BD5A8C980E4DA4116C4ABD4A36D3A3649F52CCF4A60D6DEDF4C2	9/21/2020	9/21/2030
C = US O = SecureTrust CN = SecureTrust Secure Email CA, Level 2	FC2B3B473BF00DD6110707B622F1727E20EE5665F64ED968AD1DAFCDA5C2787C	9/21/2020	9/21/2030

Client Authentication CAs

Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave Client Authentication SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	7FE20CEEE2B6972D862542060AE9A88FEA5E43A977A7FB25C95246F7F76C0668	10/1/2014	9/28/2024
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Client Authentication CA, Level 1	2F50860F968053A7DBA17851341759B0D5C0412F857A2CD19F3731DD3BED1B6B	1/29/2019	1/29/2029
C = US O = SecureTrust CN = SecureTrust TWG Client CA, Level 2	729C7C2819CA196EC3C7E197C32FD930E8FE8B2FF8C78734A03B79535813E186	9/21/2020	9/21/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-256 Client CA, Level 2	435EEEB914C2B19C8077E064B0902030B69258015C31F9CE493447686640F0A4	9/21/2020	9/21/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-384 Client CA, Level 2	397D802B65AFBF7E8F03D83A5F81013DAFF9638B07D9CD0A0AB9EA01A66FD395	9/21/2020	9/21/2030

Code Signing CAs

Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave Code Signing SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	F420949BB55A462D9B927449E49DA23F683AB4B6166E05815808F5D9FD36646B	10/1/2014	9/28/2024
E = ca@trustwave.com CN = Trustwave Code Signing SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	53A8129F71A9827D03704670720C375061821155C076E86A490D6EB871E03AF0	9/1/2016	9/29/2024
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Code Signing CA, Level 1	4D10A086866731C0E16174192114C6076C7995DD5493006DD2054EFBD169AE2B	2/6/2018	8/21/2042
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-256 Code Signing CA, Level 1	730E02CD3AFD489FDB9D708F674B45FA8CFD73AB926B94855B2C0376F9A528D9	2/6/2018	8/21/2042
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-384 Code Signing CA, Level 1	7F2A890E8D9AFDB9C0F08AF1CB8DDA18C5802C5BEA50E0B18071D3CF973A46BD	2/6/2018	8/21/2042

Code Signing CAs

Subject DN	SHA2 Thumbprint	Valid From	Valid To
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Code Signing CA, Level 1	5E4FF34628DABED6859BACF2E128A807A08F49B0C259D9BE2E33FEE066AC7AF7	1/29/2019	1/29/2029

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

Timestamping CAs			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
CN = Trustwave Timestamping CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	EF5AE8BBF214337779B8A30730962638BB3AFE100C615A49730F709A2518861B	1/25/2017	12/25/2034
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Timestamping CA, Level 1	643B81C90B3505BFAFF80EAAC9EE28C9F406362A8F56DD26ECFA29335958C856	2/6/2018	8/21/2042
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-256 Timestamping CA, Level 1	7FC29B856B23EEFC3A5E68775E0B37DC320627FD5C19368BB68397EE219A667A	2/6/2018	8/21/2042
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-384 Timestamping CA, Level 1	F75E65420AD6C018D915BBBA40A77122B30ACFD417DA3A885E4C4CD9E065A415	2/6/2018	8/21/2042
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Timestamping CA, Level 1	090DF1220A60E8E865F8607B9A24BC3BE00D933D438FB686A3173DEFC5BFBB40	1/29/2019	12/31/2034