

## INDEPENDENT ASSURANCE REPORT

To the management of Entrust Limited ("Entrust"):

### Scope

We have been engaged, in a reasonable assurance engagement, to report on Entrust management's [statement](#) that for its Certification Authority ("CA") operations in Ottawa, Ontario, Canada and Toronto, Ontario, Canada, throughout the period March 1, 2025 to September 17, 2025 (the "Period") for its CAs as enumerated in [Attachment A](#), Entrust has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in its Certificate Policy/Certification Practice Statements ("CP/CPS") as enumerated in [Attachment B](#)
- maintained effective controls to provide reasonable assurance that:
  - Entrust provides its services in accordance with its CP/CPS
- 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 Entrust); 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 authorised and performed to maintain CA systems integrity

in accordance with the [WebTrust Principles and Criteria for Certification Authorities v2.2.2](#).

Entrust does not escrow or archive its CA keys and subscriber keys, does not provide integrated circuit card management services, does not provide certificate suspension services and does not use external Registration Authorities. Accordingly, our procedures did not extend to controls that would address those criteria.

During the course of our procedures, we noted that certain controls defined within the applicable criteria were not triggered during the audit period due to the absence of relevant operational events. Specifically, activities such as the generation of CA keys (including root CA keys), CA key migration, and the registration, renewal, rekey, issuance, and distribution of subordinate CA certificates and cross-certificates did not occur. While these controls are documented within Entrust's Certification Practice Statement (CPS), their operational effectiveness could not be evaluated during this engagement.

### Certification authority's responsibilities

Entrust'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 v2.2.2](#).

### Our independence and quality management

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 Management 1, *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements*, which requires the firm to design, implement and operate a system of quality management, including policies or 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 Entrust'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.

The relative effectiveness and significance of specific controls at Entrust 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

There are inherent limitations in the effectiveness of any system of internal control, including the possibility of human error and the circumvention of controls. For example, because of their nature, controls may not prevent, or detect unauthorised access to systems and information, or failure to comply with internal and external policies or requirements. Also, the projection to the future of any conclusions based on our findings is subject to the risk that controls may become ineffective.

## Emphasis of Matters

Without modifying our opinion, we draw attention to the following matters relevant to the scope of our procedures.

In accordance with Entrust's transition plan, Entrust has stopped issuing public TLS certificates from Entrust Root CAs as of March 11, 2025, and stopped issuing S/MIME and VMC certificates as of May 12, 2025. All other public-facing services, including certificate issuance, renewals, and revocations, were discontinued as of September 8, 2025. Entrust did not generate any new cryptographic keys during the audit period; therefore, controls related to key generation were considered out of scope for this engagement.

As part of the transition plan and transfer of ownership of certain key pairs to Sectigo, specific key backups were generated by Entrust, formally transported to Sectigo, and remaining copies were subsequently destroyed. While Deloitte independently witnessed the Key Destruction Ceremonies at the Toronto location on September 4, 2025, and at the Ottawa location on September 16, 2025, we were not engaged to independently observe the key backup procedures, nor did we witness the ceremony associated with the transfer of backup keys to Sectigo.

## Opinion

In our opinion, throughout the period March 1, 2025 to September 17, 2025, Entrust 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 v2.2.2](#).

This report does not include any representation as to the quality of Entrust's services beyond those covered by the [WebTrust Principles and Criteria for Certification Authorities v2.2.2](#), nor the suitability of any of Entrust's services for any customer's intended purpose.

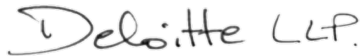
## Other Matters

Without modifying our opinion, we noted the following other matters during our procedures. These matters were not within the scope of our reasonable assurance engagement. We considered the nature of these matters in our risk assessment and in determining the nature, timing, and extent of our procedures. We performed additional procedures to understand the root cause, as well as the facts and circumstances

Matter topic	Matter description
<b>1</b> <b>Cross-certified CA CP/CPS not updated in CCADB</b>	According to Section 2.3 of the Chrome Root Program Policy, updated CA policy documents must be submitted to Common CA Database (CCADB) within 7 days (recommended) or 14 days (required) of the policy's effective date. As documented in <a href="#">Bug 1956681</a> , Entrust issued a cross-certificate for SSL.com under the Registration Authority (RA) program on October 16, 2024. Following this, SSL.com updated its CP/CPS in the CCADB. However, Entrust did not update the Cross-Certified CA CP/CPS information in CCADB within the mandated 14-day period after SSL.com's Entrust updated CP/CPS to CCADB on March 25, 2025.

### Use of the WebTrust seal

Entrust'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.



Deloitte LLP  
Chartered Professional Accountants  
Toronto, Ontario, Canada  
November 19, 2025

## ATTACHMENT A

### LIST OF IN SCOPE CAs

<b>Root CAs</b>	
1.	Entrust.net Certification Authority (2048)
2.	Entrust Root Certification Authority
3.	Entrust Root Certification Authority - G2
4.	Entrust Root Certification Authority - G4
5.	Entrust Root Certification Authority – EC1
6.	Entrust Code Signing Root Certification Authority - CSBR1
7.	Entrust Digital Signing Root Certification Authority - DSR1
8.	Entrust Verified Mark Root Certification Authority - VMCR1
9.	Entrust 4K EV TLS Root CA - 2022
10.	Entrust P384 EV TLS Root CA - 2022
11.	Entrust 4K TLS Root CA - 2022
12.	Entrust P384 TLS Root CA - 2022
13.	Entrust SMIME Root CA - 2022
14.	AffirmTrust Commercial
15.	AffirmTrust Networking
16.	AffirmTrust Premium
17.	AffirmTrust Premium ECC
18.	AffirmTrust 4K TLS Root CA - 2022
<b>Intermediate CAs</b>	
19.	Entrust Certification Authority – AATL1
20.	Entrust Enterprise Intermediate CA - ICA1
<b>Issuing CAs</b>	
21.	AffirmTrust Certificate Authority – DV1
22.	AffirmTrust 4K TLS Certification Authority - DVTLS1
23.	Entrust Certification Authority – L1F
24.	Entrust Certification Authority – L1K
25.	Entrust 4K TLS Certification Authority - OVTLS1
26.	Entrust P384 TLS Certification Authority - OVTLS2
27.	CrowdStrike TLS CA 2022
28.	Siemens Issuing CA Internet Server 2020
29.	Namirial OV SSL CA 2023
30.	AffirmTrust Certificate Authority – OV1
31.	Entrust Certification Authority – L1E
32.	Entrust Certification Authority – L1J
33.	Entrust Certification Authority – L1M
34.	Entrust Certification Authority – L1N
35.	Entrust Certification Authority – ES QWAC2
36.	Entrust 4K TLS Certification Authority - EVTLS1
37.	Entrust P384 TLS Certification Authority - EVTLS2
38.	Namirial EV SSL CA 2023
39.	AffirmTrust Extended Validation CA – EV1
40.	AffirmTrust Extended Validation CA – EV2
41.	AffirmTrust Extended Validation CA – EV3
42.	AffirmTrust Extended Validation CA – EVEC1
43.	Entrust Code Signing CA – OVCS1
44.	Entrust Code Signing CA – OVCS2
45.	Entrust Extended Validation Code Signing CA – EVCS1
46.	Entrust Extended Validation Code Signing CA – EVCS2
47.	Entrust Class 1 Client CA - SHA256
48.	Entrust Class 2 Client CA
49.	Entrust Class 2 Client CA – C2CA2
50.	Entrust Personal Email Certification Authority - SMIME1
51.	Entrust Enterprise Email CA - SMIME2
52.	Entrust Certification Authority – ES QTS1
53.	Entrust Timestamping CA – TS1
54.	Entrust Timestamping CA – TS2
55.	Entrust Time Stamping CA – TS3



