



REPORT OF THE INDEPENDENT ACCOUNTANT

To the Management of Symantec Corporation:

We have examined for the Symantec Corporation's ("Symantec") Certification Authority ("CA") operations at Mountain View, California, USA; New Castle, Delaware, USA; Melbourne, Australia; Sydney, Australia; Cape Town, South Africa; Dublin, Ireland; Sapporo, Japan; and Kawasaki-shi, Japan and for Verisign, Inc. ("Verisign"), an independent service organization that provides datacenter hosting services to Symantec at the New Castle, Delaware location:

- a) Symantec's disclosure of its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices and its disclosure of the services and related controls provided by Verisign in [Attachment A](#); and
- b) the effectiveness of Symantec's controls and Verisign's controls, where applicable, over the
 - provision of services in accordance with its Symantec Trust Network ("STN") Certification Practices Statement ("CPS"), the STN Certificate Policy ("CP"), and the description of the services and related controls provided by Verisign as enumerated in [Attachment A](#),
 - consistency of Symantec's STN CPS with its STN CP,
 - establishment and protection of the integrity of keys and certificates it manages throughout their lifecycle,
 - authenticity and confidentiality of subscriber and relying party information,
 - continuity of key and certificate lifecycle management operations, and
 - development, maintenance, and operation of CA systems integrity

throughout the period December 1, 2016 to October 31, 2017 for its CAs as enumerated in [Attachment B](#).

Symantec's management is responsible for these disclosures and for maintaining effective controls based on the WebTrust [Principles and Criteria for Certification Authorities v2.0](#). Our responsibility is to express an opinion based on our examination.

The relative effectiveness and significance of specific controls at Symantec and Verisign and their effect on assessments of control risk for subscribers and relying parties are dependent on their interaction with the controls, and other factors present at individual subscriber and relying party locations. Our examination did not extend to controls at individual subscriber and relying party locations and we have not evaluated the effectiveness of such controls.

Symantec terminated the contracts for each of its four external registration authorities used for specific subscriber registration activities as disclosed in Symantec's business practices. The dates for termination for CrossCert, CertSuperior, CertiSign, and CertiSur were January 19, 2017, April 4, 2017, April 11, 2017, and April 14, 2017, respectively. Our examination did not extend to the controls exercised by these external registration authorities.



For the CAs enumerated under the heading Class 1 and 2 CAs in [Attachment B](#), CA services were provided to enterprise customers under a managed PKI model. All registration authority activities, as disclosed in Symantec's business practices, for these CAs are performed by the enterprise customer. Our examination did not extend to the controls exercised by these enterprise customers

Symantec does not escrow its CA keys, and does not provide certificate renewal or suspension services. Accordingly, our examination did not extend to controls that would address those criteria.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether, throughout the period December 1, 2016 to October 31, 2017, for the CAs enumerated in [Attachment B](#), in all material respects,:

- a) Symantec disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices for the services and related controls provided by Verisign in [Attachment A](#); and
- b) Symantec and Verisign, where applicable, maintained effective controls over the:
 - provision of services in accordance with Symantec's STN CPS, STN CP and the description of the services and related controls provided by Verisign as enumerated in [Attachment A](#),
 - establishment and protection of the integrity of keys and certificates it manages throughout their lifecycle,
 - authenticity and confidentiality of subscriber and relying party information,
 - continuity of key and certificate lifecycle management operations, and
 - development, maintenance, and operation of CA systems integrity

based on the WebTrust [Principles and Criteria for Certification Authorities v2.0](#).

Because of the nature and inherent limitations of controls, Symantec's ability to meet the aforementioned criteria may be affected. For example, controls may not prevent, or detect and correct, error, fraud, unauthorized access to systems and information, or failure to comply with internal and external policies or requirements. Also, the projection of any conclusions based on our findings to future periods is subject to the risk that changes may alter the validity of such conclusions.

In our opinion, throughout the period December 1, 2016 to October 31, 2017, in all material respects:

- a) Symantec disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in its CPS, CP and the services and related controls provided by Verisign as enumerated in [Attachment A](#);



- b) Symantec's STN CPS is consistent with its STN CP;
- c) Symantec and Verisign maintained effective controls to provide reasonable assurance that Symantec and Verisign provide its services in accordance with the STN CPS, STN CP and the description of the services and related controls provided by Verisign as enumerated in [Attachment A](#);
- d) Symantec 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 Symantec), and
 - subordinate CA certificate requests are accurate, authenticated, and approved;
- e) Symantec and Verisign, where applicable, maintained effective controls to provide reasonable assurance that:
 - logical and physical access to CA systems and data is restricted to authorized individuals,
 - the continuity of key and certificate management operations is maintained, and
 - CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

based on the WebTrust [Principles and Criteria for Certification Authorities v2.0](#).

This report does not include any representation as to the quality of Symantec's services other than its CA operations at Mountain View, California, and New Castle, Delaware, USA, nor the suitability of any of Symantec's services for any customer's intended purpose.

Effective at the close of business on October 31, 2017, Symantec sold its CA business operations to DigiCert Inc.

Symantec's use of the WebTrust for Certification Authorities Seal constitutes a symbolic representation of the contents of this report and it is not intended, nor should it be construed, to update this report or provide any additional assurance.

BDO USA, LLP

St. Louis, Missouri
January 31, 2018



Attachment A

Symantec Trust Network Certification Practice Statement and Certificate Policy Versions in Scope

Policy Name	Version	Date
Symantec Trust Network (STN) Certification Practice Statement	3.8.28	September 8, 2017
Symantec Trust Network (STN) Certification Practice Statement	3.8.27	December 19, 2016
Symantec Trust Network (STN) Certification Practice Statement	3.8.26	September 9, 2016
Symantec Trust Network (STN) Certificate Policy	2.8.24	September 8, 2017
Symantec Trust Network (STN) Certificate Policy	2.8.23	December 19, 2016
Symantec Trust Network (STN) Certificate Policy	2.8.22	September 9, 2016

Description of Services Provided for Symantec and Related Controls Exercised by Verisign at the New Castle, Delaware Location

Symantec has entered into an agreement with Verisign Inc. (Verisign), to provide datacenter hosting services at the New Castle, Delaware datacenter (the datacenter). Verisign performs the same physical and environmental security controls as Symantec has disclosed in Section 5 and Section 6 of the Symantec Trust Network (STN) Certification Practice Statement; however, Verisign performs UPS maintenance quarterly, rather than semi-annually.

Verisign has implemented the following physical and environmental security controls to protect Symantec assets at the datacenter. Production systems housed in the datacenter are protected by multiple tiers of physical security, with access to the lower tier required before gaining access to the next highest tier. The datacenter enforces individual access control through the use of two-factor authentication, including biometrics. Physical access to the datacenter is automatically logged. Visitors to the datacenter are required to sign a log at the security office, wear a visitor badge, and be escorted while onsite. The datacenter facilities are manned continuously by on-site security personnel and the premises are continuously video monitored and recorded. Multiple generators, UPS, HVAC and fire suppression systems have been implemented at the datacenter.



Attachment B

List of CAs In-scope

Root CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 1 Public Primary Certification Authority - G4	216E33A5CBD388A46F2907B4273CC4D8	84:F2:E3:DD:83:13:3E:A9:1D:19:52:7F:02:D7:29:BF:C1:5F:E6:67	36:3F:3C:84:9E:AB:03:B0:A2:A0:F6:36:D7:B8:6D:04:D3:AC:7F:CF:E2:6A:0A:91:21:AB:97:95:F6:E1:76:DF
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 1 Public Primary Certification Authority - G6	243275F21D2FD20933F7B46ACAD0F398	51:7F:61:1E:29:91:6B:53:82:FB:72:E7:44:D9:8D:C3:CC:53:6D:64	9D:19:0B:2E:31:45:66:68:5B:E8:A8:89:E2:7A:A8:C7:D7:AE:1D:8A:AD:DB:A3:C1:EC:F9:D2:48:63:CD:34:B9
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Public Primary Certification Authority - G4	34176512403BB756802D80CB7955A61E	67:24:90:2E:48:01:B0:22:96:40:10:46:B4:B1:67:2C:A9:75:FD:2B	FE:86:3D:08:22:FE:7A:23:53:FA:48:4D:59:24:E8:75:65:6D:3D:C9:FB:58:77:1F:6F:61:6F:9D:57:1B:C5:92
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Public Primary Certification Authority - G6	64829EFC371E745DFC97FF97C8B1FF41	40:B3:31:A0:E9:BF:E8:55:BC:39:93:CA:70:4F:4E:C2:51:D4:1D:8F	CB:62:7D:18:B5:8A:D5:6D:DE:33:1A:30:45:6B:C6:5C:60:1A:4E:9B:18:DE:DC:EA:08:E7:DA:AA:07:81:5F:F0
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Public Primary Certification Authority - G4	4C79B59A289C763164F58944D09102DE	58:D5:2D:B9:33:01:A4:FD:29:1A:8C:96:45:A0:8F:EE:7F:52:92:82	53:DF:DF:A4:E2:97:FC:FE:07:59:4E:8C:62:D5:B8:AB:06:B3:2C:75:49:F3:8A:16:30:94:FD:64:29:D5:DA:43
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Public Primary Certification Authority - G6	65637185D36F45C68F7F31F909879282	26:A1:6C:23:5A:24:72:22:9B:23:62:80:25:BC:80:97:C8:85:24:A1	B3:23:96:74:64:53:44:2F:35:3E:61:62:92:BB:20:BB:AA:5D:23:B5:46:45:0F:DB:9C:54:B8:38:61:67:D5:29
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Web PKI ECC Root - G1	0E23CC37AC7466480F6B1A4B01831698	65:91:04:DA:A4:04:93:26:21:5A:5D:26:31:52:70:D9:AA:BD:16:1D	92:BB:72:F1:5E:B7:5D:E4:67:C8:4B:43:81:81:03:4B:DA:E9:A0:16:EC:26:43:4B:EE:3C:9B:BA:D8:CD:8A:F0
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Web PKI RSA Root - G1	2D9AD0E39DBD2DAE835F446FBB64FD28	77:08:8D:6A:EF:B6:19:1D:E4:1F:68:85:93:9A:AE:F9:EC:6C:73:1C	F6:BB:5B:79:85:A8:73:65:94:C1:46:79:FA:31:60:38:14:50:2A:AE:B5:F4:28:2A:69:98:5D:C8:4A:45:07:77
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 1 Public Primary Certification Authority - G3	8B5B75568454850B00CFAF3848CEB1A4	20:42:85:DC:F7:EB:76:41:95:57:8E:13:6B:D4:B7:D1:E9:8E:46:A5	CB:B5:AF:18:5E:94:2A:24:02:F9:EA:CB:C0:ED:5B:B8:76:EE:A3:C1:22:36:23:D0:04:47:E4:F3:BA:55:4B:65
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 2 Public Primary Certification Authority - G3	6170CB498C5F984529E7B0A6D9505B7A	61:EF:43:D7:7F:CA:D4:61:51:BC:98:E0:C3:59:12:AF:9F:EB:63:11	92:A9:D9:83:3F:E1:94:4D:B3:66:E8:BF:AE:7A:95:B6:48:0C:2D:6C:6C:2A:1B:E6:5D:42:36:B6:08:FC:A1:BB



