

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, except for the matters described in its statement, 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 SSL certificate lifecycle management business practices in its Certification Practice Statements as enumerated on [Attachment B](#), including its commitment to provide SSL certificates in conformity with the CA/Browser Forum Requirements on the AffirmTrust website, 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 (for the registration activities performed by AffirmTrust)
- 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

in accordance with the [WebTrust Principles and Criteria for Certification Authorities – SSL Baseline with Network Security v2.4.1](#).

The information included in [Attachment C](#), ‘Other information provided by the CA’ is presented by the management of AffirmTrust to provide additional information to users of this report. This information has not been subjected to our procedures, and, accordingly, we express no opinion on it.

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 – SSL Baseline with Network Security v2.4.1.

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 SSL certificate lifecycle management business practices, including its relevant controls over the issuance, renewal, and revocation of SSL certificates, and obtaining an understanding of AffirmTrust’s network and certificate system security to meet the requirements set forth by the CA/Browser Forum;
- (2) selectively testing transactions executed in accordance with disclosed SSL certificate lifecycle management 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.

Basis for qualified opinion

During our procedures, we noted the following which caused a qualification of our opinion:

Observation	Relevant WebTrust Criteria
<p>1 As disclosed in management’s statement, during the Period, user access reviews for a certificate management system and security support system were performed, however these were not consistently performed every three months.</p> <p>This caused WebTrust Principles and Criteria for Certification Authorities – SSL Baseline with Network</p>	<ul style="list-style-type: none"> • P4, 2.10: The CA maintains controls to provide reasonable assurance that it reviews all system accounts at least every three (3) months and deactivates any accounts that are no longer necessary for operations.

Observation	Relevant WebTrust Criteria
Security v2.4.1, Principle 4, Criterion 2.10 to not be met.	

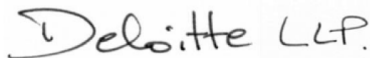
Practitioner's qualified opinion

In our opinion, except for the matters described in the preceding section entitled 'Basis for qualified opinion', throughout the period 1 March 2020 to 28 February 2021, AffirmTrust has:

- disclosed its SSL certificate lifecycle management business practices in its Certification Practice Statements as enumerated on [Attachment B](#), including its commitment to provide SSL certificates in conformity with the CA/Browser Forum Requirements on the Entrust website, 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 (for the registration activities performed by Entrust)
- 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

in accordance with the [WebTrust Principles and Criteria for Certification Authorities – SSL Baseline with Network Security v2.4.1](#).

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 – SSL Baseline with Network Security v2.4.1, nor the suitability of any of AffirmTrust's services for any customer's intended purpose.



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 (UTC)	Not After (UTC)	Revoked Date (UTC)	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			9d93c6538b5ecaaf3f9f1e0fe59995bc24f6948f	0376ab1d54c5f9803ce4b2e201a0ee7eef7b57b636e8a93c9b8d4860c96f5fa7
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	0a81ec5a929777f145904af38d5d509f6b5e2c58fcd531058b0e17f3f0b41b
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	bd71fd6da97e4cf62d1647add2581b07d79adf8397eb4ecba9c5e8488821423
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	ca4389c89dfc31bec26c74b44a8498c58b2d838516fa01b14f1393629e58a40
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	4563b936e35ab97576f5aef1935d9bc7e9977841f0573bd2e16bcac9534a6af9
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	b5fd6f800334f56036b0999f8310b5b0bd7268395d8b267005697af7301c5e8
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	cf88915cf996932c2b4cbe3039076d119b728b4f31e49b63a5022fe65489a12
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	791eb1c917c71eacb1c714d7c3e87fbc9509b15	b700ba49af4d19e72fb15a2dac3c213ba44c319fa7da92772b3682e12b781093
10	1	CN=AffirmTrust Extended Validation CA - EVECI 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	c6908c0283d75de3be3b9c2ed5657d2a1060eee5	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	dd0c0be9ce09041f16b72d6b3d62a5b8f538427ec1a42d8331af1b59dfe69446
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	af639dc0bbb168eff75b15117d888937eb64c1b0453f168d1b8c52ecf04ac93
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	47c8c927f9f291a1	RSA 4096- bits	RSA SHA- 384	2010-04-22 02:16:52	2040-12-31 14:10:36			bcdd46bbe4a242fd89d1e6791fd71e41a947fb50	1acdc91964bcfacb317c76eacfd12daadbe3daff05538a8d4d2cce06e20745fa1
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	0bcfcf3759c2f586	RSA 4096- bits	RSA SHA- 384	2010-05-18 01:40:33	2040-12-31 14:10:36			bcdd46bbe4a242fd89d1e6791fd71e41a947fb50	66566fedd60db3ae10910f2a89707c5159092033a71a75cd86851d735919411
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	565657f5dd94d6b6e5e4e132df2a3c9a241c027def14f12d46625e55e9cf58b7