56. Entrust Time Stamping CA - TS4
57. Entrust Verified Mark CA - VMC2
58. Entrust Class 3 Client CA - SHA256
59. Entrust Certification Authority - ES QSig2
60. Entrust Certification Authority - ES QSeal1
61. Entrust Certification Authority - ES QSeal2
62. Entrust Digital Signing Certification Authority - DS1
63. Entrust RSS Digital Signing CA - RSS1
64. Entrust SAS Digital Signing CA - SAS1

CA IDENTIFYING INFORMATION FOR IN SCOPE CAS

CA #	Cert #	Note	Subject	Issuer	Serial Number	Key Type	Hash Type	Not Before	Not After	Revoked Date	Extended Key Usage	Subject Key Identifier	SHA256 Fingerprint
1	1	1,2	CN=Entrust.net Certification Authority (2048) OU=(c) 1999 Entrust.net Limited OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.) O=Entrust.net	CN=Entrust.net Certification Authority (2048) OU=(c) 1999 Entrust.net Limited OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.) O=Entrust.net	3863def8	RSA 2048-bits	RSA SHA-1	12/24/1999 17:50	7/24/2029 14:15			55e481d11180bed889b908a331f9a1240916b970	6DC47172E01CBCB08F62580D895FE2B8AC9AD4F873801E0C10B9C837D21EB177
2	1	1,2	CN=Entrust Root Certification Authority OU=(c) 2006 Entrust, Inc. OU=www.entrust.net/CPS is incorporated by reference O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority OU=(c) 2006 Entrust, Inc. OU=www.entrust.net/CPS is incorporated by reference O=Entrust, Inc. C=US	456b5054	RSA 2048-bits	RSA SHA-1	11/27/2006 20:23	11/27/2026 20:53			6890e467a4a65380c78666a4f1f74b43fb84bd6d	73C176434F1BC6D5ADF45B0E76E727287C8DE57616C1E6E6141A2B2CBC7D8E4C
3	1	1,2	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	4a538c28	RSA 2048-bits	RSA SHA-256	7/17/2009 17:25	12/17/2030 17:55			6a72267ad01eef7de73b6951d46c8d9f901266ab	43DF5774B03E7FEF5FE40D931A7BEDF18B2E6842738C4E6D3841103D3AA7F339
	2		CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority OU=(c) 2006 Entrust, Inc. OU=www.entrust.net/CPS is incorporated by reference O=Entrust, Inc. C=US	525c32e349f48525bc8d7810d7aabb67	RSA 2048-bits	RSA SHA-256	3/6/2024 16:00	11/26/2026 23:59			6a72267ad01eef7de73b6951d46c8d9f901266ab	65F0358FC93934CD5AAC43122F37948D7BD042D148E6FD88B2E65AA9AC399DDD
4	1	1,2	CN=Entrust Root Certification Authority - G4 OU=(c) 2015 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - G4 OU=(c) 2015 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	00d9b5437afa9390f00000005565ad58	RSA 4096-bits	RSA SHA-256	5/27/2015 11:11	12/27/2037 11:41			9f38c45623c339e8a0716ce8544ce4e83ab1bf67	DB3517D1F6732A2D5AB97C533EC70779EE3270A62FB4AC4238372460E6F01E88
5	1	1,2	CN=Entrust Root Certification Authority - EC1 OU=(c) 2012 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - EC1 OU=(c) 2012 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	00a68b79290000000050d091f9	EC 384-bits	ECDSA SHA-384	12/18/2012 15:25	12/18/2037 15:55			b763e71add8e908a65583a4e06a504165114249	02ED0EB28C14DA45165C566791700D6451D7F856F0B2AB1D38B8E070E56EDFF5
	2		CN=Entrust Root Certification Authority - EC1 OU=(c) 2012 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority OU=(c) 2006 Entrust, Inc. OU=www.entrust.net/CPS is incorporated by reference O=Entrust, Inc. C=US	008011196de613bd16000000051d3575e	EC 384-bits	RSA SHA-256	6/10/2016 14:58	11/10/2026 15:28			b763e71add8e908a65583a4e06a504165114249	3FDE0D36E026B6E8E8E2C28883607C8651DE10BD6C1FCAD365E560F4EA2F3803
6	1	1,2	CN=Entrust Code Signing Root Certification Authority - CSBR1 O=Entrust, Inc. C=US	CN=Entrust Code Signing Root Certification Authority - CSBR1 O=Entrust, Inc. C=US	7ff1a8f9f43ae876e2dc6ff5e433db2ee30a643	RSA 4096-bits	RSA SHA-512	5/7/2021 13:26	12/30/2040 13:26			82bad63d97ce9fcf71e89237affdb3b5693557cf	B80847FDA453BF6ED876CA7BC046A2481909E15B6ED376E65E7AD09F3864E71
	2		CN=Entrust Code Signing Root Certification Authority - CSBR1 O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	4e40e43754ede68c000000051d3947f	RSA 4096-bits	RSA SHA-256	5/7/2021 15:43	11/7/2030 16:13		Code Signing, Time Stamping	82bad63d97ce9fcf71e89237affdb3b5693557cf	18DD9A467054C74A5AE46182843A6F4EC46D5E338D91ADF4E5980B50193F894B

Note:

- 1- Copy of the key was destroyed during Key Destruction Ceremony on September 4, 2025 or September 16, 2025
- 2- Backup Key was transferred to Sectigo on August 14, 2025