Root CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 3 Public Primary Certification Authority - G3	9B7E0649A33E62B9D5 EE90487129EF57	13:2D:0D:45:53:4B:69:97:CD: B2:D5:C3:39:E2:55:76:60:9B: 5C:C6	EB:04:CF:5E:B1:F3:9A:FA:76: 2F:2B:B1:20:F2:96:CB:A5:20: C1:B9:7D:B1:58:95:65:B8:1C: B9:A1:7B:72:44
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2006 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 3 Public Primary Certification Authority - G5	18DAD19E267DE8BB4 A2158CDCC6B3B4A	4E:B6:D5:78:49:9B:1C:CF:5F: 58:1E:AD:56:BE:3D:9B:67:44: A5:E5	9A:CF:AB:7E:43:C8:D8:80:D0 :6B:26:2A:94:DE:EE:E4:B4:65 :99:89:C3:D0:CA:F1:9B:AF:64 :05:E4:1A:B7:DF
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2007 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 3 Public Primary Certification Authority - G4	2F80FE238C0E220F48 6712289187ACB3	22:D5:D8:DF:8F:02:31:D1:8D: F7:9D:B7:CF:8A:2D:64:C9:3F: 6C:3A	69:DD:D7:EA:90:BB:57:C9:3E :13:5D:C8:5E:A6:FC:D5:48:0B :60:32:39:BD:C4:54:FC:75:8B :2A:26:CF:7F:79
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2008 VeriSign, Inc. - For authorized use only, CN=VeriSign Universal Root Certification Authority	401AC46421B3132103 0EBBE4121AC51D	36:79:CA:35:66:87:72:30:4D: 30:A5:FB:87:3B:0F:A7:7B:B7: 0D:54	23:99:56:11:27:A5:71:25:DE: 8C:EF:EA:61:0D:DF:2F:AO:78: B5:C8:06:7F:4E:82:82:90:BF: B8:60:E8:4B:3C

Cross Signed CAs				
Issuer	Subject	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 3 Public Primary Certification Authority - G3	C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2006 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 3 Public Primary Certification Authority - G5	217A65CF6381753 7E03332833A42CC D7	14:49:AF:AF:83: 6F:A6:6C:40:53: 49:88:F3:DF:C7: 62:8E:BD:78:6A	D9:BC:97:3F:88: 90:96:96:DA:10: 83:31:97:94:4C: A5:8A:C4:A8:88: 47:77:9C:91:33: 37:42:67:10:0E:E C:58
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2006 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 3 Public Primary Certification Authority - G5	C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2007 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 3 Public Primary Certification Authority - G4	6611549AD086E39 8912FFBFBF74D1D8 5F	3C:C7:4E:31:65: 51:C9:7E:18:39: D1:00:08:82:9C: 9D:BF:24:C2:47	61:43:6A:4E:D6: 3E:31:F2:2E:EF: AC:26:B5:25:79: 6C:F5:EB:F8:9A: 77:E7:3C:0A:DC: C8:4D:E9:79:B1: C5:E0
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2006 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 3 Public Primary Certification Authority - G5	C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2008 VeriSign, Inc. - For authorized use only, CN=VeriSign Universal Root Certification Authority	1A55C0C60F0F26F 6489BA6CDA98D2 425	43:6A:8A:70:3D: 44:93:23:8C:45: 73:1C:09:41:5C: 2A:9A:4B:41:F9	FB:2B:D3:59:81: 44:35:6D:CB:D2: B2:59:E8:F3:EB: D0:B0:F6:EE:18: 0C:15:EF:55:3B: 82:D1:99:EF:07: F3:9A



Cross Signed CAs				
Issuer	Subject	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2006 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 3 Public Primary Certification Authority - G5	C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2008 VeriSign, Inc. - For authorized use only, CN=VeriSign Universal Root Certification Authority	4B0BCEB194B330F B0E366DBBA0C87 73E	45:06:F9:BA:E3: 4B:6D:0A:CC:60: 1A:94:78:AD:3C: 80:E8:0B:A0:82	15:12:DF:AE:DF: 91:53:FF:AC:B7: 0B:C8:05:BA:32: CB:6F:9C:B3:D0: 95:B6:4E:66:59: E6:52:C3:CA:33: 5A:32
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2006 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 3 Public Primary Certification Authority - G5	C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Web PKI RSA Root - G1	7A6FC74D8D350A FBFA2138241FE7E D96	55:4F:29:93:DD: 09:91:80:98:3E:4 6:07:52:0C:DD:8 6:1F:EC:48:E0	C4:9A:A6:D4:F3: 5A:83:3B:8B:0E: 1E:29:97:CF:5A: C2:8C:93:4F:BA: D3:CF:EB:EF:5C: 45:FB:0A:DA:B1: 01:35
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2006 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 3 Public Primary Certification Authority - G5	C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2008 VeriSign, Inc. - For authorized use only, CN=VeriSign Universal Root Certification Authority	2445A1BD977380B 5F40C4550B8716D 0A	6E:B8:B6:28:D6: 24:97:A6:62:4F: C4:C5:59:CF:66: 25:DF:71:74:C4	C9:D8:9E:C4:FC: 9C:AC:1E:49:43: 22:94:E8:A7:AA: 30:11:7A:B3:E4: E0:19:9B:9E:29: 7D:6B:E1:0F:C6: E2:DF
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2006 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 3 Public Primary Certification Authority - G5	C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Web PKI ECC Root - G1	24B2C4743976887 AAAC9E9D55B043 F5C	A2:BA:17:BE:03: BA:63:CA:EA:30: 5B:0E:A3:9D:BB: 73:76:97:F2:11	F5:65:03:9D:13: 92:07:80:1F:87:3 4:D3:57:E7:CA:1 D:A1:A6:29:FB:4 8:DC:2E:FD:EA:0 8:E5:16:F6:3F:B 2:61
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2008 VeriSign, Inc. - For authorized use only, CN=VeriSign Universal Root Certification Authority	C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Web PKI RSA Root - G1	0F8752C22E2E763 1AD31FB4A2D348 5CA	F4:54:6C:31:25: BA:AB:DC:31:AD: 50:B9:99:41:AA: BA:77:B5:14:49	92:DB:39:46:47: CF:E1:22:57:3A: 99:E4:9D:94:D9: A1:F6:41:2E:A3: A0:4D:78:B4:4A: 50:44:C4:02:11: 0A:CE



Class 1 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=CH, O=World Intellectual Property Organization, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 1 Managed PKI Individual Subscriber CA, CN=WIPO CA - G2	25AE2B6BF299A2670DADCDB55411289FC	35:CC:7A:22:4C:67:A6:64:E5:6E:4D:E4:D1:C1:21:68:E5:33:CA:8B	FA:07:3D:67:B4:22:9B:D0:63:FE:C7:70:E2:72:EF:25:6C:19:6D:4B:1D:72:00:59:81:88:26:ED:02:AC:78:11
C=CH, O=World Intellectual Property Organization, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 1 Managed PKI Individual Subscriber CA, CN=WIPO CA - G2	51677AC886D7FDDDC930BF8621B04658	54:E0:0C:B4:D4:D3:A5:38:8E:6F:A3:75:6C:C8:07:AF:20:D6:A9:6D	5C:11:15:A7:8C:98:B9:B4:0A:23:2D:E8:CC:A5:8C:DE:88:0D:D7:38:35:D4:0E:A1:5F:4E:3F:A6:B4:E2:B2:86
C=DE, O=Deutscher Sparkassen Verlag GmbH, OU=VeriSign Trust Network, CN=S-TRUST Class 1 CA - G1	5CB77D193598B49A82562FD2D6A6CF08	F7:4E:F1:BC:EF:7E:9D:F3:96:59:D4:CD:58:75:C7:DD:EC:32:47:F9	A3:03:0D:FA:59:83:94:0D:6A:7A:F6:FB:BA:00:DA:A9:A5:B9:B2:EC:80:49:80:91:FE:C2:12:E8:4E:F8:A0:64
C=IS, O=Advania, OU=Symantec Trust Network, CN=Advania SC Class 1 Consumer Individual Subscriber CA	1FF571F6E6AD0C8BA59CB2EB6635C42A	16:87:B7:ED:46:E9:8D:4E:4C:17:74:D0:A4:E2:70:A8:BF:B7:DE:93	93:88:0C:49:35:13:C5:75:C6:9D:E9:59:55:47:CB:65:0F:4F:A4:7F:B9:B7:28:18:F1:CE:99:47:6C:63:D5:94
C=IS, O=Advania, OU=Symantec Trust Network, CN=Advania SC Class 1 Consumer Individual Subscriber CA	3F16165226FC8DDAE25F9312196ECECF	BE:9D:8C:FD:0C:8C:50:BB:80:A3:0B:AB:BD:B8:90:32:58:9B:62:9C	7B:B3:40:02:3E:53:1A:0A:05:78:09:CE:CE:32:CF:CE:2E:8A:86:EF:68:EF:D5:7E:0F:4B:86:90:4E:E8:54:10
C=JP, O=Bank Of Japan, OU=Symantec Trust Network, OU=Class 1 Managed PKI Individual Subscriber CA, CN=Gaitame CA - G3	3B8F41EC47FE53FEC9C46B017A1B63BD	54:D0:F3:B8:EB:B6:82:42:B3:15:AB:8D:50:01:2D:F4:06:B9:F1:4A	58:F0:77:8C:B9:96:9B:09:B2:4B:DC:96:A0:30:91:B0:AA:98:BA:FF:9C:23:F8:2B:78:B0:61:03:5D:85:A6:5F
C=JP, O=Bank Of Japan, OU=Symantec Trust Network, OU=Class 1 Managed PKI Individual Subscriber CA, CN=Gaitame CA - G3	2DAC3E6C0FE729F3015CCC3A70313076	BA:A5:39:37:E2:1F:90:5B:7B:A4:1B:56:3D:03:50:C8:D3:A6:07:D7	D2:01:18:56:3A:CC:4A:B2:D1:DF:21:7E:39:74:D0:08:77:F7:1D:2B:74:95:9F:43:FE:D3:3C:45:EB:F5:FB:31
C=JP, O=KYOCERA COMMUNICATION SYSTEMS Co.,Ltd., OU=Symantec Trust Network, OU=Class 1 Managed PKI Individual Subscriber CA, CN=DATACENTER CA - G2	183F96F48467964DAABDC5B506F3BD6C	1F:D4:8D:A6:42:C2:45:3D:49:0A:F9:92:DC:2B:A8:08:27:87:1C:B6	25:C3:24:77:76:DC:74:4D:4E:8E:FF:9B:2E:1B:5D:58:EE:3D:51:7A:3F:9C:03:5B:08:96:BB:F0:F7:CF:C5:E9
C=JP, O=KYOCERA COMMUNICATION SYSTEMS Co.,Ltd., OU=Symantec Trust Network, OU=Class 1 Managed PKI Individual Subscriber CA, CN=DATACENTER CA - G2	3E98F85F23E0217834F9EF1425BF62BD	7A:21:9E:80:CB:8D:80:EF:6B:5C:18:71:61:01:88:7F:A5:0D:AF:70	7B:A5:F5:C9:C2:2C:3C:D5:90:C9:FE:54:18:FA:E3:D3:43:82:F8:5A:2F:1F:EA:A3:3D:DE:F1:6E:C4:1C:41:0D