CA #	Cert #	Subject	Issuer	Serial Number	Key Type	Hash Type	Not Before (UTC)	Not After (UTC)	Revoked Date (UTC)	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 ECC 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	5adcc54514916b02dbf5e06952e9c130bec59421e0fea1ce9647f02050b7ec6
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	0340f9459bf3d9fe	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	077b75f6b7fa71be4f8121e1ec52faebca0d0aed2dc01711a0f6dccc38e7bf38
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	a0dd71da35f5a24301c18b3bcf74b5b62b48fd667cba3e05fc46956bdea5d93
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	3f0ae5b3d05652472a108c28546364b31b5a33d01528b555feab21afaebb5b3a
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	c6f613a20b0c98aa9ed4a7e25d4dd19f370a41a3e57efd4ecb0dfd7aeef8c278
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			c42bad000f672c6d3c3775d67d3e9dd19c5a5cd8	3ca196de120acc3f6e680ef9c5cdfc39ef89f0fdd33bd68e524025358446a94e
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

ATTACHMENT C

Other information provided by the CA

The information included herein is presented by the management of AffirmTrust to provide additional information to users of this report. This information has not been subjected to the procedures of this engagement, and, accordingly, Deloitte LLP express no opinion on it.

Comments on qualified opinion

Observation	Additional AffirmTrust comments
1 As disclosed in management's statement, during the Period, user access reviews for a certificate management system and security support system were performed, however these were not consistently performed every three months.	81 out of 84 access reviews across 21 distinct systems were successfully performed throughout the audit period. Reviews for the certificate management system were performed in May and February. Reviews for the security support system were performed in August, November, and February. Changes to access rights for both systems are extremely rare. Automation improvements have recently been made to improve on completeness of user access reviews.

AFFIRMTRUST MANAGEMENT'S STATEMENT

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

The management of AffirmTrust is responsible for establishing and maintaining effective controls over its SSL CA operations, including its network and certificate system controls, its SSL CA business practices disclosure on its [website](#), SSL key lifecycle management controls, and SSL 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. During its assessment, AffirmTrust noted the following:

Observation	Relevant WebTrust Criteria
<p>1 User access reviews for a security support system were performed, however these were not consistently performed every three months.</p> <p>This caused WebTrust Principles and Criteria for Certification Authorities – SSL Baseline with Network Security v2.4.1, Principle 4, Criterion 2.10 to not be met.</p>	<p>P4, 2.10: The CA maintains controls to provide reasonable assurance that it reviews all system accounts at least every three (3) months and deactivates any accounts that are no longer necessary for operations.</p>

In AffirmTrust management's opinion, except for the matters described in the preceding table, in providing its SSL and non-SSL Certification Authority (CA) services at Ottawa, Ontario, and Toronto, Ontario, throughout the period 1 March 2020 to 28 February 2021, AffirmTrust has:

- disclosed its SSL certificate lifecycle management business practices in its Certification Practice Statements as enumerated on [Attachment B](#), including its commitment to provide SSL certificates in conformity with the CA/Browser Forum Requirements on the AffirmTrust website, 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 (for the registration activities performed by AffirmTrust)
- 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

in accordance with the [WebTrust Principles and Criteria for Certification Authorities – SSL Baseline with Network Security v2.4.1](#).

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