CA #	Cert #	Note	Subject	Issuer	Serial Number	Key Type	Hash Type	Not Before	Not After	Revoked Date	Extended Key Usage	Subject Key Identifier	SHA256 Fingerprint
7	1	1,2	CN=Entrust Digital Signing Root Certification Authority - DSR1 O=Entrust, Inc. C=US	CN=Entrust Digital Signing Root Certification Authority - DSR1 O=Entrust, Inc. C=US	6c73c936b185e50b804d5bcec29f83d21a51c1a3	RSA 4096-bits	RSA SHA-512	11/12/2021 18:28	12/30/2040 18:28			a6654181f25b87056addd8a544e8f987bdc23b8	E874FE2531EAE4A4B6B62F374968BAE90EB1D8F8CCEDEBEB00A182CFACDC7E61
	2		CN=Entrust Digital Signing Root Certification Authority - DSR1 O=Entrust, Inc. C=US	CN=Entrust.net Certification Authority (2048) OU=(c) 1999 Entrust.net Limited OU=www.entrust.net/CPS_2048 incorp.by ref. (limits liab.) O=Entrust.net	3e52a4c23935756349c5a8820c03d47f	RSA 4096-bits	RSA SHA-256	3/6/2024 15:40	7/23/2029 23:59			a6654181f25b87056addd8a544e8f987bdc23b8	37C4596A91541642B4DD07AE28A6E968999EA95A057A8182695A33DFEB308C4D
8	1	1,2	CN=Entrust Verified Mark Root Certification Authority - VMCR1 O=Entrust, Inc. C=US	CN=Entrust Verified Mark Root Certification Authority - VMCR1 O=Entrust, Inc. C=US	743900bd5b07f63d7e9150452c89bb701680463	RSA 4096-bits	RSA SHA-512	5/7/2021 13:31	12/30/2040 13:31			7323567b2b7845809ab8c27cca586398b2678c5	7831D95A47D42508CD5C9E6264F9096BAC19F04EB9B7C8BDD35FFFC71C189617
9	1	1,2	CN = Entrust 4K EV TLS Root CA - 2022 O = Entrust, Inc. C = US	CN = Entrust 4K EV TLS Root CA - 2022 O = Entrust, Inc. C = US	72429d8f40dfe46dafbe06ebb533194c90d6c76	RSA 4096-bits	RSA SHA-384	12/13/2022 16:35	12/7/2047 16:35			0bdd90d58fbb3f5cbd60a0551a2482863c413041	647987D98D52645DA4D3DE3B80771A0CE02B9B9285E6E8699882170744EC9AA
	2		CN = Entrust Root Certification Authority - G2 O=Entrust, Inc. C = US		ac9a58d8637568d2cdfddc1c7955cc	RSA 4096-bits	RSA SHA-256	3/6/2024 15:31	12/6/2030 23:59	9/2/2025		0bdd90d58fbb3f5cbd60a0551a2482863c413041	E821B11129110567F1607F0B0F368EC78D811418F0C48CC425450F63EB88095D
10	1	1	CN = Entrust P384 EV TLS Root CA - 2022 O = Entrust, Inc. C = US	CN = Entrust P384 EV TLS Root CA - 2022 O = Entrust, Inc. C = US	097558f5a16c16877bbd064ff9ce483ba4b040b	EC 384-bits	ECDSA SHA-384	12/13/2022 16:46	12/7/2047 16:46			137210ae82580fc1389bbc6a64c05ca8e8468bf	937EF8F12276B3C7A3F58E345D09A6EFF01F862F8D2794441CD84D511825FA0C
11	1	1	CN = Entrust 4K TLS Root CA - 2022 O = Entrust, Inc. C = US	CN = Entrust 4K TLS Root CA - 2022 O = Entrust, Inc. C = US	57262836aa751a000c16ba28cc86b590fd225ba	RSA 4096-bits	RSA SHA-384	12/13/2022 16:26	12/7/2047 16:26			9440ea5affef4963019e09df03b803373122056	DD6C44B39401B053D8E611207488BB0F6056007665C168E5C286750EDC8DF129
12	1	1	CN = Entrust P384 TLS Root CA - 2022 O = Entrust, Inc. C = US	CN = Entrust P384 TLS Root CA - 2022 O = Entrust, Inc. C = US	453eef32daed9068218d5bea0e83d165042e0f31	EC 384-bits	ECDSA SHA-384	12/13/2022 16:41	12/7/2047 16:41			c42e807c5f709204864c9e52cb2b67c5076a8293	420332EF876E8E78F2AF5D28AAACDE24AAD0C10F8FFAAC469EFD7BD941929568
13	1	1,2	CN = Entrust SMIME Root CA - 2022 O = Entrust, Inc. C = US	CN = Entrust SMIME Root CA - 2022 O = Entrust, Inc. C = US	7da23fcefbbe8849c350f2a511e9b96bb71f8d80	RSA 4096-bits	RSA SHA-384	12/13/2022 17:00	12/7/2047 17:00			94c8e8468d7f53170305441810ac65e06ea2950d	B7A41ED8096D62716BADCF7530942197A9E7E3175CE05D11D01E7AD6C12DCBA7
	2		CN = Entrust SMIME Root CA - 2022 O = Entrust, Inc. C = US	CN = Entrust Root Certification Authority - G2 O = Entrust, Inc. CN = US	58cbd5fa3076485c180ac1e25747447d	RSA 4096-bits	RSA SHA-256	5/17/2023 19:22	12/7/2030 12:59			94c8e8468d7f53170305441810ac65e06ea2950d	E8A2BB3BDE5365BE0BE83AAECC646A104B5C1A2CD03D4534F6CFCF48DA1533E0
14	1		CN = AffirmTrust Commercial O = AffirmTrust C = US	CN = AffirmTrust Commercial O = AffirmTrust C = US	7777062726a9b17c	RSA 2048-bits	RSA SHA-256	1/29/2010 14:06	12/31/2030 14:06			9d93c6538b5ecaf3f9f1e0fe59995bc24f6948f	0376AB1D54C5F9803CE4B2E201A0EE7EEF7B57B636E8A93C988D4860C96F5FA7
15	1		CN = AffirmTrust Networking O = AffirmTrust C = US	CN = AffirmTrust Networking O = AffirmTrust C = US	7c4f04391cd4992d	RSA 2048-bits	RSA SHA-256	1/29/2010 14:08	12/31/2030 14:08			071fd2e79cdac26ea240b4b07a50105074c4c8bd	0A81EC5A929777F145904AF38D5D509F66B5E2C58FCD853105880E17F3F0B41B
16	1		CN = AffirmTrust Premium O = AffirmTrust C = US	CN = AffirmTrust Networking O = AffirmTrust C = US	6d8c1446b1a60aee	RSA 2048-bits	RSA SHA-256	1/29/2010 14:10	12/31/2030 14:10			9dc067a60c22d926f545aba665521127d845ac63	70A73F7F376860074248904534B11482D58F0E698ECC498DF52577EBF2E93B9A
17	1		CN = AffirmTrust Premium ECC O = AffirmTrust C = US	CN = AffirmTrust Premium ECC O = AffirmTrust C = US	7497258ac73f7a54	RSA 2048-bits	RSA SHA-256	1/29/2010 14:20	12/31/2040 14:20			9aaf297ac011353526513000c36afe40d5aed63c	BD71FDF6DA97E4CF62D1647ADD2581B07D79AD78397EB4ECBA9C5E8488821423
18	1	1	CN = AffirmTrust 4K TLS Root CA - 2022 O = AffirmTrust C = CA	CN = AffirmTrust 4K TLS Root CA - 2022 O = AffirmTrust C = CA	4261723e9b00a227d3bd5871e2d5b404687473a5	RSA 2096-bits	RSA SHA-256	12/13/2022 17:05	12/7/2047 17:05			07875af4076871d9661be264788037805cdef727	A7DEDFA842167DD12FDA0F2080E73295B888BEA71B2094EA0950945A482FC1

Note:  
1- Copy of the key was destroyed during Key Destruction Ceremony on September 4, 2025 or September 16, 2025  
2- Backup Key was transferred to Sectigo on August 14, 2025