Class 1 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=JP, O=KYOCERA COMMUNICATION SYSTEMS Co.,Ltd., OU=Symantec Trust Network, OU=Class 1 Managed PKI Individual Subscriber CA, CN=DATACENTER CA - G2	58EC821789970AD4F693A6FFD735F57E	E1:01:01:4C:8D:59:99:01:86:6C:A0:9E:DB:D2:DE:DD:4C:83:F9:4E	EA:70:CA:94:65:E2:55:93:BA:B9:09:A9:DB:F8:F0:95:C0:B2:0B:FB:B5:4F:1D:18:5D:46:4C:CC:8A:43:1F:4B
C=JP, O=NTT DoCoMo,Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa(c)09, OU=Class 1 Managed PKI Individual Subscriber CA, CN=Global Business Division CA - G2	6B29103EB2570F2458FB40219CE412F4	C5:22:7B:10:9B:3D:5C:CB:10:AE:D2:E5:6D:8E:4D:E5:7A:C5:1A:04	D3:B0:41:C2:D3:29:CF:F3:7C:C1:E4:8E:35:AA:5F:08:AD:91:86:F1:3D:B8:88:99:C8:06:26:E5:49:DC:0F:72
C=JP, O=Pharmaceuticals and Medical Devices Agency, OU=Symantec Trust Network, OU=Class 1 Managed PKI Individual Subscriber CA, CN=PMDA Secure Mail Service CA - G2	1902CCB389173CA0EDEDBED97A64F35D	D4:F2:12:E0:3C:CE:05:C8:9D:E0:A0:5F:2D:D4:82:9C:FA:C0:72:96	DD:FC:E2:EC:CC:66:5A:71:91:D2:B9:67:B7:2F:79:2A:0A:FA:8E:33:36:84:E0:32:51:B0:18:B2:D7:46:02:CC
C=JP, O=Symantec Japan, Inc., OU=Symantec Trust Network, OU=Class 1 Managed PKI Individual Subscriber CA, CN=Application Service CA	5A862EAD5681901EA9D1B60F69D264D8	3E:8D:29:D5:E2:34:13:2D:5B:92:CA:80:4C:CD:82:64:61:07:24:70	2B:31:88:33:20:31:E5:48:FE:42:4A:7A:3A:BB:47:70:1F:A0:89:D9:D0:EE:AE:35:58:5C:A7:29:74:BD:A6:9C
C=JP, O=Symantec Japan, Inc., OU=Symantec Trust Network, OU=Class 1 Managed PKI Individual Subscriber CA, CN=Class 1 KM TEST CA	797FE1B9AD41F11EA982C314F4CEE1B9	22:F9:2B:D6:21:5D:4B:6C:46:AF:2E:E1:43:4D:B4:AF:9A:01:F8:D4	2C:09:6E:B3:D6:56:FA:92:D2:38:0A:25:91:24:8B:A3:EE:CD:BB:07:AA:98:3C:B5:C8:DD:E4:72:36:01:D6:04
C=JP, O=VeriSign Japan K.K., OU=Symantec Trust Network, CN=VeriSign Japan Class 1 CA - G5	6C5CAF3D3850ABA66F386AD0BD02D339	45:F1:F3:A9:CB:46:F7:80:40:46:9E:A1:7C:EC:59:4D:0F:16:A4:63	41:AA:85:FB:17:77:70:92:F6:F7:04:ED:1C:17:BF:13:8A:64:3E:43:BA:8B:26:04:4A:67:D0:63:33:C0:06:6C
C=JP, O=VeriSign Japan K.K., OU=Symantec Trust Network, CN=VeriSign Japan Class 1 CA - G5	022F53359D5D4557517DAABE8415C869	E9:67:20:A7:06:3E:0C:28:8D:73:C3:39:91:72:09:87:37:AD:80:5F	02:E9:E3:23:CD:6F:98:37:40:79:52:35:14:C3:78:3A:C1:00:3A:B8:0A:BC:BA:0E:E2:25:8C:41:8E:AC:44:CC
C=JP, O=VeriSign Japan K.K., OU=Symantec Trust Network, CN=VeriSign Japan Class 1 CA - G5	0ACA5B0F1446A6428FC DFA1F053550FF	14:D1:97:18:18:4D:B6:64:74:60:60:53:6F:79:4A:0F:AA:68:EF:52	9C:EB:C0:30:75:0F:1A:1B:AD:C0:6C:99:85:58:AE:20:9D:FC:CA:68:A8:0D:38:C1:61:A8:5D:C5:AF:68:DD:48
C=JP, O=VeriSign Japan K.K., OU=Symantec Trust Network, OU=Class 1 Managed PKI Individual Subscriber CA, CN=C1 Issuing CA under G5 intermed	67E9D1CF35E2D072CDBE5ACA22C5DE16	CA:E7:D4:33:77:FB:97:19:EE:25:11:7C:E0:C1:A3:78:65:B6:4F:79	66:81:05:AE:BD:94:F7:9D:06:DA:E4:3B:CF:CC:B5:08:CA:8B:AC:F0:DF:B8:25:9E:5B:11:98:80:B1:6E:4A:CD



Class 1 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=JP, O=VeriSign Japan K.K., OU=Symantec Trust Network, OU=Class 1 Managed PKI Individual Subscriber CA, CN=Digital ID Class1 Individual CA - G3	349030CEC6DDD517F0E B354E8706A2DA	61:45:78:B5:81:0F:3B:47:9A: F5:24:6A:40:61:67:76:F3:B0: 34:5B	2B:70:0E:88:8C:EA:35:2F:7D: A5:C7:E4:92:07:DB:63:0A:E1: F0:6B:DE:41:1E:C1:12:6F:63: 6C:80:48:43:C6
C=JP, O=VeriSign Japan K.K., OU=Symantec Trust Network, OU=Class 1 Managed PKI Individual Subscriber CA, CN=PC350Prod-Ops- C1-Pub4-CoBrand-AfterCARenewal CA - G2	6D583EA497AC8D5B6F7 2AF5D37BE4DC1	10:92:02:C7:77:70:DD:63:8B: 25:7F:A9:5B:79:43:13:FF:F4: E8:46	74:02:3E:5C:6A:8A:FA:4C:B4: 41:96:A6:2A:64:A9:A7:F3:7B: F9:91:42:B5:44:68:25:7B:9C: 24:C9:1B:C2:2E
C=JP, O=VeriSign Japan K.K., OU=Symantec Trust Network, OU=Class 1 Managed PKI Individual Subscriber CA, CN=VJSJ Class1 Promotion Individual CA - G2	6675FE01C54541B78FA 9E9F46967D1FB	34:59:AF:50:10:43:57:83:18: 7B:6F:E1:83:07:A3:20:AA:0F: B3:1A	D5:B6:75:69:1F:71:9A:CA:1E: CB:1D:96:59:EA:13:E9:3F:52: 26:DC:78:C2:E8:27:EE:6C:2E: 45:08:FF:E8:11
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, CN=VeriSign Japan Class 1 CA - G3	2279D509FA0AF32863D E1136106F806A	79:3E:60:0B:6E:A5:76:5D:28: 4E:1E:93:46:F9:9D:20:D6:05: B6:A4	C1:1C:ED:51:F8:6C:7A:16:76: 08:93:C0:79:61:F3:29:79:90: D3:2A:33:44:3F:C6:FC:1F:C5: 42:EC:36:5D:75
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, CN=VeriSign Japan Class 1 CA - G3	1B690380F135159D5CD 73325F4A2271B	A0:B3:1A:D6:1C:C4:8B:08:AB :63:0B:0B:11:B6:08:46:4C:A8 :F8:1F	C8:C0:22:98:A4:BB:95:A7:8C: 39:43:C0:25:E8:44:CC:23:9A: 2D:53:C6:98:6F:45:6E:9F:0B: 34:D2:93:B5:78
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, CN=VeriSign Japan Class 1 CA - G4	058386BC6DF6BA46F56 318F6A0AA05CB	13:5E:3E:87:C4:4E:51:D3:AF: C4:F4:15:17:04:9E:24:C2:8E: FF:F0	0E:B5:73:23:18:65:C4:E8:6B: C4:20:0D:9F:B3:F0:62:29:7F: 43:3D:C4:01:14:A4:7E:CF:87: 90:2F:F6:4D:98
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa(c)09 , OU=Class 1 Managed PKI Individual Subscriber CA, CN=VeriSign Japan Class 1 Public 2048bit CA	48E902759F2BBCFF721 296C9CEAB3F38	43:4A:C2:B8:E3:33:09:F5:23: F9:5B:71:FE:9B:FA:FC:A0:2F: E5:C3	72:9F:C4:B2:C7:FA:56:A7:8F: ED:CC:ED:50:9A:08:D9:AD:7C :91:3F:C0:10:BD:44:B8:16:43 :75:61:56:CE:F6
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa(c)10 , OU=Class 1 Managed PKI Individual Subscriber CA, CN=Academic Program CA - G2	02F2AD9488D136BC178 C340D3C81B81B	42:6C:3C:33:D2:64:CB:28:85: BA:C6:BA:A1:6A:B9:C9:EF:2A :AF:14	ED:97:37:11:36:E5:E7:42:AE: 99:B6:EC:C8:7A:CC:62:A0:11: 75:9A:42:89:FB:EF:D3:D6:CB: 77:F5:E9:EA:15



Class 1 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa (c)10, OU=Class 1 Managed PKI Individual Subscriber CA, CN=Application Service CA - G2	1E567ACE987D395165B 90D508EE49E30	85:44:1F:DC:AC:D3:60:97:B5: 96:F1:63:28:70:63:D5:49:93: A2:A5	F7:0C:6E:72:C3:11:F4:88:DE: 7A:11:BA:49:63:CC:14:1A:C0: B8:06:7E:DD:06:C9:FE:8F:34: DF:24:71:E8:1F
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 1 Individual Subscriber CA - G6	7827F626623577B4FB9 B70AAE819DB25	A8:A8:08:D8:7C:B6:A4:2E:B9: 81:CF:C1:65:30:82:0F:12:65: 8C:CB	51:E7:54:2B:47:AD:38:49:D1: C3:63:E6:D5:39:DA:70:3D:C1: 2C:D1:6C:E9:85:FE:6D:79:2C: 5D:CD:F4:53:CB
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 1 Individual Subscriber CA - G7	2D3F6C37302E1A52863 A7120F1B8CEF1	54:64:8D:D9:B4:0E:05:B6:5B: 83:87:D1:E3:55:2E:00:FC:EE: 03:37	9B:50:2B:94:1A:F5:71:3A:CC: BA:B4:F7:70:08:F7:A1:A3:C4: A7:1E:3B:AB:DB:07:00:6A:E6: 72:9E:C5:D9:54
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 1 CA	3577B35465B20991A39 0EAEA4556D610	79:6B:FC:3C:FA:55:A4:8A:4F: 01:A8:55:C0:6A:E8:34:B2:85: AF:97	D6:A3:57:4E:4C:2A:A2:D1:53: 97:D5:A9:BE:FC:F8:38:09:10: CC:01:48:BA:B8:6A:0B:9F:F4: 0E:26:59:BC:E8
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 1 CA	0F2CA41C5939E9E3B07 0BBC97ECCF02D	D4:58:B0:D0:BE:19:2F:7A:F6: B1:22:74:80:29:56:F4:1B:41: A5:AA	50:77:79:7A:18:15:E4:82:87: 38:58:98:61:89:08:BD:7E:D1: 82:D0:37:25:F0:3B:02:F1:3B: FF:D6:65:2F:6A
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Persona Not Validated, CN=Symantec Class 1 Individual Subscriber CA - G4	38AB002FFFAE96B756F F395AFB5DE71B	2F:75:63:CB:C7:F7:61:15:47: 1C:AD:B8:53:C9:E4:19:AC:DD :A6:CD	CF:47:B3:70:76:1E:9C:A4:00: 96:CB:DB:0C:34:B6:14:29:95: 7E:41:07:80:33:9A:0D:00:5D: 73:E3:71:20:4E
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Persona Not Validated, CN=Symantec Class 1 Individual Subscriber CA - G5	0702A21A85B84B659E1 80A6EE6F5A365	10:5A:58:CE:FC:92:48:A9:5A: 13:66:4B:A0:31:03:65:F5:3D: A4:0B	42:A5:FB:CA:2D:6A:A2:62:FF: 62:33:3A:B7:86:99:CE:1E:4B: F1:CF:5F:49:F8:06:FD:32:4C: BE:5B:B6:2C:F4
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)09, OU=Persona Not Validated, CN=VeriSign Class 1 Individual Subscriber CA - G3	711566054AE491214DE 9BC44F9ACD3DC	3F:59:1E:B3:7C:2E:E1:87:14: 8B:20:85:E2:76:33:12:66:B9: 7F:6A	30:95:16:3C:87:EC:9B:A3:9E: A3:D3:C4:C5:A7:3E:5F:B8:17: 7C:D7:69:9B:7F:E0:7F:71:B2: 01:80:E9:F8:FD



