

INDEPENDENT ASSURANCE REPORT

To the management of Entrust Corporation doing business as AffirmTrust (“AffirmTrust”):

Scope

We have been engaged, in a reasonable assurance engagement, to report on AffirmTrust management’s [statement](#) that for its Certification Authority (CA) operations in Ottawa, Ontario, Canada and Toronto, Ontario, Canada throughout the period 1 March 2020 to 28 February 2021 (the “Period”) for its CAs as enumerated in [Attachment A](#), AffirmTrust has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in its Certification Practice Statements as enumerated in [Attachment B](#)
- maintained effective controls to provide reasonable assurance that AffirmTrust provides its services in accordance with its Certification Practice Statements
- maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and certificates it manages is established and protected throughout their lifecycles;
 - the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;
 - subscriber information is properly authenticated (for the registration activities performed by AffirmTrust); and
 - subordinate CA certificate requests are accurate, authenticated, and approved
- maintained effective controls to provide reasonable assurance that:
 - logical and physical access to CA systems and data is restricted to authorised individuals;
 - the continuity of key and certificate management operations is maintained; and
 - CA systems development, maintenance, and operations are properly authorised and performed to maintain CA systems integrity

in accordance with the [WebTrust Principles and Criteria for Certification Authorities v2.2](#).

AffirmTrust does not escrow its CA keys, does not provide subscriber key generation, storage, or management services, does not provide integrated circuit card management services, does not provide certificate suspension services, and does not provide third-party subordinate CA or cross certificate issuance or management. Accordingly, our procedures did not extend to controls that would address those criteria.

Certification authority’s responsibilities

AffirmTrust’s management is responsible for its statement, 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.

Our independence and quality control

We have complied with the relevant rules of professional conduct / code of ethics applicable to the practice of public accounting and related to assurance engagements, issued by various professional accounting bodies, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Canadian Standard on Quality Control 1, *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance Engagements*, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.



Practitioner's responsibilities

Our responsibility is to express an opinion on management's statement based on our procedures. We conducted our procedures in accordance with Canadian Standard on Assurance Engagements 3000, *Attestation Engagements Other than Audits or Reviews of Historical Financial Information*, set out in the CPA Canada Handbook – Assurance. This standard requires that we plan and perform our procedures to obtain reasonable assurance about whether, in all material respects, management's statement is fairly stated, and, accordingly, included:

- (1) obtaining an understanding of AffirmTrust'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 evaluating the operating effectiveness of the controls; and
- (4) performing such other procedures as we considered necessary in the circumstances.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Relative effectiveness of controls

The relative effectiveness and significance of specific controls at AffirmTrust 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.

Inherent limitations

Because of the nature and inherent limitations of controls, AffirmTrust's ability to meet the aforementioned criteria may be affected. For example, controls may not prevent, or detect and correct, error, fraud, unauthorised 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.

Other matters

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

| | Matter topic | Matter description |
|---|--|---|
| 1 | Legacy Inactive CAs not used during the Period and decommissioned | The Legacy Inactive CAs (<i>Attachment A, CA #11 to 20</i>) did not issue certificates during the Period and remained in an inactive state. |

Practitioner's opinion

In our opinion, throughout the period 1 March 2020 to 28 February 2021, AffirmTrust management's statement, as referred to above, is fairly stated, in all material respects, in accordance with the WebTrust Principles and Criteria for Certification Authorities v2.2.

This report does not include any representation as to the quality of AffirmTrust's services beyond those covered by the WebTrust Principles and Criteria for Certification Authorities v2.2, nor the suitability of any of AffirmTrust's services for any customer's intended purpose.



Use of the WebTrust seal

AffirmTrust'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.

A handwritten signature in black ink that reads "Deloitte LLP". The signature is written in a cursive, flowing style.