CA #	Cert #	Note	Subject	Issuer	Serial Number	Key Type	Hash Type	Not Before	Not After	Revoked Date	Extended Key Usage	Subject Key Identifier	SHA256 Fingerprint
19	1		CN=Entrust Certification Authority - AATL1 O=Entrust, Inc. C=US	OU=(c) 2015 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	00c727f51f8f922b0200000005565d8ad	RSA 4096-bits	RSA SHA-512	7/20/2020 15:46	12/20/2037 16:16	9/2/2025	1.3.6.1.4.1.311.10.3.12, 1.2.840.113583.1.1.5, E-mail Protection	63f184dd03bea39f64fa767a47c4567ec06da020	839f9b91c2e49218a66416df181b984e98e634d12a95483d98a6199fc0788d74
20	1	1,2	CN=Entrust Enterprise Intermediate CA - ICA1 O=Entrust, Inc. C=US	CN=Entrust.net Certification Authority (2048) OU=(c) 1999 Entrust.net Limited OU=www.entrust.net/CPS_2048 incorp.by ref. (limits liab.) O=Entrust.net	3eeb174d9b443ba90000000051ce1981	RSA 2048-bits	RSA SHA-256	5/7/2021 15:32	7/7/2029 16:02		TLS Web Client Authentication, E-mail Protection, Microsoft Smart card login, Microsoft Encrypted File System, 1.3.6.1.4.1.311.10.3.4.1, 1.3.6.1.4.1.311.67.1.1	c838d40a70dda357a8e596592d1313c920d5dcb3	C54D8812C438725C275584AD81825F6975CBA6C258A2BF8B8247A14F03BD22A
21	1		CN = AffirmTrust Certificate Authority - DV1 O = See www.affirmtrust.com/repository ON = AffirmTrust CN = CA	CN = AffirmTrust Commercial ON = AffirmTrust CN = US	6345009686538276405	RSA 2048-bits	RSA SHA-256	4/7/2017 15:10	12/2/2030 04:00	9/9/2025	TLS Web Server Authentication, TLS Web Client Authentication	33DF7A3E027996EBB60CC063FA75BF9222CD91FA	CA4389C89DDFC31BEC26C74B44A8498C58B2D838516FA01B14F1393629E58A40
	2		CN = AffirmTrust Certificate Authority - DV1 O = See www.affirmtrust.com/repository ON = AffirmTrust CN = CA	CN = AffirmTrust Commercial ON = AffirmTrust CN = US	62b4c3eba53918177f127a837b574f96	RSA 2048-bits	RSA SHA-256	3/21/2019 20:21	12/2/2030 04:00	9/9/2025	TLS Web Server Authentication, TLS Web Client Authentication	33DF7A3E027996EBB60CC063FA75BF9222CD91FA	4563B936E35A897576F5AEF1935D9BC7E9977841F0573BD2E16BCAC9534A6AF9
22	1	1	CN = AffirmTrust 4K TLS Certification Authority - DVTLS1 O = AffirmTrust C = CAS	CN = AffirmTrust 4K TLS Root CA - 2022 O = AffirmTrust C = CA	04e911e082864b911d97267aa3388c5a	RSA 4096-bits	SHA384	12/14/2022 18:09	12/29/2040 23:59		TLS Web Server Authentication, TLS Web Client Authentication	45c174f7f45d03320f133efb8da6179886f5c96	FB327FE14AB3FEC5C96D9169A8B536382B97B1B325543CD8A10F8C431E103
23	1	1,2	CN=Entrust Certification Authority - L1F OU=(c) 2016 Entrust, Inc. - for authorized use only OU=See <a href="http://www.entrust.net/legal-terms">www.entrust.net/legal-terms</a> O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - EC1 OU=(c) 2012 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	b601913d8553bafa0000000051d4c1f6	EC 384-bits	ECDSA SHA-384	4/5/2016 20:17	10/5/2037 20:47		TLS Web Server Authentication, TLS Web Client Authentication	2e62f014ee87cdb335033defe4b99efd3bb8a3c9	183580E482EA65536FC010E4BC13C060F65668165FBA97E2F542CE9CA6DFEFC
	2		CN=Entrust Certification Authority - L1F OU=(c) 2016 Entrust, Inc. - for authorized use only OU=See <a href="http://www.entrust.net/legal-terms">www.entrust.net/legal-terms</a> O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - EC1 OU=(c) 2012 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	a25b1769bad80ad70000000051ce1941	EC 384-bits	RSA SHA-256	2/5/2021 16:34	7/5/2029 17:04		TLS Web Server Authentication, TLS Web Client Authentication	2e62f014ee87cdb335033defe4b99efd3bb8a3c9	0CA09DB8AEDF7D2D1DDE14DCCC2DB6EA959BCF6F010360D836C342C624D7E0E
24	1	1,2	CN=Entrust Certification Authority - L1K OU=(c) 2012 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	79851D5CBC895C56D97FEF2D5CF3D6	RSA 2048-bits	RSA SHA-256	10/5/2015 19:13	12/5/2030 19:43			82a27074dbbc533fcf7bd4f7cd7fa760c60a4cbf	052C0174E806F9474AEC865129A04867F385087B631393B4D8A7F26B43733348
	2		CN=Entrust Certification Authority - L1K OU=(c) 2012 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	0ee94cc30000000051d37785	RSA 2048-bits	RSA SHA-256	10/5/2015 19:13	12/5/2030 19:43			82a27074dbbc533fcf7bd4f7cd7fa760c60a4cbf	13EFB39A2F6654E8C67BD04F4C6D4C90CD6CAB50918CEDC73787F6B77D3D3FE7
	3		CN = Entrust Certification Authority - L1K OU = (c) 2012 Entrust, Inc. - for authorized use only OU = See www.entrust.net/legal-terms O = Entrust, Inc. C = US	CN = Entrust.net Certification Authority (2048) OU = (c) 1999 Entrust.net Limited OU = www.entrust.net/CPS_2048 incorp.by ref. (limits liab.) O = Entrust.net	2e0451ce5d2424c72b5d6576716506d8	RSA 2048-bits	RSA SHA-256	11/25/2022 21:19	7/23/2029 00:00			Server Authentication (1.3.6.1.5.5.7.3.1) Client Authentication (1.3.6.1.5.5.7.3.2)	82a27074dbbc533fcf7bd4f7cd7fa760c60a4cbf

Note:

- 1- Copy of the key was destroyed during Key Destruction Ceremony on September 4, 2025 or September 16, 2025
- 2- Backup Key was transferred to Sectigo on August 14, 2025

CA #	Cert #	Note	Subject	Issuer	Serial Number	Key Type	Hash Type	Not Before	Not After	Revoked Date	Extended Key Usage	Subject Key Identifier	SHA256 Fingerprint