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=AU, O=Yieldbroker Pty Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Yieldbroker CA	3193700B1D01023CD33A072F1EC99D85	02:09:F0:1D:D0:04:53:4C:69:9A:77:0A:47:B4:11:36:21:7D:48:76	7B:07:77:BA:C2:0C:9B:C6:8F:C9:C7:95:53:DF:98:0A:5D:9D:9D:B4:53:0F:03:13:46:2D:E4:C2:4A:DA:EC:DD
C=AU, O=Post Redbox Pty Ltd, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Post Redbox Public Issuing CA	58EE8B437DA71374F6BF41925643A80C	B1:9B:9B:C9:0C:06:F0:80:61:82:4C:C7:23:C8:2E:CA:B9:0F:E5:43	19:D1:A5:3C:E3:32:F9:5D:F9:DB:B3:D4:29:4F:9C:6A:89:F3:2C:EC:D6:EF:DF:BD:28:33:A0:61:1F:87:1F:1A
C=AU, O=Queensland Police Service, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=QLD Police Service Media Connect CA - G2	367E911DA54898C12D1CB6CFAA5C8610	50:7E:D8:0A:FD:51:86:E8:FF:D0:48:2F:04:F3:67:10:1E:05:0E:6E	7E:1F:7A:FD:70:12:25:AA:CB:F7:34:F2:8C:DE:A8:5C:EA:FC:CE:F5:93:63:14:0A:23:65:30:26:3C:99:CE:DF
C=AU, O=Yieldbroker Pty Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Yieldbroker CA	6063D6513BEFCD63FE73FCA892B612EF	D9:0E:32:6D:40:DD:B2:F3:D6:B2:EB:8A:7E:BE:83:EB:2D:4B:60:BC	C4:CD:17:9F:85:50:39:14:58:7C:17:38:BE:12:75:B8:15:1C:DD:01:95:27:64:2C:B6:96:98:B3:46:AC:AE:27
C=CL, O=E-Sign S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=E-Sign Firma Electronica Avanzada para Estado de Chile CA	52469858CEFE3D6907B5A4C0FBEB9427	0A:8F:A1:41:FE:76:4D:A2:12:C7:3F:5C:F9:16:A1:54:DA:19:35:1F	39:57:CA:80:6D:56:8A:6D:50:17:93:87:AD:AC:81:E8:6C:4C:72:46:E4:6F:FF:52:D7:0C:1E:78:22:0B:33:B2
C=CL, O=E-Sign S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=E-Sign Firma Electronica Avanzada para Estado de Chile CA/emailAddress=e-sign@e-sign.cl	1AA36A62F96D7C9DDA98344621E8F143	47:A2:B1:88:A1:F0:84:C5:8B:8F:B8:27:03:8A:AD:5B:38:E4:F9:6D	5D:ED:D2:9F:82:C4:BB:95:F2:EE:6C:B7:24:7E:7E:6C:5D:DF:6F:8A:34:2C:40:A9:8E:F1:4F:7D:E0:77:A5:CF
C=CL, O=E-Sign S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=E-Sign Firma Electronica Avanzada para Estado de Chile CA/emailAddress=e-sign@e-sign.cl	2980726A1FD9265F9D78D924441DE6E1	54:5C:DB:78:EA:A9:18:AB:83:D7:DB:50:F9:14:5E:15:2E:4D:B6:0C	79:A2:F6:FA:83:C8:23:FF:A4:1C:D5:08:8C:DD:DE:7B:5A:5E:DF:DF:80:72:9E:71:6E:D8:AA:5E:51:9B:D6:06
C=CL, O=E-Sign S.A., OU=VeriSign Trust Network, OU=Terms of use at https://www.e-sign.cl/rpa (c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Admin - AR Estado de Chile CA	110F05BA4558A4B8FF548B4CE9FC582E	AE:11:C2:76:6B:F2:6B:E6:C7:74:A2:CA:5A:EC:0A:FC:34:0C:F4:79	7B:4F:CF:EA:C7:0B:D4:AF:BF:A2:D8:30:35:DC:F6:3E:DA:12:8F:C0:99:B3:DC:AF:CF:76:A6:6B:0B:68:EC:6E
C=CL, O=E-Sign S.A., OU=VeriSign Trust Network, OU=Terms of use at https://www.e-sign.cl/rpa (c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Admin - AR Estado de Chile CA	6DF2D91E9FCF137883212F6037EB58B7	F6:66:01:65:CC:F2:DE:67:7A:67:D1:15:C0:DD:59:82:39:11:01:5B	56:35:66:5E:B6:7A:41:64:CA:A9:E4:52:C2:F4:84:23:CB:EF:E0:65:07:55:9E:BA:A3:69:A0:51:58:59:7F:1A



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=CL, O=E-Sign S.A., OU=VeriSign Trust Network, OU=Terms of use at https://www.e-sign.cl/rpa (c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=AR Estado de Chile CA/emailAddress=e-sign@e-sign.cl	2243F960DC12040BB28 E208042CF4622	FF:2D:19:91:0A:C1:47:79:9D: 0B:BC:85:6D:34:C4:AA:82:2E: 5C:94	7B:82:A6:5F:1A:00:3D:33:3C: 48:E5:66:A9:7D:73:92:3C:18: 67:62:C0:7A:E9:76:AB:45:6E: ED:EF:28:4B:0B
C=BE, O=Safmarine, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Safmarine Certification Authority	305E745B8181C08233F 98177189B5120	D0:6C:47:24:36:03:44:94:EF: 05:C8:D0:F1:89:86:C1:94:43: 84:E5	D3:A5:D3:75:64:CC:40:4F:93: A6:B5:6B:4D:AA:D3:C1:EA:9E :FC:E5:A6:71:8D:A5:C0:AC:C 1:AF:24:6C:FF:15
C=BE, O=Safmarine, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Safmarine Certification Authority	6779C0EF7D84B7F9FB9 3C38DA40843C7	33:C4:76:31:16:39:6D:7E:30: A6:2B:89:45:2F:8E:51:A2:E4: 6D:12	4C:3F:6F:55:76:A9:34:FC:59: 76:58:3C:C4:C3:03:9B:00:A8: F9:10:11:B6:10:4D:F1:D7:EE: 48:C2:82:F9:4B
C=DK, O=Maersk Line A/S, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Maersk Line Certification Authority	67CC437A9A078FF6863 2B8CBC10EB2D2	8B:84:0C:59:89:3E:B7:D2:91: 36:88:7A:14:A0:9B:08:3B:41: CF:AA	31:D2:EC:12:38:43:AD:52:B8: 3B:2F:85:45:72:A6:BC:24:57: 63:8F:A4:CC:22:38:3C:59:B2: 09:B1:B1:EC:EB
C=DK, O=Maersk Line A/S, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Maersk Line Certification Authority	7044A752EAAEC77FE4E 034C54C0BB97D	11:B4:BE:51:AB:92:EB:49:BF: F6:0E:27:6B:BD:60:D8:E4:58: 4C:7C	00:59:C3:0A:64:B1:8C:37:2D: 31:6E:B3:73:C4:D6:87:09:1E: D2:02:C4:49:9A:B8:C1:D5:D3: D0:F1:2F:16:89
C=DK, O=Tryg Forsikring A/S, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Tryg Forsikring A/S Public CA	661552813FDC014697B 83B8521B25A00	1A:54:50:10:4E:AB:A1:66:D2: EB:6F:F6:B9:7B:3D:4A:EB:3B: 98:A7	01:0D:56:6A:DC:A6:D4:55:A2 :7D:E9:BB:9C:EC:7F:EE:33:45 :D0:8C:DC:8C:98:BE:81:8F:88 :EA:D1:B6:8B:5F
C=GR, O=ALPHA BANK, OU=Symantec Trust Network, CN=ALPHA BANK CA - G2	1083683F36B4D79192A 4B1694A5AD2C3	38:43:88:4E:0F:B9:27:6D:7F: D9:1E:1F:56:19:EF:19:B4:1A: DC:0C	D4:F4:E9:71:98:21:1E:5D:9E: 80:28:4E:E4:DF:A1:CE:BF:4D: FC:AB:FD:D3:26:5F:CF:3D:64: 25:12:D4:FC:C7
C=GR, O=Alpha Bank, OU=VeriSign Trust Network, CN=Alpha Bank CA	7BD7E9F29A09E230EAA 47C5573EED2A0	7C:21:73:74:BB:3F:C6:DD:50: F3:AD:A7:CF:F6:BB:52:D2:F8: B8:C8	A4:63:DF:D8:D2:D5:A3:13:A5 :A6:24:73:47:64:C1:B9:14:9A :5E:09:38:59:C3:E6:EC:1E:2D :56:B8:FD:D7:C2