Deloitte LLP
Chartered Professional Accountants
Toronto, Ontario, Canada
22 April 2021



ATTACHMENT A

LIST OF IN SCOPE CAs

| |
|---|
| Root CAs |
| 1. AffirmTrust Commercial 2. AffirmTrust Networking 3. AffirmTrust Premium 4. AffirmTrust Premium ECC |
| DV SSL Issuing CAs |
| 5. AffirmTrust Certificate Authority - DV1 |
| OV SSL Issuing CAs |
| 6. AffirmTrust Certificate Authority - OV1 |
| EV SSL Issuing CAs |
| 7. AffirmTrust Extended Validation CA - EV1 8. AffirmTrust Extended Validation CA - EV2 9. AffirmTrust Extended Validation CA - EV3 10. AffirmTrust Extended Validation CA - EVEC1 |
| Legacy Inactive CAs |
| 11. AffirmTrust Commercial Extended Validation CA 12. AffirmTrust Networking Extended Validation CA 13. AffirmTrust Premium Extended Validation CA 14. AffirmTrust Premium ECC Extended Validation CA 15. Trend Micro CA 16. Trend Micro S2 CA 17. AffirmTrust Commercial Extended Validation 18. AffirmTrust Networking Extended Validation 19. AffirmTrust Premium Extended Validation 20. AffirmTrust Premium ECC Extended Validation |