25	1	1	CN = Entrust 4K TLS Certification Authority - OV TLS1 O = Entrust, Inc. C = US	CN = Entrust 4K TLS Root CA - 2022 O = Entrust, Inc. C = US	68ca04736adcebbd10432a6bd6ef8a34	EC 384-bits	RSA SHA-256	12/14/2022 18:23	12/29/2040 23:59		Server Authentication (1.3.6.1.5.5.7.3.1) Client Authentication (1.3.6.1.5.5.7.3.2)	a80003c10185b8c0272aa9bc08acfad44abe51a5	9EC6CA44D6ADB5DAEFEC9D773787E3B88E1243F5455341B8438A6776869333B
36	1	1	CN = Entrust P384 TLS Certification Authority - OV TLS2 O = Entrust, Inc. C = US	CN = Entrust P384 TLS Root CA - 2022 O = Entrust, Inc. C = US	68772973693c55320a742f1433ca0a2	EC 384-bits	RSA SHA-256	12/14/2022 18:25	12/29/2040 23:59		Server Authentication (1.3.6.1.5.5.7.3.1) Client Authentication (1.3.6.1.5.5.7.3.2)	c25b7126ed58efa51419aa2ef60456546f9a39c9	2DB842F8243212772912668230ABC31DE13C1D4B852D6C21C9B1007D5AC20681
27	1	1,2	CN = CrowdStrike TLS CA 2022 O = CrowdStrike, Inc. C = US	CN = Entrust Root Certification Authority - G2 OU = (c) 2009 Entrust, Inc. - for authorized use only OU = See www.entrust.net/legal-terms O = Entrust, Inc. C = US	309dc7b318912d0ecb7d1df27ab75cdf	RSA 2048-bits	RSA SHA-256	11/15/2022 16:50	12/6/2030 00:00:00			55eaa745b99af7b671311a31dfa176fe7692997a	2C4AD64B4E862D7D46424D9FA13EA9A74A62F7C4B608AE1A87142CC9A6873D
28	1		CN=Siemens Issuing CA Internet Server 2020 O=Siemens C=DE	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	00fab27d0ff80d09a000000051d39440	RSA 2048-bits	RSA SHA-256	8/10/2020 14:11	11/10/2030 14:41	9/2/2025	TLS Web Server Authentication, TLS Web Client Authentication	c9a757cb86c96107c6c2b48665a91ec1cae1029b	A65007A05EFE1889D66A40DEECBC6C1A271E919006811FDB8DBD7E0675212D1
29	1	1,2	CN = Namirial OV SSL CA 2023 O = Namirial S.p.A C = IT	CN = Entrust Root Certification Authority - G2 OU = (c) 2009 Entrust, Inc. - for authorized use only OU = See www.entrust.net/legal-terms O = Entrust, Inc. C = US	17c236215a437f11aae022348b6b7f2d	RSA 2048-bits	RSA SHA-256	2/9/2023 20:09	12/7/2030 12:59		Server Authentication (1.3.6.1.5.5.7.3.1) Client Authentication (1.3.6.1.5.5.7.3.2)	9a9f6a5f8fe34fc102deb2f89c6b9d7c692d31e	F4E26BEB0279228D96D47B05DF744AE6CE6AAD88A3B757D249EB3D22D27F4C6
30	1		CN AffirmTrust Certificate Authority – OV1 OU= See www.affirmtrust.com/repository ON= AffirmTrust C=CA	CN= AffirmTrust Commercial ON= AffirmTrust C=US	1764987999490089933	RSA 2048-bits	RSA SHA-256	11/29/2016 16:49	12/2/2030 04:00	9/2/2025		FE60C30DA4A29D214F7A784C62C5DB14FC3978C4	EA4EE2FAA57AE48539863977FE5BB205B6AFB32F7A73B2B363E4BE02CD8A91E9
	2		CN= AffirmTrust Certificate Authority – OV1 OU= See www.affirmtrust.com/repository ON= AffirmTrust C=CA	CN= AffirmTrust Commercial ON= AffirmTrust C=US	53f6a611092e528ed963f19149532204	RSA 2048-bits	RSA SHA-256	3/21/2019 20:25	12/2/2030 04:00	9/2/2025	TLS Web Server Authentication, TLS Web Client Authentication	FE60C30DA4A29D214F7A784C62C5DB14FC3978C4	B5FD6F800334F565036B0999F8310B5B0BD7268395D8B267005697AF7301C5E8
31	1		CN=Entrust Certification Authority - L1E OU=(c) 2009 Entrust, Inc. OU=www.entrust.net/rpa is incorporated by reference O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority OU=(c) 2006 Entrust, Inc. OU=www.entrust.net/CPS is incorporated by reference O=Entrust, Inc. C=US	008666b02ac1cb544000000051d3589c	RSA 2048-bits	RSA SHA-256	6/19/2019 16:52	11/19/2026 17:22	9/2/2025	TLS Web Server Authentication, TLS Web Client Authentication	5b418ab2c443c1bdfbc85441559de096adff9a1	232F6367CF561E00C83E180A9FCA8546B3771FB450EBCB4A0526F8349C8CA139
32	1	1,2	CN=Entrust Certification Authority - L1J OU=(c) 2016 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - EC1 OU=(c) 2012 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	0a83d4803e7e9f51000000051d4c1f7	EC 384-bits	ECDSA SHA-384	4/5/2016 20:19	10/5/2037 20:49		TLS Web Server Authentication, TLS Web Client Authentication	c3f94503bec8f90b3c4535f3eb72ece7e8eb949b	3447B74B5E500A549983FA2CED73A5642E6AAEC78829546158437DF66D7435B8
33	1	1,2	CN=Entrust Certification Authority - L1M OU=(c) 2014 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	61a1e7d20000000051d366a6	RSA 2048-bits	RSA SHA-256	12/15/2014 15:25	10/15/2030 15:55		TLS Web Client Authentication, TLS Web Server Authentication	c3f7d0b52a30adaf0d9121703954ddbc8970c73a	75C5B3F01FD1F51A2C447AB7C785D72E69FA9C472C08571E7EADF3B8EABAE70C
34	1		CN=Entrust Certification Authority - L1N OU=(c) 2014 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - G4 OU=(c) 2015 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	00abec77f1b410c0700000005565d805	RSA 2048-bits	RSA SHA-256	11/22/2017 20:04	12/22/2030 20:3	9/2/2025	TLS Web Server Authentication, TLS Web Client Authentication	ee47d18571f1fd2db73fbb3e6358771749400e95	B14D5089079C1D8F7649DB9A5D3CEFB1AAC06F66AFC49225C5BE2AA19FD41A35
35	1	1,2	CN=Entrust Certification Authority - ES QWAC2 ON=VATES-B81188047 O=Entrust EU, S.L. C=ES	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	7a8872b868a359dab1b02ecf4c9718d	RSA 2048-bits	RSA SHA-256	11/16/2021 00:00	12/01/2030 00:00		TLS Web Server Authentication, TLS Web Client Authentication	41cfae2b1d633bc4cf5904479b65a2489df929c	C97F2F6E6A8ADB6ECFE4978F08CA8F6F0123A94784522B610ADF6AB51439FC62