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=JP, O=Astellas Pharma Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Astellas Global SMIME CA - G2	462BCC137A83C216E20 717CFDF4C80FF	17:79:FD:56:60:49:9F:AB:0F: 13:03:03:E1:D2:85:02:0B:29: 4F:47	CB:4D:7A:E5:1B:8A:2B:25:E3: B0:D5:CC:4F:92:4A:D1:6D:BA :54:9F:60:6B:BA:CC:BA:7C:A E:1C:FC:EA:0E:CD
C=JP, O=Astellas Pharma Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Astellas Global SMIME CA - G2	01204CB219A323EC706 AC0F9EFA683B9	FC:F7:C3:28:0A:10:9E:12:AB: AC:90:07:76:EE:BE:2D:7E:D9: 69:30	13:9E:78:23:75:E5:07:B8:44: 0E:D2:6B:43:96:F2:74:9E:C0: 95:63:D2:8A:C6:4A:11:04:9C: 27:75:73:32:9E
C=JP, O=DAIICHI SANKYO COMPANY, LIMITED, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=DAIICHI SANKYO COMPANY Public CA - G2	62D8DD595A8A95BB9C EF961EAD2523DA	6F:F2:BA:BE:95:93:D9:E9:B3: A9:97:4D:2F:31:CA:4D:90:EB: F3:A6	10:1A:F6:73:7A:03:BB:2C:95: D3:4E:6B:4B:D2:C5:67:79:0C: E3:B2:31:C9:A4:8A:76:F6:9B: E9:2C:40:FB:C5
C=JP, O=DAIICHI SANKYO COMPANY, LIMITED, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=DAIICHI SANKYO COMPANY Public CA - G2	269FF41760E89522B5C 1A25199A85209	F4:D2:01:4F:64:8E:A3:B4:51: E5:26:18:77:68:63:5D:5E:73: 9B:88	D4:29:98:94:5D:CD:C7:32:A5: 40:C7:26:73:44:82:82:94:55: 1F:81:E2:50:6A:A1:E8:8D:E2: 6F:1B:4B:38:BA
C=JP, O=Japan Exchange Group, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Corporate CA - G2	0F58309DF0361FADEEC 2808D9D580148	E1:6E:8C:30:9D:6B:B1:87:40: 25:1D:71:64:91:25:47:28:09: 70:08	26:9D:4F:4E:EF:1D:9B:1C:1F: A9:13:40:F6:8F:6F:3B:55:A8: 6A:E3:DF:FC:A6:96:61:E4:39: CC:B6:92:F0:C6
C=JP, O=Symantec Japan, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa (c)14, OU=Class 2 Managed PKI Individual Subscriber CA, CN=PUBLIC TEST CA	2FF789989E3E23334A7 F48055C958EFD	94:75:D2:9B:E5:26:62:78:56: FE:E4:0E:19:1E:13:C8:FE:BD: A4:0F	95:7D:C4:96:E5:D0:A3:2F:E2: 45:28:F8:A8:B7:CF:B1:99:40: A1:EE:EB:11:11:68:6D:C9:B4: F4:EB:D2:AF:20
C=JP, O=The Financial Futures Association of Japan, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa (c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=FFAJ Public CA	7732BB3F7E8F525F927 E891C5C3DE1DD	FF:50:73:17:78:87:33:FC:71: D6:35:4B:E6:84:C7:96:84:B5: 6B:D7	83:5C:F1:8F:EB:23:C2:DB:D9: DE:30:95:BA:4E:EC:9C:F0:BC: 07:0F:5E:FC:BF:07:5B:8E:64: EE:99:6D:30:43
C=JP, O=Tokyo Stock Exchange, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Corporate CA - G2	214E271EB46BCF3739D 136A77CFBC173	60:33:51:8E:A0:20:B0:6A:C2: EE:4D:E4:BB:29:73:20:87:76: 94:3D	BF:DA:AE:C8:2A:14:66:C0:5D :F6:1E:F3:AD:EA:0B:95:E9:62 :18:9F:29:3F:BF:FB:D4:26:7E :3A:50:07:8D:B8
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa (c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=VeriSign Japan Class 2 Public 2048bit CA	7685D33CACAC371764F 922B008700F98	BD:EA:93:65:00:41:25:00:EA: EC:8A:BA:C3:A5:7B:76:DB:EE :0A:92	40:77:50:98:FD:F2:B2:C4:06: F2:39:84:7E:C4:7D:61:DB:94: 9E:48:4B:B5:AF:58:AC:4B:03: 71:E9:80:A7:5F
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Class2 Individual Certificate Service CA - G2	712F241CA01F2D1176D 634A16D464999	57:72:61:D9:CD:85:F4:34:67: B4:BE:E2:08:7A:16:32:42:F1: 5A:CE	C5:54:12:46:31:18:CD:36:07: 65:33:C8:EF:DB:A4:78:7A:1F: 3D:42:01:83:79:9E:18:C3:2B: BC:7E:76:CC:7F



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
O=NEC Corporation, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=NEC Group Certification Authority SMIME G3	75CE2AD115038167D65 C405F29567491	ED:DA:ED:D9:E4:CF:33:AF:5E :29:9B:3F:99:21:2A:1D:6C:81 :9B:AB	A1:76:4E:F6:FF:05:03:0E:47: 6F:8C:87:39:15:78:15:95:73: 34:0D:9C:25:5E:14:61:75:49: 36:5F:AE:34:F3
O=NTT DOCOMO, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=NTT DOCOMO Group CA - G2	1B280B588AE6392188E 4C04BD14653A7	27:7A:15:05:0F:59:6F:48:26: AC:92:42:1A:93:69:6D:90:A6: 05:0A	75:BE:8F:29:66:FD:32:5A:47: 84:5D:AC:92:48:AF:4B:F3:F3: 10:11:51:5F:27:9E:46:D9:FE: 68:88:8D:95:8B
C=US, O=Oracle Corporation, OU=VeriSign Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=IPsec CA	2332681DF4F0A9B05A0 658F4B278461E	D9:BD:2B:A5:FF:61:F2:4C:CE: F7:10:BF:83:86:D6:40:EE:0B: DF:7F	8C:DC:B6:24:73:FE:6A:EA:3F: A7:CE:06:5B:FB:09:2D:45:23: 35:63:C3:3A:B1:6C:D9:98:5B: 7A:0A:14:A0:7E
C=US, O=Oracle Corporation, OU=VeriSign Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Object Signing CA	2EA2317F6E2B8FC144E 66D7961624723	6B:C6:CE:A5:1D:A1:4D:E5:86: A9:A3:5C:EF:79:CF:12:39:15: E9:8C	FD:70:A5:04:12:71:0B:B7:9F: B4:2B:D3:97:85:DC:47:80:ED: 73:2A:15:82:96:25:1A:6D:AF: BC:C0:60:26:98
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Individual Signing ECC CA	6173A4BB44B30E7D287 8C203640B59C0	EB:06:39:99:1D:65:51:F8:DD: 30:C5:35:22:0F:12:1E:FA:E4: 3D:77	10:9A:EA:4F:36:78:23:98:9B: 6C:36:38:A5:69:33:AD:C6:82: EE:BB:2F:65:5A:16:E6:36:32: 63:B4:A7:29:DB
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Individual Signing RSA CA	262CBFB5F36D78A360B E1DC844628D1D	3C:8B:FC:F7:C6:04:7C:6E:DC: 9D:2F:EB:2F:10:C2:2D:71:15: 19:AC	4E:74:47:5D:2C:33:E1:DD:47: 32:30:6B:79:71:2B:5E:E6:99: 7C:2D:BD:F5:96:CC:8B:D1:36 :21:63:DA:A4:F4
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Individual Signing RSA CA	4C1215ABFA0B8D9D1C 5FD23BC11F8963	47:EE:74:50:4B:E5:39:10:2D: AB:EB:74:E3:99:7D:89:05:24: E1:70	8B:92:18:D9:3D:B5:37:7C:FE: 7D:59:23:E7:01:6D:37:9D:44: 6F:00:19:C4:7B:9B:4E:A7:37: AE:DF:86:A5:58
C=US, O=U.S. Nuclear Regulatory Commission, OU=External Basic, CN=NRC Basic CA G2	5DF3151772561A98D85 9E547E974C91A	04:31:CD:9C:85:B4:34:61:83: 58:B4:61:4F:83:9A:E7:0A:7D: E1:DE	C4:0D:6A:B7:5F:7E:5D:11:CF: 7B:04:04:AC:7E:43:21:A7:A8: B0:DD:F7:63:13:28:F3:D7:CC: 80:D6:64:4E:2B
C=JP, O=Astellas Pharma Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Astellas Global SMIME CA - G2	210D6E3A5E6E8376917 EACDCCF99B104	85:E9:C1:91:28:78:C7:1F:73: 52:13:5D:2C:7C:85:31:D2:31: 45:A6	B2:ED:9A:6D:9B:6C:48:DD:14 :94:EE:0C:D4:80:21:79:F6:20 :8C:7F:75:89:4D:E2:60:7E:16 :57:3B:E4:64:AE



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=JP, O=DAIICHI SANKYO COMPANY, LIMITED, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=DAIICHI SANKYO COMPANY Public CA - G2	5A2BECABAE280294BA3 CEE5861BF495F	8B:CF:CB:5B:BE:3C:B2:77:C3: E7:E0:72:38:AA:11:47:25:B3: 09:2D	68:36:1F:DO:13:1D:79:AC:91: C9:93:9F:3E:54:79:CA:32:E2: BE:41:9A:7C:F5:19:E0:26:F9: 92:23:45:09:EE
C=JP, O=Japan Exchange Group, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Corporate CA - G3	47254A16858B0EEEBF4 2AEBB0670410D	C4:48:BC:49:80:EA:7A:81:3A: C0:1B:6A:98:C8:86:B7:83:1A: 93:0F	75:DF:38:1E:C1:FD:BD:3F:5F: 66:2A:3C:FC:F2:F7:A3:5C:5F: 58:CF:B2:6A:F9:77:D9:B8:AB: B8:2D:CE:E2:08
C=JP, O=Symantec Japan, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Class 2 KM TEST CA	0BC4C2D4D9BAFDDDD5A 67A22AECEEE9CF	8D:15:77:D6:28:D7:9E:A8:5F: 04:C6:07:6B:95:EC:6D:C0:29: 6F:21	B7:75:22:A5:A6:5E:C0:40:63: CF:61:3B:D8:A7:1D:7F:73:E3: 2A:B9:C9:D1:95:65:C6:F3:57: 3C:F1:B0:E2:AE
C=JP, O=Symantec Japan, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Class2 Individual Certificate Service CA	5FD607102C80354C72B FDB718C717BB9	B0:7C:B3:5D:4F:39:0E:6B:05: 9A:39:0A:CD:EB:FF:26:7E:73: 75:A1	92:68:44:97:25:E5:DE:18:F8: A7:65:48:BB:EC:1F:8C:84:5B: 17:38:75:90:E1:85:5B:FF:CA: 5B:02:CF:6C:28
C=JP, O=Symantec Japan, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=PUBLIC TEST CA - G2	4EDE68CAA58268CF6E DFDBE1615FF719	7E:44:10:9C:DB:DE:89:22:05: FF:CA:FC:25:76:2C:61:FE:83: F6:F2	BA:35:69:26:A1:25:17:74:18: 76:D1:13:7B:93:2A:92:4F:72: F4:1B:1C:67:D6:43:E4:ED:18: 3B:63:B3:19:29
C=JP, O=The Financial Futures Association of Japan, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=FFAJ Public CA - G2	2F51B08A69BE1B1224B 23F2A707B3900	88:AF:BF:90:5F:18:51:2B:E5: B6:6D:F1:AB:9F:26:F4:21:72: D3:35	FE:27:C2:68:89:69:B4:6B:83: A5:85:AA:F5:3E:00:9A:DO:D7: 5B:4D:F6:4E:AB:9C:08:5B:8F: 3E:BC:8E:F2:52
O=NTT DOCOMO, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa(c)11 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=NTT DOCOMO Group CA - G2	19F76FE6864A21414DA 9D87B59498534	CC:86:D1:E6:23:64:74:A0:57: 0C:1F:80:63:A7:E0:7F:37:1F: 45:E8	A7:59:39:F2:70:BA:6F:23:EC: EE:83:C7:0A:37:55:EB:46:44: 9F:E2:70:7F:F0:1D:62:6F:B7: 45:15:8F:94:13
C=US, O=University of Houston, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=University of Houston CA	6C0F6AFF9989F77A8A 1C0B307F0D865	71:58:7D:36:66:7F:0C:FF:6E: 2C:9F:6D:D5:6B:74:F5:15:71: 4B:05	E4:37:53:73:55:8F:93:DC:3C: 3A:C6:AB:A1:96:F2:3F:9D:B5: 3E:B6:64:9C:CB:B5:72:14:B5: 54:70:E7:B9:93
C=US, O=US Nuclear Regulatory Commission, OU=VeriSign Trust Network, CN=Nuclear Regulatory Commission FBCA Class 2 Intermediate CA	438465C7270598C7C17 7C3D7FDE00234	86:97:7D:63:05:AE:9E:B2:02: C8:E4:16:4B:74:20:AC:79:FF: 4F:22	32:F7:3D:55:93:E4:85:56:6A: EF:C5:CC:34:DC:F8:9B:D0:47: :EA:FE:33:83:4A:1C:33:42:62: :1E:70:B1:1F:62