CA IDENTIFYING INFORMATION

| CA # | Cert # | Subject | Issuer | Serial Number | Key Type | Hash Type | Not Before | Not After | Revoked Date | Extended Key Usage | Subject Key Identifier | SHA256 Fingerprint |
|------|--------|---|--|----------------------------------|-------------------|-------------------|------------------------|------------------------|--------------|--|---|--|
| 1 | 1 | CN=AffirmTrust Commercial O=AffirmTrust C=US | CN=AffirmTrust Commercial O=AffirmTrust C=US | 7777062726a9b17c | RSA 2048- bits | RSA SHA-256 | 2010-01-29 14:06:06 | 2030-12-31 14:06:06 | | | 9d93c6538b5eeca4f3f9f1e0fe59995bc24f6948f | 0376ab1d54c5f9803ce4b2e201a0ee7eef7b57b63e6e8a93c9b8d4860c96f5a7 |
| 2 | 1 | CN=AffirmTrust Networking O=AffirmTrust C=US | CN=AffirmTrust Networking O=AffirmTrust C=US | 7c4f04391cd4992d | RSA 2048- bits | RSA SHA-1 | 2010-01-29 14:08:24 | 2030-12-31 14:08:24 | | | 071fd2e79cdac26ea240b4b07a50105074c4c8bd | 0a81ec5a929777f145904af38d5d509f66b5e2c58fcd531058b0e17f3f0b41b |
| 3 | 1 | CN=AffirmTrust Premium O=AffirmTrust C=US | CN=AffirmTrust Premium O=AffirmTrust C=US | 6d8c1446b1a60aee | RSA 4096- bits | RSA SHA-384 | 2010-01-29 14:10:36 | 2040-12-31 14:10:36 | | | 9dc067a60c22d926f545aba665521127d845ac63 | 70a73f7f376b60074248904534b11482d5bf0e698ecc498df52577ebf2e93b9a |
| 4 | 1 | CN=AffirmTrust Premium ECC O=AffirmTrust C=US | CN=AffirmTrust Premium ECC O=AffirmTrust C=US | 7497258ac73f7a54 | EC 384-bits | ECDSA SHA- 384 | 2010-01-29 14:20:24 | 2040-12-31 14:20:24 | | | 9aaf297ac011353526513000c36afe40d5aed63c | bd71fd6da97e4cf62d1647add2581b07d79adf8397b4ecba9c5e8488821423 |
| 5 | 1 | CN=AffirmTrust Certificate Authority - DV1 OU=See www.affirmtrust.com/repository O=AffirmTrust C=CA | CN=AffirmTrust Commercial O=AffirmTrust C=US | 580e00b14e86ce35 | RSA 2048- bits | RSA SHA-256 | 2017-04-07 15:10:56 | 2030-12-02 04:00:00 | | TLS Web Server Authentication, TLS Web Client Authentication | 33df7a3e027996ebb60cc063fa75bf9222cd91fa | ca4389c89ddf31bec26c74b44a8498c58b2d838516fa01b14f1393629e58a40 |
| 5 | 2 | CN=AffirmTrust Certificate Authority - DV1 OU=See www.affirmtrust.com/repository O=AffirmTrust C=CA | CN=AffirmTrust Commercial O=AffirmTrust C=US | 62b4c3eba53918177f127a837b574f96 | RSA 2048- bits | RSA SHA-256 | 2019-03-21 20:21:37 | 2030-12-02 04:00:00 | | TLS Web Server Authentication, TLS Web Client Authentication | 33df7a3e027996ebb60cc063fa75bf9222cd91fa | 4563b936e35ab975f65aef1935d9bc7e9977841f0573bd2e16bcac9534a6af9 |
| 6 | 1 | CN=AffirmTrust Certificate Authority - OV1 OU=See www.affirmtrust.com/repository O=AffirmTrust C=CA | CN=AffirmTrust Commercial O=AffirmTrust C=US | 187e7f3bf66f23cd | RSA 2048- bits | RSA SHA-256 | 2016-11-29 16:49:28 | 2030-12-02 04:00:00 | | TLS Web Server Authentication, TLS Web Client Authentication | fe60c30da4a29d214f7a784c62c5db14fc3978c4 | ea4ee2faa57ae4b539b63977fe5bb205b6afb32f7a73b2b363e4be02cd8a91e9 |