Note:

- 1- Copy of the key was destroyed during Key Destruction Ceremony on September 4, 2025 or September 16, 2025
- 2- Backup Key was transferred to Sectigo on August 14, 2025

CA #	Cert #	Note	Subject	Issuer	Serial Number	Key Type	Hash Type	Not Before	Not After	Revoked Date	Extended Key Usage	Subject Key Identifier	SHA256 Fingerprint
36	1	1	CN = Entrust 4K TLS Certification Authority - EVTLS1 O = Entrust, Inc. C = US	CN = Entrust 4K EV TLS Root CA - 2022 O = Entrust, Inc. C = US	31ef81d7823f9a0f27b5d3085df41ec0	EC 384-bits	ECDSA SHA-384	12/14/2022 14:16	12/29/2040 19:59		Server Authentication (1.3.6.1.5.5.7.3.1) Client Authentication (1.3.6.1.5.5.7.3.2)	9930115c04d2448b259713c665d21616c9678792	AAC8B9394C3BB0376622444235343371C59E951FF85A151B3FE19C288076E2B5
37	1	1	CN = Entrust P384 TLS Certification Authority - EVTLS2 O = Entrust, Inc. C = US	CN = Entrust P384 EV TLS Root CA - 2022 O = Entrust, Inc. C = US	2ecf71fbc3f43015ca8bea5edd3dc763	EC 384-bits	ECDSA SHA-384	12/14/2022 14:20	12/29/2040 19:59		Server Authentication (1.3.6.1.5.5.7.3.1) Client Authentication (1.3.6.1.5.5.7.3.2)	2cc1fad3279c77e73038c8c95ca43c02a36775c4	2426C77CFA12EBCDB68013225496C0E7AAD66D63597AE5EF9A0EBE3830C23EC2
38	1		CN = Namirial EV SSL CA 2023 O = Namirial S.p.A C = IT	CN = Entrust Root Certification Authority - G2 OU = (c) 2009 Entrust, Inc. - for authorized use only OU = See www.entrust.net/legal-terms O = Entrust, Inc. C = US	7b0350a7b1d46885af4cc8c740a568b0	RSA 2048-bits	RSA SHA-256	2/9/2023 16:13	12/7/2030 8:59	9/2/2025	Server Authentication (1.3.6.1.5.5.7.3.1) Client Authentication (1.3.6.1.5.5.7.3.2)	eafeeb5847b833d9d2367bc88c677ab1338b8d52	3660D61ECE49E68A7E0705915ECE7EE7BAA3C5D7189363CD487E0FE0242A634
39	1		CN= AffirmTrust Extended Validation CA - EV 1 OU= See www.affirmtrust.com/repository ON= AffirmTrust C= CA	CN= AffirmTrust Commercial ON= AffirmTrust C= US	4679446353986764952	RSA 2048-bits	RSA SHA-256	11/29/2016 04:00	12/2/2030 04:00	9/2/2025		DBEF65370BE547C835D1901F03C1BC88C7A7EA80	CF88915CF996932C2B4CBE3039076D1198B72884F31E49B63A5022FE65489A12
	2		CN= AffirmTrust Extended Validation CA - EV 1 OU= See www.affirmtrust.com/repository ON= AffirmTrust C= CA	CN= AffirmTrust Commercial ON= AffirmTrust C= US	1729551ed68e7fb1edf57300f35d7fd5	RSA 2048-bits	RSA SHA-256	3/21/2019 20:27	12/2/2030 04:00	9/2/2025		DBEF65370BE547C835D1901F03C1BC88C7A7EA80	ED3C991466C8C4585FD1DA281028F9587B8219523647E0CA1B47F2C527D2920F
40	1		CN= AffirmTrust Extended Validation CA - EV 2 OU= See www.affirmtrust.com/repository ON= AffirmTrust C= CA	CN= AffirmTrust Premium ON= AffirmTrust C= US	5371c8eb0784fd5108e5d4f3e323ec46	RSA 2048-bits	RSA SHA-256	3/21/2019 20:46	12/2/2030 04:00	9/2/2025		737C9A38683C517C4108FEA11F2A1EB461DBCD3C	9DF77488C4B74AC32E3CEC4C643D001D5C3BABFA4001FFD193DCA10C8BE5CB3A
41	1		CN= AffirmTrust Extended Validation CA - EV 3 OU= See www.affirmtrust.com/repository ON= AffirmTrust C= CA	CN= AffirmTrust Networking ON= AffirmTrust C= US	3424a1ecf8f0a35fe746b7011c43e844	RSA 2048-bits	RSA SHA-256	3/21/2019 20:46	12/2/2030 04:00	9/2/2025		791EB1C917C71EACB1C714D7C3E87FBCB9509B15	B700BA49AF4D19E72FB15A2DAC3C213BA44C319FA7DA92772B3682E12B781093
42	1		CN= AffirmTrust Extended Validation CA - EV EC1 OU= See www.affirmtrust.com/repository ON= AffirmTrust C= CA	CN= AffirmTrust Premium ECC ON= AffirmTrust C= US	0202a584c134064dc9f32d207ea37298	RSA 2048-bits	RSA SHA-256	3/21/2019 20:55	12/2/2030 04:00	9/2/2025		C6908C0283D75DE3BE3B9C2ED5657D2A1060EEE5	CDE23A52303C3CA67A48BBCC9582FF5C9203AA98CB0F387139308CE2289506A2
43	1	1,2	CN=Entrust Code Signing CA - OVCS1 OU=(c) 2015 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	7ab8c4fc000000051d373d4	RSA 2048-bits	RSA SHA-256	6/9/2015 18:00	6/9/2025 18:33		Code Signing	7e1a1f1a11745c64c90c1f9401abfd81642ea12c	7FBA43A4CCBB37B1CCC2DD11CE0C911DA3A2917B0CA0E846056854EF464C50C4
	2		CN=Entrust Code Signing CA - OVCS1 OU=(c) 2015 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	43c10b1c000000051d373da	RSA 2048-bits	RSA SHA-256	6/10/2015 13:46	11/10/2030 14:16		Code Signing	7e1a1f1a11745c64c90c1f9401abfd81642ea12c	CC587A0E5D6771BA348D3D763752F0667026B3531C5396EDBE24ADCE93215723
44	1	1,2	CN=Entrust Code Signing CA - OVCS2 O=Entrust, Inc. C=US	CN=Entrust Code Signing Root Certification Authority - CSBR1 O=Entrust, Inc. C=US	71ef5574af3554c35a2c69f6f4b6bcd	RSA 4096-bits	RSA SHA-512	5/7/2021 19:2	12/29/2040 23:59		Code Signing	ef9fba79b073f2251e789c03529c1b5384de8ded	95F843046BAC035572A3BA1B821DF8B759467F5B512DDFA8A72F0799447D6368
45	1	1,2	CN=Entrust Extended Validation Code Signing CA - EVCS1 OU=(c) 2015 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	417ace39000000051d373bb	RSA 2048-bits	RSA SHA-256	6/9/2015 17:54	6/9/2025 18:24		Code Signing	2a0a6f322c292021766ab1ac8c3caf938e0e6ba2	57BC151D924C5A43B57B6433A58A93885F773B4631FDEC85C9FC3545529F274
	2		CN=Entrust Extended Validation Code Signing CA - EVCS1 OU=(c) 2015 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	00d9d6b8f2000000051d373d8	RSA 2048-bits	RSA SHA-256	6/10/2015 13:39	6/10/2025 14:09		Code Signing	2a0a6f322c292021766ab1ac8c3caf938e0e6ba2	091C6319936F0CAC4C7B5E027DCCA2B2BA2AF4561EA2C71E650C1E3FB905FD0