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Commonwealth of Virginia, OU=Fairfax County Government, CN=Fairfax County Government Basic CA	3598F28E52E82F6D768875F957C33174	05:84:02:E3:22:89:9D:D5:F0:CF:C3:21:D5:19:03:F0:D7:FD:46:2C	26:0C:39:E2:BE:2C:32:61:85:10:B2:39:3B:7A:8F:E1:B3:26:ED:12:46:CE:DD:86:C6:90:CB:7E:25:4F:C6:37
C=AR, O=Banco Itau Argentina S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Autoridad Certificante Banco Itau Argentina - G2	56B98EF0CB200DBC874E0EF94905FB3F	6D:E1:A1:8F:42:AA:B0:16:EB:41:DD:3F:9A:B3:F5:76:69:35:7A:E0	C9:51:DA:EC:BD:C5:97:63:C6:68:18:25:DB:ED:07:80:C3:E8:92:1E:1E:76:E9:AA:D3:14:6F:1B:0C:18:F9:B9
C=AR, O=Banco Santander Rio S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Autoridad Certificante Banco Santander Rio - Empleados G2	4A011D4FD833AF159925560F5E421880	C6:2D:65:94:0A:01:04:A9:DF:10:89:1E:9E:F3:27:CF:5D:F4:46:30	41:00:F6:07:03:23:E5:8B:B5:15:92:90:C2:4D:30:05:60:1F:87:56:87:66:5B:48:EC:4D:F6:5E:3F:1A:8A:C2
C=AR, O=Banco Santander Rio S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Autoridad Certificante Banco Santander Rio - G2	5F0F49A1AB70E5C2DC0346B261D95CF2	16:86:D8:E1:50:B9:C1:D1:77:7C:E2:65:BD:56:45:7C:D0:19:28:68	C7:B6:88:79:23:74:03:95:0E:17:F2:BE:62:04:83:48:43:21:1E:04:D3:A8:85:63:25:68:A7:76:36:E5:BF:3D
C=AR, O=Bolsa de Cereales, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Autoridad Certificante Bolsa de Cereales - G2	66F19AEEB1A2BD899CB598BD7A84840C	D5:F3:30:C9:C9:E9:53:F4:01:31:1C:C3:6C:AD:EF:2F:AE:AA:81:AE	54:E3:76:20:BF:05:CE:AF:BB:22:86:EB:25:1F:69:43:4C:84:67:7B:81:22:29:9A:F2:E0:77:50:34:12:68:E2
C=AR, O=Bolsa de Comercio de Rosario, OU=VeriSign Trust Network, OU=Terms of use at https://www.certisur.com/rpa(c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Autoridad Certificante Bolsa de Comercio de Rosario - G2	7B7C2F05303310B160FE4931B6A63647	73:AC:7A:B2:20:EE:33:12:C9:53:CC:57:14:F7:A1:0C:C7:E5:25:AF	D0:71:48:B5:3F:F8:D0:E1:70:D7:14:EF:B4:F2:65:DA:D1:FF:40:38:72:D9:ED:D5:FE:BB:39:4F:BE:E4:CB:72
C=AR, O=CertiSur S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Autoridad Certificante CertiSur	7AB072A95F4221C4529A9C6E0C433EEE	76:E6:BA:18:99:87:E4:CC:29:A0:33:F7:EC:3E:D6:5E:3B:3E:F9:ED	C8:56:F8:54:F6:FC:94:EC:4D:49:6E:6C:DA:E6:C6:6A:A2:D8:CA:FD:BF:87:C9:28:B9:89:8E:32:7B:96:2A:3F
C=CL, O=CertiNet S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=CertiNet S.A. Firma Electronica Avanzada - G2/emailAddress=certinet@certinet.cl	02A6946F5A61CCE0261D88CAAB7B34A1	2D:C8:26:62:E5:2A:88:FE:EC:E8:92:E6:37:81:97:49:E8:4C:DE:44	75:F7:A4:03:D9:9D:49:88:3D:41:AC:AE:AF:DC:55:13:61:FC:4B:16:92:70:6A:BC:27:F8:2B:36:DB:5A:55:75



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=AR, O=Banco Itau Buen Ayre S.A., OU=VeriSign Trust Network, OU=Condiciones de uso en https://www.certisur.com/rpa (c)07, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Autoridad Certificante Banco Itau Argentina	6C5D61EA3A49CE48223 4BA299F7B3F33	07:2B:97:9B:0D:F3:34:EE:9E: A5:4F:80:63:FF:17:40:04:96: 19:3C	6C:70:26:90:A7:F0:A1:A0:41: 5B:FB:6B:0F:AC:04:40:A0:DC: 19:8A:E0:31:E8:3C:95:B4:6D: F1:21:1A:A9:24
C=AR, O=Banco Santander Rio S.A., OU=VeriSign Trust Network, OU=Condiciones de uso en https://www.certisur.com/rpa (c)07, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Autoridad Certificante Banco Santander Rio	1D9EDFAA078BAAA68A 2C6E472A9622C9	02:F5:15:CE:66:09:3F:68:D9: 7E:4F:DE:8D:94:CB:64:4F:68: 58:D1	F5:89:05:84:89:B3:FB:58:14: 54:CA:20:25:63:AC:88:3B:C6: 5A:F7:B5:B8:AB:51:B2:D7:6E: A3:3F:8C:66:FE
C=AR, O=Banco Santander Rio S.A., OU=VeriSign Trust Network, OU=Condiciones de uso en https://www.certisur.com/rpa (c)07, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Autoridad Certificante Banco Santander Rio - Empleados	3080BE1E58B148315DE 89E2A94072AAF	6A:02:90:88:40:AF:05:63:45: 47:C1:F1:13:C4:72:90:87:13: A5:02	10:00:8A:3F:85:5C:79:35:84: B2:EC:D7:CF:7F:23:3B:72:95: AA:26:9B:D6:11:A8:A9:6A:B8: F6:18:BD:14:20
C=AR, O=Bolsa de Cereales, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Autoridad Certificante Bolsa de Cereales - G2	4FAAF0E5FB8F29182AE C6A776D6CABCB	4B:2D:A3:C1:6F:C1:5D:F6:12: 69:D9:BB:C2:A3:22:AD:28:CC :F4:FF	C6:D9:75:F7:3D:E0:3D:56:85: 48:F2:7B:1D:BC:57:37:9A:F1: 88:D0:8F:66:A9:FF:C9:77:09: AA:71:F6:A3:3B
C=AR, O=Bolsa de Comercio de Rosario, OU=VeriSign Trust Network, OU=Terms of use at https://www.certisur.com/rpa (c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Autoridad Certificante Bolsa de Comercio de Rosario - G2	01AAC263A9BF254A595 77E526973F956	03:6E:C3:C9:97:95:A0:99:D6: EB:92:91:94:CB:7C:3D:CF:8B: C3:1E	47:9C:81:9F:A2:F3:18:E9:D2: 91:08:42:B0:45:60:7B:66:C4: BE:BC:AC:DD:49:DB:44:12:85: :98:46:14:5A:B7
C=CL, O=CertiNet S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=CertiNet S.A. Firma Electronica Avanzada - G2/emailAddress=certinet@certinet.cl	28CC03EDE4DE4960EFF CB81FEB65F6EA	65:01:5B:B9:21:F9:4E:F5:D7: 55:74:2C:6B:A7:82:5B:C1:C9: 98:BF	9E:6A:85:5C:E5:4E:EC:87:E2: 60:E2:81:BA:EB:F8:B2:48:1B: 74:C1:BE:28:40:EE:08:50:14: 43:1E:08:7B:C4
C=CL, O=CertiNet S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=CertiNet S.A. Firma Electronica Avanzada - G2/emailAddress=certinet@certinet.cl	2734B44CCF1F20EC5F2 4A52849DF05A8	9A:D0:06:75:24:CA:98:ED:1D: A2:6D:E7:80:40:4F:A7:4C:43: 35:51	16:3D:DE:CF:86:B4:70:8A:77: 70:5D:10:6F:D6:30:C3:03:31: B1:07:0C:4B:D9:A3:63:74:AC: 0A:68:A8:3D:D7



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=CL, O=CertiNet S.A., OU=VeriSign Trust Network, OU=Terms of use www.certisur.com/rpa-certinet- avanzada (c)06, OU=Class 2 Onsite Individual Subscriber CA, CN=CertiNet S.A. Firma Electronica Avanzada/emailAddress=certinet@ certinet.cl	289294DB7AC9FF48E35 7AF26775917E0	4C:53:EC:91:63:CA:4A:D8:13: AA:7F:CA:35:FF:E0:1D:FE:99: 3C:99	3B:03:28:1D:F4:90:92:32:44: B3:DD:E1:F8:B9:C5:21:F6:4F: 74:4A:B8:D8:04:FF:A5:62:E0: 7C:34:2D:12:2C
C=CL, O=CertiNet S.A., OU=VeriSign Trust Network, OU=Terms of use www.certisur.com/rpa-certinet- avanzada (c)06, OU=Class 2 Onsite Individual Subscriber CA, CN=CertiNet S.A. Firma Electronica Avanzada/emailAddress=certinet@ certinet.cl	12CBDA0F1C1BB397124 70320EE9D3B01	6C:21:69:72:DE:90:B6:77:6B: C2:94:10:6B:3D:9F:7B:23:92: 90:2A	CF:0F:44:D9:0C:C3:4C:72:DA :34:73:14:9F:40:97:56:C2:9F: E7:EF:9D:2A:25:8A:E9:94:9D: 8D:B7:E6:FB:96
C=AU, O=Queensland Police Service, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com.au/RPA (c) 06, OU=Class 2 OnSite Individual Subscriber CA, CN=QLD Police Service Media Connect CA	0B5633FB061A268C099 098B01F12CE14	77:A4:9C:0A:6F:2E:3C:2B:12: C6:ED:8D:1E:BA:29:1A:71:34: ED:28	C3:98:5B:16:89:C4:63:2C:8F: 2E:73:51:A6:2E:E6:65:47:4B: 04:F1:93:47:F0:5C:54:21:4F: D7:95:2A:27:8B
C=AU, O=Queensland Police Service, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com.au/RPA (c) 08, OU=Class 2 OnSite Individual Subscriber CA, CN=QLD Police Service Media Connect CA	7F9FFD5BDF87A0CE566 57C071FCC388A	71:C4:3A:BD:AA:DE:A5:28:E8 :79:0F:34:3E:BC:8F:19:56:2F: 45:52	D4:D6:D2:CE:14:4F:D7:06:95: 0E:E4:33:40:FD:8A:0E:FD:5D: 63:52:29:5C:10:FB:5A:1F:C8: EF:9B:F6:8D:D5
O=Health Services Australia Limited, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com.au/RPA (c) 07, OU=Class 2 OnSite Individual Subscriber CA, CN=HSAGroup CA	78CC85C228201E8D506 4E4D4DFE5B1F3	F3:F0:83:52:55:EA:56:24:F0: 99:35:D5:2B:CF:D4:4F:B8:5B: 52:72	F1:08:75:0C:EE:FD:D6:27:81: A9:24:35:C1:58:03:73:E9:42: CD:4A:80:90:86:CF:20:53:58: 44:CC:44:48:63
O=Hermes Precisa Pty Limited, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com.au/RPA (c) 07, OU=Class 2 OnSite Individual Subscriber CA, CN=HPA Email Billing CA	40EB40394AC775D73E3 8D504C82426EB	9A:D7:58:42:38:8E:F5:04:C4: 90:23:08:D8:86:FF:36:17:DC: D0:C0	E6:6F:A6:16:EA:9C:94:B0:A5: 17:17:3E:BD:EE:C6:2B:5A:F3: 26:9E:AC:82:9A:F3:34:98:02: 6C:E6:89:AD:FD
C=AU, O=ASCIANO EXECUTIVE SERVICES PTY LTD, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Asciano CA	7D781BB197DB73B5089 DD3A928C0E9D1	2C:88:5B:08:F1:DB:24:EF:83: 2C:21:98:9C:24:49:E8:87:1F: 3E:99	5F:C7:C6:E1:9A:F8:73:E0:94: 1D:7C:6A:B3:44:D3:E6:E4:F7: 3D:D6:76:93:FA:DF:A2:DA:9C :64:38:AC:1A:1A