| 6 | 2 | CN=AffirmTrust Certificate Authority - OV1 OU=See www.affirmtrust.com/repository O=AffirmTrust C=CA | CN=AffirmTrust Commercial O=AffirmTrust C=US | 53f6a611092e528ed963f19149532204 | RSA 2048- bits | RSA SHA-256 | 2019-03-21 20:25:32 | 2030-12-02 04:00:00 | | TLS Web Server Authentication, TLS Web Client Authentication | fe60c30da4a29d214f7a784c62c5db14fc3978c4 | b5fd6f800334f65036b0999f8310b5b0bd726839d8b267005697af7301c5e8 |
| 7 | 1 | CN=AffirmTrust Extended Validation CA - EV1 OU=See www.affirmtrust.com/repository O=AffirmTrust C=CA | CN=AffirmTrust Commercial O=AffirmTrust C=US | 40f0bbaa8ae0c098 | RSA 2048- bits | RSA SHA-256 | 2016-11-29 16:42:17 | 2030-12-02 04:00:00 | | TLS Web Server Authentication, TLS Web Client Authentication | dbef65370be547cb35d1901f03c1bc88c7a7ea80 | cf88915cf996932c2b4cbe3039076d119bb728b4f31e49b63a50226f5489a12 |
| 7 | 2 | CN=AffirmTrust Extended Validation CA - EV1 OU=See www.affirmtrust.com/repository O=AffirmTrust C=CA | CN=AffirmTrust Commercial O=AffirmTrust C=US | 1729551ed68e7fb1edf57300f35d7fd5 | RSA 2048- bits | RSA SHA-256 | 2019-03-21 20:27:54 | 2030-12-02 04:00:00 | | TLS Web Server Authentication, TLS Web Client Authentication | dbef65370be547cb35d1901f03c1bc88c7a7ea80 | ed3c991466cbc45b5fd1da281028f9587b8219523647e0ca1b47f2c527d2920f |
| 8 | 1 | CN=AffirmTrust Extended Validation CA - EV2 OU=See www.affirmtrust.com/repository O=AffirmTrust C=CA | CN=AffirmTrust Premium O=AffirmTrust C=US | 5371c8eb0784fd5108e5d4f3e323ec46 | RSA 2048- bits | RSA SHA-256 | 2019-03-21 20:46:35 | 2030-12-02 04:00:00 | | TLS Web Server Authentication, TLS Web Client Authentication | 737c9a38683c517c4108fea11f2a1eb461dbcd3c | 9df77488c4b74ac32e3cec4c643d001d5c3babfa4001ffd193dca10c8be5cb3a |
| 9 | 1 | CN=AffirmTrust Extended Validation CA - EV3 OU=See www.affirmtrust.com/repository O=AffirmTrust C=CA | CN=AffirmTrust Networking O=AffirmTrust C=US | 3424a1ecf8f0a35fe746b7011c43e844 | RSA 2048- bits | RSA SHA-256 | 2019-03-21 20:38:59 | 2030-12-02 04:00:00 | | TLS Web Server Authentication, TLS Web Client Authentication | 791eb1c917c71eac1c714d7c3e87fbc9509b15 | b700ba49af4d19e72fb15a2dac3c213ba44c319fa7da92772b3682e12b781093 |
| 10 | 1 | CN=AffirmTrust Extended Validation CA - EVEC1 OU=See www.affirmtrust.com/repository O=AffirmTrust C=CA | CN=AffirmTrust Premium ECC O=AffirmTrust C=US | 0202a584c134064dc9f32d207ea37298 | EC 384-bits | ECDSA SHA- 384 | 2019-03-21 20:55:07 | 2030-12-02 04:00:00 | | TLS Web Server Authentication, TLS Web Client Authentication | c6908c028d75de3be3b9c2ed5657d2a1060eee5 | cde23a52303c3ca67a4bbcc9582ff5c9203aa98cb0f387139308ce2289506a2 |