Note:  
1- Copy of the key was destroyed during Key Destruction Ceremony on September 4, 2025 or September 16, 2025  
2- Backup Key was transferred to Sectigo on August 14, 2025

CA #	Cert #	Note	Subject	Issuer	Serial Number	Key Type	Hash Type	Not Before	Not After	Revoked Date	Extended Key Usage	Subject Key Identifier	SHA256 Fingerprint
	3		CN=Entrust Extended Validation Code Signing CA - EVCS1 OU=(c) 2015 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	0087825260000000051d373d9	RSA 2048-bits	RSA SHA-256	6/10/2015 13:42	11/10/2030 14:12		Code Signing	2a0a6f322c292021766ab1ac8c3caf938e0e6ba2	D04DB927C663AA8C853D54716DD6DC2A4B2FEF9C3AE18FB250447FC5D7771E57
46	1	1,2	CN=Entrust Extended Validation Code Signing CA - EVCS2 O=Entrust, Inc. C=US	CN=Entrust Code Signing Root Certification Authority - CSBR1 O=Entrust, Inc. C=US	35afb77b9d341f6afc8f8446ab31352b	RSA 4096-bits	RSA SHA-512	5/7/2021 19:19	12/29/2040 23:59		Code Signing	ce894f8251aa15a28462ca312361d261fbf8fe78	6510DC50A0D17DC438C2A85D738F558582B6C25361884F3882E207A51F4ED152
47	1	1,2	CN=Entrust Class 1 Client CA - SHA256 OU=(c) 2015 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust Root Certification Authority - G2 OU=(c) 2009 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	6e61669872bc9c30000000051d3931e	RSA 2048-bits	RSA SHA-256	4/16/2019 15:35	11/16/2030 16:05		TLS Web Client Authentication, E-mail Protection	e249b9ec25deb70cdee550185b48cc0c8e15f2a6	C6E9E993C258B72124AAD3C9C068B6EF23576155F310B305733361E20B17C943
48	1	1,2	CN=Entrust Class 2 Client CA OU=(c) 2010 Entrust, Inc. OU=www.entrust.net/CPS is incorporated by reference O=Entrust, Inc. C=US	CN=Entrust.net Certification Authority (2048) OU=(c) 1999 Entrust.net Limited OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.) O=Entrust.net	00bc4d843035b759f0000000051ce1709	RSA 2048-bits	RSA SHA-256	6/20/2017 20:34	12/20/2028 21:04		E-mail Protection, TLS Web Client Authentication	0991a5bae9f22e2a75dfcd7efe77caf2de6b9b24	95AD94E88F5B8604E40E5FF3680D34BE46C1D5BA06C0E735B72AA396735C415
	2		CN=Entrust Class 2 Client CA OU=(c) 2010 Entrust, Inc. OU=www.entrust.net/CPS is incorporated by reference O=Entrust, Inc. C=US	CN=Entrust.net Certification Authority (2048) OU=(c) 1999 Entrust.net Limited OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.) O=Entrust.net	00af1c04b2ac8cf9b0000000051ce18e3	RSA 2048-bits	RSA SHA-256	7/29/2020 15:48	6/29/2029 16:18		E-mail Protection, TLS Web Client Authentication	0991a5bae9f22e2a75dfcd7efe77caf2de6b9b24	1A20FEF46482A98BAC6F6C7397C017310AC7FB78495438BC7A7DE9035C246679
49	1	1,2	CN=Entrust Class 2 Client CA - C2CA2 O=Entrust, Inc. C=US	CN=Entrust.net Certification Authority (2048) OU=(c) 1999 Entrust.net Limited OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.) O=Entrust.net	0088068b45c3fd4640000000051ce1961	RSA 2048-bits	RSA SHA-256	3/16/2021 14:22	7/16/2029 14:52		TLS Web Client Authentication, E-mail Protection	a2714ad5c264652f8dce2ae2c1b6e70dd0f932e4	B14CF550D8F573D93E90963C32A85FB51C983C98164F54D78915F6358C954F0E
50	1	1,2	CN = Entrust Personal Email Certification Authority - SMIME1 O = Entrust, Inc. C = US	CN = Entrust SMIME Root CA - 2022 O = Entrust, Inc. C = US	1bb7bc5a6a4f06be4f716105ecd2a74	RSA 4096-bits	SHA-384	12/14/2022 18:31	12/29/2040 23:59		E-mail Protection, TLS Web Client Authentication	03219B5F18632EC87EF9AEDAD9179FB6C9188360	97E229CD78B38BD7B74AC431FA57E294CBA35EB238293DEE04B20B218D92BA
51	1	1,2	CN = Entrust Enterprise Email CA - SMIME2 O = Entrust, Inc. C = US	CN = Entrust SMIME Root CA - 2022 O = Entrust, Inc. C = US	1ab5936d245a2fe43421c2ef6513e3f3	RSA 4096-bits	SHA-384	6/26/2024 16:05	12/29/2040 23:59		E-mail Protection, TLS Web Client Authentication	E08815F1C58A919DBF8E5E8E676AD71CD0780F87F	D9F628050929FC422B1FCB73C11496923D7DB0E155769A134313C0E5E81FB2A8
52	1	1,2	CN = Entrust Certification Authority – ES QTS1 OrganizationIdentifier = VATES-B81188047 O = Entrust EU, S.L. C = ES	CN = Entrust Digital Signing Root Certification Authority – DSR1 O = Entrust, Inc. C = US	10b5a317770d5c645606941116538cdc	RSA 4096-bits	RSA SHA-256	10/3/2022 11:12	12/28/2040 20:00		Time Stamping (1.3.6.1.5.5.7.3.8)	696382cac2f1119a714332858bae37ca9676be80	253F463FB19E06D188A1F81AB6A3CA78C9352B08DC94D74CF05336809363812
53	1	1,2	CN=Entrust Timestamping CA - TS1 OU=(c) 2015 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust.net Certification Authority (2048)s OU=(c) 1999 Entrust.net Limited OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.) O=Entrust.net	58da13ff00000000051ce0df7	RSA 2048-bits	RSA SHA-256	7/22/2015 19:02	6/22/2029 19:32		Time Stamping	c3c271d27bd76805ae3b399b34250c6203c75768	44DFCD2C573110E748F4E85903595F66050ED925B7306542C54E87396671F03
54	1	1,2	CN=Entrust Time Stamping CA - TS2 O=Entrust, Inc. C=US	CN=Entrust Code Signing Root Certification Authority - CSBR1 O=Entrust, Inc. C=US	25bc2bf329ca107f1ea9ba8885d49d3b	RSA 4096-bits	RSA SHA-512	5/7/2021 19:22	12/29/2040 23:59		Time Stamping	26ff0c448081bccdd91f55454b6b3b3fc99f108	21E81685B352955B9ED48FB969BD2E4F95CFB85ED1260CF6B7FA0A35D0028F
55	1		CN = Entrust Time Stamping CA – TS3 O = Entrust C = US	CN=Entrust Digital Signing Root Certification Authority - DSR1 O=Entrust, Inc. C=US	3408caf88bab2551c998e96caf61b9b6	RSA 4096-bits	RSA SHA-384	1/22/2025 15:07	12/29/2040 23:59	9/2/2025	Time Stamping	0F5327BD88991DEBF2F978D14CFBECF9F573D9EA	ACBCF6B556719222C02B594792FE757BFC14BFDAB2C0C425B9345D546DA556B
56	1		CN = Entrust Time Stamping CA - TS4 O = Entrust C = US	CN=Entrust Code Signing Root Certification Authority - CSBR1 O=Entrust, Inc. C=US	29a427b69f9b74ac2f799250ed090d61	RSA 4096-bits	SHA-512 with RSA	1/22/2025 15:09	12/29/2040 23:59	9/2/2025	Time Stamping	24D2F416EFE99F21232AC594D4247EBE641974B7	E46CD7BE45E1519532C06012B6785DF8512CCF0FC9AD7E850606E185330F2E7
57	1	1,2	CN=Entrust Verified Mark CA - VMC2 O=Entrust, Inc. C=US	CN=Entrust Verified Mark Root Certification Authority - VMCR1 O=Entrust, Inc. C=US	699d8fd758c2c39c1e53d1aa1476d1e6	RSA 4096-bits	RSA SHA-512	5/7/2021 19:23	12/19/2040 23:59		1.3.6.1.5.5.7.3.3.1	efbc3cb4af3ad045e7654dfc76478e92d1d743f	C269504B491DBF451A695B953711ADC5CD70975B5FCA1E181EBBD2172CB07E0C
58	1	1,2	CN=Entrust Class 3 Client CA - SHA256 OU=(c) 2015 Entrust, Inc. - for authorized use only OU=See www.entrust.net/legal-terms O=Entrust, Inc. C=US	CN=Entrust.net Certification Authority (2048) OU=(c) 1999 Entrust.net Limited OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.) O=Entrust.net	551615150000000051ce160e	RSA 2048-bits	RSA SHA-256	2/25/2016 18:08	6/25/2029 18:38		TLS Web Client Authentication, E-mail Protection, 1.3.6.1.4.1.311.10.3.12, 2.16.840.1.1140.27.40.11	069f6f4ea2294e0fcae17bfb69846efadb83b72	33857338361EFCF4858DDFF6B9EF6273E3DB856AB9CEA1C0E2C65925D1C87978
59	1		CN=Entrust Certification Authority - ES QSig2 organizationIdentifier=VATES-B81188047 O=Entrust EU, S.L. C=ES	CN=Entrust Digital Signing Root Certification Authority - DSR1 O=Entrust, Inc. C=US	3f967d63188a95bf302f82e516cb991d	RSA 4096-bits	RSA SHA-512	11/16/2021 00:00	12/29/2040 00:00	9/2/2025	1.3.6.1.4.1.311.10.3.12, 1.2.840.113583.1.1.5	f5560d69d7da69c8d9a2096e74bedb80c61700	4671FDEAD3C532D834B36591D41496FCB8A0DB7D4F9F4CB9D34EABE0947EE87

Note:

- 1- Copy of the key was destroyed during Key Destruction Ceremony on September 4, 2025 or September 16, 2025
- 2- Backup Key was transferred to Sectigo on August 14, 2025

CA #	Cert #	Note	Subject	Issuer	Serial Number	Key Type	Hash Type	Not Before	Not After	Revoked Date	Extended Key Usage	Subject Key Identifier	SHA256 Fingerprint
60	1	1,2	CN=Entrust Certification Authority - ES QSeal1 C=ES O=Entrust Datacard Europe, S.L. organizationIdentifier=VATES- B81188047	CN=Entrust Certification Authority - AATL1 C=US O=Entrust, Inc.	13ee348e492f8dd6b5c49cf073f714ab	RSA 4096- bits	RSA SHA- 512	7/27/2020 14:39	12/19/2037 23:59		E-mail Protection, 1.3.6.1.4.1.311. 10.3.12, 1.2.840.113583. 1.1.5	5680152395717e72d90d0cd063a4f67637d3d75	1701DE38124C4458F32B88AE7E62AC15876C427A3AD3BBAE8FD1479FF00030F3
61	1	1,2	CN=Entrust Certification Authority - ES QSeal2 organizationIdentifier=VATES- B81188047 O=Entrust EU, S.L. C=ES	CN=Entrust Digital Signing Root Certification Authority - DSR1 O=Entrust, Inc. C=US	12f04c327561e6f51e8d39b47e9884e1	RSA 4096- bits	RSA SHA- 512	11/16/2021 00:00	12/29/2040 00:00		Document Signing (1.3.6.1.4.1.311. 10.3.12) Unknown Key Usage (1.2.840.113583 .1.1.5)	3618256ed95df710057c272eb8ecfa414a60ed1f	8C31D9375128D4B107F07678EEBFFF2CCA26A4CABB462F257F31A36FE7BCE104
62	1	1,2	CN = Entrust Digital Signing Certification Authority - DS1 O = Entrust, Inc. C = US	CN = Entrust Digital Signing Root Certification Authority - DSR1 O = Entrust, Inc. C = US	536373ce69ce48b59ab6f202780d6d75	RSA 4096- bits	RSA SHA- 384	12/14/2022 14:12	12/29/2040 19:59		Unknown Key Usage (1.3.6.1.5.5.7.3. 36) Document Signing (1.3.6.1.4.1.311. 10.3.12) Unknown Key Usage (1.2.840.113583 .1.1.5)	80a1841c29b421823c0e5d17bb21ed1a3e2d82d	EE2B2C76CF4A1DC6E90C14CC1986D120245294833BD6A739EFBD3EBDE98B972
63	1		CN = Entrust RSS Digital Signing CA - RSS1 O = Entrust, Inc. C = US	CN = Entrust Digital Signing Root Certification Authority - DSR1 O = Entrust, Inc. C = US	4e09de80dab7abb564ec883b235371cf	RSA 4096- bits	RSA SHA- 384	6/26/2024 16:09	12/29/2040 23:59	9/2/2025		25B5821F426E18029D9E0E50DE83D12BFC7D7	BE7A936D231428C0DB3AEE0EE9DEC65A21637B9C3D287D4A2E4960C6E5D0A827
64	1		CN = Entrust SAS Digital Signing CA - SAS1 O = Entrust, Inc. C = US	CN = Entrust Digital Signing Root Certification Authority - DSR1 O = Entrust, Inc. C = US	6c8a610b9102af05a8f9f4ecbbebfe48	RSA 4096- bits	RSA SHA- 384	6/26/2024 16:09	12/29/2040 23:59	9/2/2025		FEE2158D58F8CD0A728107388D60ED067F1B70:87	2CE87D1F184A99E7CC39F122AB4ED19215261CCE27BC85FD1B2E065AB7FD7615