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=AU, O=Attorney Generals Department, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Attorney Generals Department Public CA	47E60DC1F45AD99C27D29A12F6C0980B	4F:D4:EB:21:20:0E:4F:8E:CB:9A:5F:BC:93:E8:F9:89:86:C1:63:BB	CE:F7:11:14:7D:8B:0A:1D:C5:20:0B:83:83:BE:D2:3C:1D:29:4F:2F:89:EB:FE:17:9D:25:01:EA:5E:24:AB:8A
C=AU, O=BHP Billiton Group Operations Pty Ltd, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=BHP Billiton CA - G2	71D72EDFB4BFC4D2CE2FC4C2A7C5781C	43:5C:5A:79:D7:83:41:25:6F:22:2B:F3:A3:C1:15:D7:14:9B:5D:D4	43:69:E0:83:A2:7F:C4:75:17:66:F0:BF:65:41:F3:5F:8A:59:E9:29:1C:4A:BF:75:22:79:BD:36:53:B4:D7:5F
C=AU, O=BHP Billiton Group Operations Pty Ltd, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=BHP Billiton Group Operations Pty Ltd Secure Email CA	03021D1509D2D5375CAEEA914FC4C853	C6:70:D3:3A:C8:74:35:4C:CE:CC:12:AD:5B:1B:34:39:7C:CC:76:3C	67:C0:A4:82:62:93:FC:FC:61:E5:7F:B4:96:44:3C:84:F0:35:49:6E:21:20:FC:80:C5:51:AD:3C:37:75:E3:68
C=AU, O=BHP Billiton Group Operations Pty Ltd, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=BHP Billiton Group Operations Pty Ltd Secure Email CA	3EBFBB24F4238A5812B05B652F972E51	F7:A8:9B:13:1E:83:D2:AE:8F:55:E0:10:38:4B:5F:9F:04:F2:BA:DD	0A:9D:BB:4B:E5:DD:B8:EE:F5:4E:E1:3B:36:EB:97:DD:8B:EB:FD:7B:0A:FA:8B:9C:9A:21:5E:B7:24:A4:E8:8D
C=AU, O=BHP Billiton Operations Pty Ltd, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=BHPB Secure Email for External Parties CA	2F11C3C0977580C9ABF3B8A40A3773DB	EA:E6:E0:8E:43:14:30:40:AA:3B:A8:1C:F2:02:C6:9A:76:A8:4D:AE	2E:A4:E7:E0:AC:42:B3:BC:3D:A2:D9:A7:88:72:09:BC:8C:C7:95:8C:EE:1B:52:D2:5B:4B:E3:0D:6E:95:AE:A8
C=AU, O=Ensign Laboratories Proprietary Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Ensign Laboratories Proprietary Limited Public CA	14A2842A9CA784894BDODB66FCA711A1	7C:7F:6A:DD:75:0E:40:72:C7:84:00:44:E1:9D:B6:B5:C4:30:7E:15	32:CA:A1:18:86:17:19:79:14:95:5C:73:A1:4A:5A:B2:F2:2A:43:8B:BA:0A:1F:56:AE:1D:F9:A7:70:2D:BF:F4
C=AU, O=Fuji Xerox Businessforce Pty. Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Fuji Xerox Businessforce CA	1ED74DBF3743DF23316E198B217D264F	EB:3D:03:EB:C8:3F:E3:BD:60:BE:BB:96:66:E6:5D:A8:2D:78:F7:BC	AA:4C:BF:40:A4:33:B6:CE:E6:23:BA:61:45:7B:41:05:2C:0A:3A:C7:DC:A6:1E:0E:EF:BA:32:F2:CD:7E:38:CE

Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=AU, O=Fuji Xerox Businessforce Pty. Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Fuji Xerox Businessforce CA - G2	3D1A943CCA7282E84C5E8C1F5BCA5CAD	22:26:A3:A3:09:71:1B:9C:22:EB:EB:2E:65:14:F2:4F:86:3D:1D:0B	92:58:7C:DC:27:A5:C0:19:B4:13:AA:94:D2:19:44:AC:85:62:E8:DA:A8:C7:8A:EA:17:C6:23:D1:B7:77:14:DE
C=AU, O=ING Bank Australia Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ING Bank Australia Limited CA - G2	53425F8996D1133B76B6E74D58B6889E	47:C3:13:E7:3B:AD:DC:41:E2:1C:C1:E6:5B:1F:B1:CF:50:B9:9C:F4	1B:5B:77:93:29:3F:34:42:55:F3:11:17:A5:FE:DF:A7:9D:2D:36:F1:5B:43:0F:FA:4F:C8:E1:03:1F:69:AE:F7
C=AU, O=Medibank Private Limited, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)10 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Medibank Health Solutions Pty Ltd CA	37426233FDCEA6016ECB5829DF89A2A5	4C:02:59:CE:65:3F:F2:02:87:F3:86:D9:D9:0A:92:C7:23:79:E6:3A	91:7E:5A:2E:B9:A5:A1:32:AC:78:59:0E:12:88:77:D8:79:3D:4C:25:53:2A:6D:F6:45:4A:D5:F7:0A:69:6A:D0
C=AU, O=NBN Co Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=NBN Co Limited Public Issuing CA - G2	5EA880B36C55681682203F11E48327F4	9B:FB:82:5F:23:B8:D6:9B:F1:FF:F1:84:0D:FC:AC:83:D7:EE:1B:10	75:8F:49:6C:99:28:A3:C6:7E:0D:50:D0:3D:2E:2C:AA:FF:73:3D:42:7E:57:AB:5F:EE:7D:5A:C4:15:3C:40:71
C=AU, O=Sydney Trains, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Sydney Trains CA	0E03C5C6051EC0697934C736E3423F14	97:58:20:64:47:86:72:5B:41:10:6B:C0:9B:8A:26:1E:1D:91:DD:17	BD:80:A3:35:B5:EB:B7:27:99:60:E0:B5:80:22:57:C2:56:06:28:95:F3:3D:3D:CB:C0:B7:CB:71:99:DF:A7:5F
C=AU, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Australia Class 2 CA - G2	034F60731B762012CDCFOA940408640E	CB:16:FB:8F:B8:9C:6E:51:34:24:49:A8:87:2E:BA:E9:68:BE:CE:06	F9:67:44:53:FD:BC:3E:72:4D:A9:CF:C4:93:9E:2D:B7:1B:8E:70:D3:23:7B:B2:C6:D5:1B:7D:AD:8D:F9:1A:41
C=AU, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Australia Class 2 CA - G2	4E9C80C2ED499A520A0FD8327FED1DE3	FB:72:82:49:DF:88:C5:9A:2C:88:AA:22:42:01:08:CB:DD:6E:77:56	C0:FE:90:8A:51:2E:9E:7E:5C:9B:D0:15:3B:E3:A3:B0:DA:A1:B2:BF:07:2F:6D:5F:22:55:45:A4:3B:70:5F:74
C=AU, O=Symantec Corporation, OU=VeriSign Trust Network, CN=Symantec Australia Class 2 CA	7A3DAEF3CC8455711BF013F52B8F54E9	16:99:D2:F2:B5:AF:71:3D:61:9F:0F:C3:13:A9:8D:6C:EA:79:BA:06	F8:EF:81:F0:4B:F6:45:3A:67:87:F5:41:DB:21:A0:9D:08:86:91:A9:79:22:E4:ED:28:98:70:30:63:03:44:BE
C=AU, O=VeriSign Australia, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com.au/rpa(c)10 , CN=VSA Class 2 Consumer Individual Subscriber CA - G2	2341E837BCB44500BB4CC562A3FFCF23	06:20:B1:39:B4:B1:15:25:34:A2:2B:32:57:20:D8:5D:5D:C4:B9:15	93:28:20:F0:DB:B3:FA:10:48:84:BA:D1:5D:69:A0:30:9A:E5:30:54:CB:8F:46:82:66:B2:58:37:F3:C1:F0:6A