| 11 | 1 | CN=AffirmTrust Commercial Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Commercial O=AffirmTrust C=US | 2926357ea5ca133e | RSA 2048- bits | RSA SHA-256 | 2010-04-22 02:08:03 | 2030-12-31 14:06:06 | | | a6a117b8ec06ba3e215a8eb82840e1512d4426dc | 62f692b7447953d4205ab31b4e34d45a02a12ca45654af8270fedc89e2db3e47 |
| 11 | 2 | CN=AffirmTrust Commercial Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Commercial O=AffirmTrust C=US | 631bf90c8ab02c81 | RSA 2048- bits | RSA SHA-256 | 2010-05-18 01:36:45 | 2030-12-31 14:06:06 | | | a6a117b8ec06ba3e215a8eb82840e1512d4426dc | 241136327dc0aec84973d1fa9b2d0dc027797037ae3ed654564e3b85fc7db221 |
| 12 | 1 | CN=AffirmTrust Networking Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Networking O=AffirmTrust C=US | 7c519f91f6c988fa | RSA 2048- bits | RSA SHA-1 | 2010-04-22 02:14:01 | 2030-12-31 14:08:24 | | | 7df8b24c5425085d6d27c9ab2b01c33570798064 | caf19845b5f9b658f52c3d9aa73a2fcb2a1965fa1f65b54778aab20f1fc720c3 |
| 12 | 2 | CN=AffirmTrust Networking Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Networking O=AffirmTrust C=US | 239015c7f6788046 | RSA 2048- bits | RSA SHA-1 | 2010-05-18 01:39:24 | 2030-12-31 14:08:24 | | | 7df8b24c5425085d6d27c9ab2b01c33570798064 | dd0c0be9ce09041f16b72d6b3d62a5b8f538427ec1a42d8331af1b59dfe6946 |
| 12 | 3 | CN=AffirmTrust Networking Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Networking O=AffirmTrust C=US | 5f0accb65a6bf800 | RSA 2048- bits | RSA SHA-256 | 2015-04-19 22:09:29 | 2030-12-31 14:08:24 | | | 7df8b24c5425085d6d27c9ab2b01c33570798064 | af639dc0bb168eff75b15117d888937eb64c1b0453f168d1b8c52ecf04acb93 |
| 13 | 1 | CN=AffirmTrust Premium Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Premium O=AffirmTrust C=US | 47c8c9279f291a1 | RSA 4096- bits | RSA SHA-384 | 2010-04-22 02:16:52 | 2040-12-31 14:10:36 | | | bcdd46bbe4a242fd89d1e6791fd71e41a947fb50 | 1acc91964bcfacb317c76eacfd1d2dadbe3daf05538a8d4d2cce06e20745fa1 |
| 13 | 2 | CN=AffirmTrust Premium Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Premium O=AffirmTrust C=US | 0bcfc3759c2f586 | RSA 4096- bits | RSA SHA-384 | 2010-05-18 01:40:33 | 2040-12-31 14:10:36 | | | bcdd46bbe4a242fd89d1e6791fd71e41a947fb50 | 66566fedd60db3ae10910f2a89707cf5159092033a71a75cd86851d735919411 |
| 13 | 3 | CN=AffirmTrust Premium Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Premium O=AffirmTrust C=US | 0974f448192f94c4 | RSA 4096- bits | RSA SHA-384 | 2015-09-09 03:04:29 | 2030-12-31 11:59:59 | | | bcdd46bbe4a242fd89d1e6791fd71e41a947fb50 | 565657f55dd94d6b6e54e132df2a3c9a241c027def14f12d46625e55e9cf58b7 |