Note:

- 1- Copy of the key was destroyed during Key Destruction Ceremony on September 4, 2025 or September 16, 2025
- 2- Backup Key was transferred to Sectigo on August 14, 2025

**ATTACHMENT B**  
**LIST OF ENTRUST CERTIFICATION PRACTICE STATEMENTS**

<b>CPS Name</b>	<b>Version</b>	<b>Date</b>
<a href="#">Entrust Certificate Services Certification Practice Statement</a>	3.29	February 21, 2025
<a href="#">AffirmTrust Certification Practice Statement</a>	3.18	January 15, 2025



## ENTRUST MANAGEMENT'S STATEMENT

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

- Subscriber registration
- Certificate renewal
- Certificate issuance
- Certificate distribution
- Certificate revocation
- Certificate validation
- Subscriber key generation and management
- Subordinate CA cross-certification

The management of Entrust 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 Entrust's Certification Authority operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

Entrust management has assessed its disclosures of its certificate practices and controls over its CA services. Based on that assessment, in Entrust management's opinion, in providing its CA services in Ottawa, Ontario, Canada and Toronto, Ontario, Canada, throughout the period March 1, 2025 to September 17, 2025, Entrust has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environment control practices in its Certificate Policy/ Certification Practice Statements ("CP/CPS") as enumerated in [Attachment B](#).
- maintained effective controls to provide reasonable assurance that Entrust provides its services in accordance with its CP/CPS.
- 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 Entrust); 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 v2.2.2](#), 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 Destruction
- CA Key Compromise
- CA Cryptographic Hardware Lifecycle Management
- CA Key Transportation
- CA Key Migration

**Subscriber Key Lifecycle Management Controls**

- CA-Provided Subscriber Key Generation Services
- CA-Provided Subscriber Key Storage and Recovery Services
- Requirements for Subscriber Key Management

**Certificate Lifecycle Management Controls**

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

**Subordinate CA and Cross Certificate Lifecycle Management Controls**

- Subordinate CA and Cross Certificate Lifecycle Management

Entrust does not escrow or archive its CA keys and subscriber keys, does not provide integrated circuit card management services, does not provide certificate suspension services and does not use external Registration Authorities. Accordingly, our statement does not extend to controls that would address those criteria.

Entrust management has also reported the following 'bug' on Mozilla's Bugzilla reporting system:

Bug ID	Summary	Opened	Closed
1956681	Cross-certified CA CP/CPS not updated in CCADB	3/26/2025	5/08/2025

Signed by:  
  
89D32B44D9C945B...  
Jim Trovato  
Director, Product Compliance  
November 19, 2025



**ATTACHMENT A**

**LIST OF IN SCOPE CAs**

<b>Root CAs</b>
<ol style="list-style-type: none"><li>1. Entrust.net Certification Authority (2048)</li><li>2. Entrust Root Certification Authority</li><li>3. Entrust Root Certification Authority - G2</li><li>4. Entrust Root Certification Authority - G4</li><li>5. Entrust Root Certification Authority – EC1</li><li>6. Entrust Code Signing Root Certification Authority - CSBR1</li><li>7. Entrust Digital Signing Root Certification Authority - DSR1</li><li>8. Entrust Verified Mark Root Certification Authority - VMCR1</li><li>9. Entrust 4K EV TLS Root CA - 2022</li><li>10. Entrust P384 EV TLS Root CA - 2022</li><li>11. Entrust 4K TLS Root CA - 2022</li><li>12. Entrust P384 TLS Root CA - 2022</li><li>13. Entrust SMIME Root CA - 2022</li><li>14. AffirmTrust Commercial</li><li>15. AffirmTrust Networking</li><li>16. AffirmTrust Premium</li><li>17. AffirmTrust Premium ECC</li><li>18. AffirmTrust 4K TLS Root CA - 2022</li></ol>
<b>Intermediate CAs</b>
<ol style="list-style-type: none"><li>19. Entrust Certification Authority – AATL1</li><li>20. Entrust Enterprise Intermediate CA - ICA1</li></ol>
<b>Issuing CAs</b>
<ol style="list-style-type: none"><li>21. AffirmTrust Certificate Authority – DV1</li><li>22. AffirmTrust 4K TLS Certification Authority - DVTLS1</li><li>23. Entrust Certification Authority – L1F</li><li>24. Entrust Certification Authority – L1K</li><li>25. Entrust 4K TLS Certification Authority - OVTLS1</li><li>26. Entrust P384 TLS Certification Authority - OVTLS2</li><li>27. CrowdStrike TLS CA 2022</li><li>28. Siemens Issuing CA Internet Server 2020</li><li>29. Namirial OV SSL CA 2023</li><li>30. AffirmTrust Certificate Authority – OV1</li><li>31. Entrust Certification Authority – L1E</li><li>32. Entrust Certification Authority – L1J</li><li>33. Entrust Certification Authority – L1M</li><li>34. Entrust Certification Authority – L1N</li><li>35. Entrust Certification Authority – ES QWAC2</li><li>36. Entrust 4K TLS Certification Authority - EVTLS1</li><li>37. Entrust P384 TLS Certification Authority - EVTLS2</li><li>38. Namirial EV SSL CA 2023</li><li>39. AffirmTrust Extended Validation CA – EV1</li><li>40. AffirmTrust Extended Validation CA – EV2</li><li>41. AffirmTrust Extended Validation CA – EV3</li><li>42. AffirmTrust Extended Validation CA – EVEC1</li><li>43. Entrust Code Signing CA – OVCS1</li><li>44. Entrust Code Signing CA – OVCS2</li><li>45. Entrust Extended Validation Code Signing CA – EVCS1</li><li>46. Entrust Extended Validation Code Signing CA – EVCS2</li></ol>



47. Entrust Class 1 Client CA - SHA256
48. Entrust Class 2 Client CA
49. Entrust Class 2 Client CA – C2CA2
50. Entrust Personal Email Certification Authority - SMIME1
51. Entrust Enterprise Email CA - SMIME2
52. Entrust Certification Authority – ES QTS1
53. Entrust Timestamping CA – TS1
54. Entrust Timestamping CA – TS2
55. Entrust Time Stamping CA – TS3
56. Entrust Time Stamping CA - TS4
57. Entrust Verified Mark CA - VMC2
58. Entrust Class 3 Client CA - SHA256
59. Entrust Certification Authority - ES QSig2
60. Entrust Certification Authority - ES QSeal1
61. Entrust Certification Authority - ES QSeal2
62. Entrust Digital Signing Certification Authority - DS1
63. Entrust RSS Digital Signing CA - RSS1
64. Entrust SAS Digital Signing CA - SAS1



ATTACHMENT B

LIST OF ENTRUST CERTIFICATION PRACTICE STATEMENTS

CPS Name	Version	Date
<a href="#">Entrust Certificate Services Certification Practice Statement</a>	3.29	February 21, 2025
<a href="#">AffirmTrust Certification Practice Statement</a>	3.18	January 15, 2025