| CA # | Cert # | Subject | Issuer | Serial Number | Key Type | Hash Type | Not Before | Not After | Revoked Date | Extended Key Usage | Subject Key Identifier | SHA256 Fingerprint |
|------|--------|---|--|------------------|-------------------|---------------|------------------------|------------------------|--------------|--------------------|--|--|
| 13 | 4 | CN=AffirmTrust Premium Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Premium O=AffirmTrust C=US | 5d544509a0d60aa7 | RSA 4096- bits | RSA SHA-384 | 2015-09-16 02:50:04 | 2040-12-31 11:59:59 | | | bcdd46bbe4a242fd89d1e6791fd71e41a947fb50 | d57b9872b1eef8e8032ab2e8cb0e63b685d1655c51c454f23f9975dfa2ad7e0a |
| 14 | 1 | CN=AffirmTrust Premium ECC Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Premium O=AffirmTrust C=US | 5fbc0e888ea4da20 | EC 384-bits | ECDSA SHA-384 | 2010-04-22 02:19:25 | 2040-12-31 14:20:24 | | | 01072f8a132c020ea058064ba2a6be08227f26ad | f5d174906c36057fe0dc3b450ea1738612605f9251b12d3103b8be86333ef77f |
| 14 | 2 | CN=AffirmTrust Premium ECC Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Premium ECC O=AffirmTrust C=US | 19269f5e035dfe4b | EC 384-bits | ECDSA SHA-384 | 2010-04-22 02:20:43 | 2040-12-31 14:20:24 | | | 01072f8a132c020ea058064ba2a6be08227f26ad | 4e513974092730d1a83f43dcb8ef2621793f51a126d36714f49fe8f639effec0 |
| 14 | 3 | CN=AffirmTrust Premium ECC Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Premium ECC O=AffirmTrust C=US | 107caa12ecd68c54 | EC 384-bits | ECDSA SHA-384 | 2010-05-18 01:48:14 | 2040-12-31 14:20:24 | | | 01072f8a132c020ea058064ba2a6be08227f26ad | 5adcc54514916b02dbf5e065952e9c130bec59421e0fea1ce9647f02050b7ec6 |
| 14 | 4 | CN=AffirmTrust Premium ECC Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Premium ECC O=AffirmTrust C=US | 0340f9459b3d9fe | EC 384-bits | ECDSA SHA-384 | 2015-09-09 03:05:22 | 2030-12-31 11:59:59 | | | 01072f8a132c020ea058064ba2a6be08227f26ad | af872aa2d241957b11608c8e0601a8e2f34b823024f2b24e58bb1b78f00b5e0c |
| 14 | 5 | CN=AffirmTrust Premium ECC Extended Validation CA OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Premium ECC O=AffirmTrust C=US | 2b44f713df170c16 | EC 384-bits | ECDSA SHA-384 | 2015-09-16 02:49:03 | 2040-12-31 11:59:59 | | | 01072f8a132c020ea058064ba2a6be08227f26ad | 077b75f6b7fa71be4f8121e1ec52faebca0d0aed2dc01711a0f6dcdc38e7bf38 |
| 15 | 1 | CN=Trend Micro CA O=Trend Micro Inc C=US | CN=AffirmTrust Networking O=AffirmTrust C=US | 4f0c2f8ec227f9ae | RSA 2048- bits | RSA SHA-1 | 2011-10-04 18:11:57 | 2030-12-31 14:08:24 | | | ad31c7fa02ce67f7651cfbba5fc0bbc5504c67c8 | a0dd71da35f5a24301c18b3bcf74b5b62b48fdd667cba3e05fc46956bdea5d93 |
| 15 | 2 | CN=Trend Micro CA O=Trend Micro Inc C=US | CN=AffirmTrust Networking O=AffirmTrust C=US | 2eed7b3dab645b10 | RSA 2048- bits | RSA SHA-1 | 2011-10-04 18:24:29 | 2030-12-31 14:08:24 | | | ad31c7fa02ce67f7651cfbba5fc0bbc5504c67c8 | 58c95d17907e743e121cef47d48064d7b3af32b514bea3ef74d290a52d70b96c |
| 15 | 3 | CN=Trend Micro CA O=Trend Micro Inc C=US | CN=AffirmTrust Networking O=AffirmTrust C=US | 5af80e98c1530a58 | RSA 2048- bits | RSA SHA-1 | 2011-10-22 19:14:42 | 2030-12-31 14:08:24 | | | ad31c7fa02ce67f7651cfbba5fc0bbc5504c67c8 | 3f0ae5b3d05652472a108c28546364b31b5a33d01528b55f5eab21afaeb5b3a |
| 15 | 4 | CN=Trend Micro CA O=Trend Micro Inc C=US | CN=AffirmTrust Networking O=AffirmTrust C=US | 3d847c1b4abb3202 | RSA 2048- bits | RSA SHA-1 | 2014-04-29 02:25:55 | 2030-12-31 14:08:24 | | | ad31c7fa02ce67f7651cfbba5fc0bbc5504c67c8 | 938c4557589b7263d59b2f0f6b84cbeb27efb9b23ba724eb3ccd5b7e2a58716f |
| 16 | 1 | CN=Trend Micro S2 CA O=Trend Micro Inc C=US | CN=AffirmTrust Commercial O=AffirmTrust C=US | 5b469990ec759d34 | RSA 2048- bits | RSA SHA-256 | 2014-03-01 23:13:48 | 2030-12-31 14:06:06 | | | b099e1904ef36563289c123f7856ba84c0c73a3d | 8cd591f3314bd57bac74b3faee2d70471b5d996a4fe197e64380abaf9e8b3133 |
| 17 | 1 | CN=AffirmTrust Commercial Extended Validation OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Commercial O=AffirmTrust C=US | 6cf34fe998b2b13a | RSA 2048- bits | RSA SHA-256 | 2010-01-29 14:13:08 | 2030-12-31 14:06:06 | | | 8ef10a21466a38a4c85b21167ef56c9a8eee1efe | c6f613a20b0c98aa9ed4a7e25d4dd19f370a41a3e57efd4ecb0dfd7aef8c278 |
| 18 | 1 | CN=AffirmTrust Networking Extended Validation OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Networking O=AffirmTrust C=US | 1c915ed11d3c8994 | RSA 2048- bits | RSA SHA-1 | 2010-01-29 14:15:31 | 2030-12-31 14:08:24 | | | c42bad00f672c6d3c3775d67d3e9dd19c5a5cd8 | 3ca196de120acc3f6e80ef9c5cdfc39ef89f0fdd33bd68e524025358446a94e |
| 19 | 1 | CN=AffirmTrust Premium Extended Validation OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Premium O=AffirmTrust C=US | 56f1bc77c11d417d | RSA 4096- bits | RSA SHA-384 | 2010-01-29 14:18:04 | 2040-12-31 14:10:36 | | | 684de243d25cbc4152e4b42f518b007f9a01da78 | 52e3e25bb3a162f210b89c7af98776b259cc9b525aafd24b1a35998438efa94c |
| 20 | 1 | CN=AffirmTrust Premium ECC Extended Validation OU=http://www.affirmtrust.com/resources O=AffirmTrust C=US | CN=AffirmTrust Premium ECC O=AffirmTrust C=US | 7b80f268cb93ef80 | EC 384-bits | ECDSA SHA-384 | 2010-01-29 14:23:02 | 2040-12-31 14:20:24 | | | 7edbf6081bd80b5e52d979841cc142aa318f1b45 | 4bd76adb9ad30ef667037bba662393317500595acbd4f0a75e4249daf48ccf85 |



ATTACHMENT B

LIST OF AFFIRMTRUST CERTIFICATION PRACTICE STATEMENTS

| CPS Name | Version | Date |
|--|---------|-------------|
| AffirmTrust Certification Practice Statement | 3.8 | 30 Sep 2019 |
| AffirmTrust Certification Practice Statement | 3.9 | 30 Sep 2020 |



AFFIRMTRUST MANAGEMENT'S STATEMENT

Entrust Corporation doing business as AffirmTrust ("AffirmTrust") operates the Certification Authority (CA) services as enumerated in [Attachment A](#), and provides the following CA services:

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

The management of AffirmTrust 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, subscriber key lifecycle management controls, certificate lifecycle management controls, and subordinate CA 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 only provide reasonable assurance with respect to AffirmTrust's Certification Authority operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

AffirmTrust management has assessed its disclosures of its certificate practices and controls over its CA services. Based on that assessment, in AffirmTrust management's opinion, in providing its Certification Authority (CA) services at Ottawa, Ontario, and Toronto, Ontario, throughout the period 1 March 2020 to 28 February 2021 AffirmTrust has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environment control practices in its Certification Practice Statements as enumerated in [Attachment B](#)
- maintained effective controls to provide reasonable assurance that AffirmTrust provides its services in accordance with its Certification Practice Statements
- maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and certificates it manages is established and protected throughout their lifecycles;
 - the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;
 - subscriber information is properly authenticated (for the registration activities performed by AffirmTrust); and
 - subordinate CA certificate requests are accurate, authenticated, and approved
- 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

in accordance with the [WebTrust Principles and Criteria for Certification Authorities v2.2](#), including the following:

CA Business Practices Disclosure

- Certification Practice Statement (CPS)

CA Business Practices Management

- Certification Practice Statement 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

Subscriber Key Lifecycle Management Controls

- Requirements for Subscriber Key Management

Certificate Lifecycle Management Controls

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

AffirmTrust does not escrow its CA keys, does not provide subscriber key generation, storage, or management services, does not provide integrated circuit card management services, does not provide certificate suspension services, and does not provide third-party subordinate CA or cross certificate issuance or management. Accordingly, our statement does not extend to controls that would address those criteria.

Bruce Morton
Director, Entrust Certificate Services
22 April 2021

ATTACHMENT A**LIST OF IN SCOPE CAs**

| |
|---|
| Root CAs |
| 1. AffirmTrust Commercial 2. AffirmTrust Networking 3. AffirmTrust Premium 4. AffirmTrust Premium ECC |
| DV SSL Issuing CAs |
| 5. AffirmTrust Certificate Authority - DV1 |
| OV SSL Issuing CAs |
| 6. AffirmTrust Certificate Authority - OV1 |
| EV SSL Issuing CAs |
| 7. AffirmTrust Extended Validation CA - EV1 8. AffirmTrust Extended Validation CA - EV2 9. AffirmTrust Extended Validation CA - EV3 10. AffirmTrust Extended Validation CA - EVEC1 |
| Legacy Inactive CAs |
| 11. AffirmTrust Commercial Extended Validation CA 12. AffirmTrust Networking Extended Validation CA 13. AffirmTrust Premium Extended Validation CA 14. AffirmTrust Premium ECC Extended Validation CA 15. Trend Micro CA 16. Trend Micro S2 CA 17. AffirmTrust Commercial Extended Validation 18. AffirmTrust Networking Extended Validation 19. AffirmTrust Premium Extended Validation 20. AffirmTrust Premium ECC Extended Validation |



ATTACHMENT B

LIST OF AFFIRMTRUST CERTIFICATION PRACTICE STATEMENTS

| CPS Name | Version | Date |
|--|---------|-------------|
| AffirmTrust Certification Practice Statement | 3.8 | 30 Sep 2019 |
| AffirmTrust Certification Practice Statement | 3.9 | 30 Sep 2020 |