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=AU, O=VeriSign Australia, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com.au/rpa (c)10, CN=VSA Class 2 Managed PKI Individual Subscriber CA - G2	0297F92E1524D39BA46D9C970C5D8CD6	13:B7:83:B0:A1:B0:78:AA:45:AD:34:8E:78:EF:A6:C6:B3:F0:D4:88	56:38:74:FB:8F:C4:F5:83:5C:75:B8:84:41:32:6B:D5:B0:D0:02:91:B9:9E:57:0D:2D:0A:13:E5:AA:FF:AF:46
C=AU, O=VeriSign Australia, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com.au/rpa (c)10, CN=VSA Class 2 Managed PKI Individual Subscriber CA - G2	71EA6379EBDC2622676C612F7491358E	78:84:26:FD:1A:D7:BD:06:F0:C8:A0:90:C4:BA:26:4E:9B:0D:C5:57	0F:6A:70:8E:0F:F2:6A:A6:19:B3:06:28:A6:35:4F:04:20:D3:1D:6C:9A:46:65:4D:BF:79:A3:11:A4:9D:B6:BA
C=AU, O=VeriSign Australia, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com.au/rpa (c)10, CN=VSA Class 2 Managed PKI Individual Subscriber CA - G2	6692D3AFDB683C7F97445ECE2138AD7F	8A:B2:4C:6D:43:28:EB:85:49:7D:82:C5:6E:1B:49:A0:D2:05:6E:DB	75:0D:F1:8D:B9:BB:89:2C:DD:23:4E:0A:1E:64:FE:2A:FC:95:D8:6F:61:0B:05:7D:64:B2:91:0A:4F:19:BD:26
C=BR, O=Certisign Certificadora Digital S.A., OU=Symantec Trust Network, CN=Certisign Class 2 CA - G3	2EC91F879ABEC179328CC7158D1C368C	01:1A:48:80:44:B2:38:9B:E6:50:41:DD:6D:BB:92:F5:A5:F1:6F:90	8E:7E:A2:58:F7:43:72:F8:8E:0B:18:2F:A6:0B:7F:83:EC:FB:BB:6F:1F:FE:61:45:BF:24:F7:44:16:CD:02:CC
C=BR, O=Certisign Certificadora Digital S.A., OU=Symantec Trust Network, CN=Certisign Class 2 CA - G3	5CCA628A48CC9399C60C0BF57CBB1E11	71:EA:03:8D:25:AC:24:23:B3:3B:CD:00:A6:DB:2D:43:60:26:5F:3C	01:1B:07:4C:1D:1D:22:A9:27:40:65:97:AB:4E:51:14:F5:C0:45:61:2E:C9:8C:C4:29:A1:A9:3E:19:86:E6:F6
C=BR, O=Certisign Certificadora Digital S.A., OU=VeriSign Trust Network, CN=Certisign Class 2 CA - G2	06D0DA4D722CEAD0520A58522CF5DD62	CB:39:D3:0A:D2:3F:B5:BF:8E:73:48:6C:24:04:ED:3F:6A:0C:A3:1E	88:CF:A8:C6:51:59:41:7F:BA:9B:53:60:FF:7C:47:81:D0:F1:A2:08:61:CC:5B:E2:99:77:AD:67:B7:6C:B0:40
C=CA, O=Canadian Imperial Bank of Commerce, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=CIBC Trusted CA G2	321D52D65F8DA5872F45AB0149E36D3B	8A:8B:1C:D6:D2:2D:02:A4:04:3C:D0:70:61:CD:E7:5D:4F:28:F9:AD	4B:B8:00:C7:CC:2F:02:A3:4F:FD:99:ED:75:77:36:15:51:CB:C2:4C:63:52:B8:14:C6:57:FE:50:4F:3F:09:FB
C=CA, O=Goldcorp Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Goldcorp Class 2 Certificate Authority	0689A8E1BA8E09B49DAAF50C30EA403E	71:4C:CF:F3:2B:ED:0C:76:5B:7B:8F:CD:9B:2B:91:A5:9E:A9:1E:86	B9:78:67:E6:5B:80:5D:78:15:3D:53:49:38:9C:7E:54:69:5A:45:DD:B2:A4:A0:15:CA:D8:06:9C:63:FC:F6:69



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=CA, O=Goldcorp Inc. , OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)11 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Goldcorp Class 2 Certificate Authority	099AFF7EDBFC05C112D 03051C933F1D2	C7:88:2A:CD:D7:00:3A:3D:BC :86:B9:72:80:58:36:39:AD:D2 :FE:30	86:69:39:51:3F:6C:24:05:4A: C0:07:51:65:2D:0F:74:53:22: B3:0C:7C:41:E2:48:6F:67:23: AA:F7:E3:AE:33
C=CA, O=GREEN SHIELD CANADA, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)10 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=GREEN SHIELD CANADA CA	2F463F154CFDBD1F22C E07F0EDF64003	70:61:81:AA:62:11:45:94:75: AC:2B:7B:24:FF:B8:92:CC:87: 88:78	6A:71:46:31:90:34:A1:F3:80: E6:B3:2A:8F:AC:00:69:EB:1D: 33:24:77:F4:EA:D3:37:62:F8: A6:14:A5:52:F2
C=CA, O=GREEN SHIELD CANADA, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)10 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=GREEN SHIELD CANADA CA	75018C5EC7F9AA323DD A7F27AA05D5E4	D9:85:6F:E2:56:11:F5:E0:F7: 22:57:99:59:FE:86:17:DD:27: 6B:49	1B:B1:D9:A9:E7:1B:97:B6:9A: 92:10:44:CC:D1:7A:CA:7A:06: 48:B6:E2:8F:02:9E:42:FE:09: 0B:6E:1E:DC:99
C=CA, O=SAAO, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=SGSI CA G2	692799D01BBB9F8F9A4 BD00C7F741277	D2:7F:5E:33:3D:47:48:87:03: 79:21:7B:BE:3E:19:D7:69:E5: 7A:E0	C7:7E:2D:10:AD:55:D5:CB:B1 :BA:36:43:55:C2:B6:77:8A:F0 :72:4A:77:15:2B:3B:41:19:65: 58:1B:4E:3C:6F
C=CA, O=Tangerine Bank, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Tangerine Bank CA	76CDA7AF01F88B6C928 61E6AED2248F7	3B:5C:F1:45:7E:7D:08:66:7E: 73:87:7D:3A:BF:09:B5:79:30: 5B:51	CE:F2:0F:5A:C6:D0:D5:3D:B0 :2F:E6:F9:B0:C9:D3:AF:A7:04 :13:04:00:B6:C6:0D:C7:36:F7 :E6:8B:B0:F5:0F
C=CA, O=Tangerine Bank, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Tangerine Bank CA	6EBF9491E17FF2BE424 98ED35416CF41	4C:82:55:BF:B9:B0:FF:C1:19: D0:DD:F4:22:4B:3F:34:14:D1: 73:7A	AF:FD:4B:39:F6:1B:CE:A6:B1: 6B:C9:8D:05:08:3D:AD:44:08: 95:66:99:F7:79:1A:32:F0:06: CC:1E:FA:7A:9F
C=CA, O=TELUS Communications Company, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)07 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=TELUS External CA	46EFDC284FDEB0600F1 C90C77771545E	1F:19:4C:CC:44:75:90:9E:F1: 70:56:23:F2:5F:C4:D9:AB:81: 9C:A5	08:38:11:95:D4:A9:79:D0:31: 48:50:9F:64:C4:D7:96:E5:04: 8C:BB:04:D1:9F:55:44:54:C9: 1D:94:AE:DD:DA



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=CA, O=Vancouver International Airport Authority, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Vancouver International Airport Authority CA	1C4F442EE53EC626C15 C5DBF94CD4923	56:D6:0F:A9:90:F2:5E:32:3E: E3:A5:20:35:E5:87:0F:C4:C0: A6:EC	3E:C0:9F:72:F8:C7:F2:AE:38: 9E:DC:B6:E9:CA:06:8E:17:94: 17:DF:42:B1:14:08:9B:0C:12: 66:40:D2:F5:A9
C=CA, O=Vancouver International Airport Authority, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Vancouver International Airport Authority CA	40309E100D6832D8C64 D3CEC3178370F	E1:20:FA:45:5B:CB:A1:18:3B: F2:9E:E4:4D:FC:52:86:C5:12: C6:2E	4C:48:67:1C:48:02:0A:CC:CD: 3D:BB:E7:8C:45:2B:A5:7C:4B: ED:83:BD:B1:A1:C3:3A:98:12: 52:90:F9:CA:A3
C=CH, O=OFAC Societe Cooperative, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=OFAC VPN CA	48B22ED6F7F02581A70 3D4FB6CC72E6E	67:15:41:38:41:83:4F:EB:EB: CC:C7:92:DD:09:7D:8E:97:1E: 16:30	F7:72:0B:96:8E:E0:52:92:84: 2A:5A:A1:3F:4D:B9:A0:2F:67: DA:DC:73:40:CD:C2:8A:17:BE :B1:AA:5A:73:22
C=CH, O=OFAC Societe Cooperative, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=OFAC VPN CA	56603F711D51F6C0C05 AA4B2B552720E	D0:4F:75:9D:C3:E1:CC:97:78: 64:3A:AF:FB:A3:AE:3A:DB:7A :0A:62	E6:7E:5B:40:7C:8B:01:69:80: 49:F4:5F:3A:6F:77:21:A6:8F: E1:25:C1:27:59:89:46:0A:C1: 4C:10:E6:1B:AC
C=CL, O=E-Sign S.A., OU=Symantec Trust Network, CN=E-Sign C2 Firma Electronica Avanzada Consumer Individual CA G2/emailAddress=e-sign@e-sign.cl	5E1E97BBAE21C182919 35F12CF69E86D	3A:E0:BE:CB:DD:BF:8C:2F:E6 :F7:F8:3C:61:C8:D3:86:E1:E1 :EA:CD	52:A5:E3:12:87:A0:F8:91:59: F7:BB:4B:D3:A6:A2:70:DE:E5: 83:A7:72:61:F6:D0:0D:D9:2D: 8C:94:24:E8:00
C=CL, O=E-Sign S.A., OU=Symantec Trust Network, CN=E-Sign C2 Firma Electronica Avanzada Consumer Individual CA G2/emailAddress=e-sign@e-sign.cl	521A5453E0C65DC8FF0 43526CC83F7C9	B5:4E:DC:AE:45:16:FF:E9:A1: 69:BC:AD:D8:08:25:4F:B0:A2: 31:6F	97:A2:F7:AA:C9:46:EC:57:FD: EB:99:D3:4C:EB:0F:9E:22:09: F7:0B:6C:36:85:E9:AE:4D:FE: 89:B2:07:81:DC
C=CL, O=E-Sign S.A., OU=Symantec Trust Network, CN=E-Sign C2 Firma Electronica Avanzada Consumer Individual CA G2/emailAddress=e-sign@e-sign.cl	2F6196C61E9593BAE37 DD2C2580A2DF1	BA:AA:9F:C1:2F:25:FD:F9:FA: C3:7A:16:AC:5E:0A:75:93:F2: 03:48	BE:4D:87:22:25:F0:13:B6:E1: 75:95:AA:29:F3:C0:B9:F8:5C: 40:3E:6C:9B:48:35:50:B0:69: E4:A2:F4:7B:FE
C=CL, O=E-Sign S.A., OU=Symantec Trust Network, CN=E-Sign C2 Firma Electronica Avanzada Consumer Individual CA G2/emailAddress=e-sign@e-sign.cl	481F645D2F635C49D43 EF02067A4CECC	C9:D6:84:3E:0E:2F:81:2F:CC: DC:52:B5:06:A2:F6:2B:27:BE: CB:B4	24:0A:25:1F:12:92:50:D1:98: 82:D0:4D:38:C2:E1:1D:C7:6A: 88:01:53:AB:1A:87:55:AA:96: 22:08:C1:E3:E6

Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=CL, O=E-Sign S.A., OU=Symantec Trust Network, CN=E-Sign SC Class 2 Consumer Individual Subscriber CA - G2/emailAddress=e-sign@e-sign.cl	7C8E03F9357F8362E8B373992C3EF9FD	2D:6C:22:6A:94:EF:D1:A2:CE:03:80:64:A1:A9:6C:7F:11:B9:5E:A6	72:F0:E3:B1:B8:CD:1A:86:BD:F7:D0:22:DA:41:31:C3:02:29:3C:AE:82:0B:28:A5:97:BC:84:D0:41:B8:97:1D
C=CL, O=E-Sign S.A., OU=Symantec Trust Network, CN=E-Sign SC Class 2 Consumer Individual Subscriber CA - G2/emailAddress=e-sign@e-sign.cl	29B2F39E5611CEFF2448D19909805775	4D:8F:16:94:8C:5D:DB:F2:03:9F:67:5E:CA:FA:3C:F3:29:41:56:E1	82:6C:D7:8F:27:47:94:CE:FE:BD:44:F2:BC:80:3E:B2:4A:28:4A:2B:70:5A:44:0B:25:17:CF:C4:A4:19:7D:E1
C=CL, O=E-Sign S.A., OU=Symantec Trust Network, CN=E-Sign SC Class 2 Consumer Individual Subscriber CA - G2/emailAddress=e-sign@e-sign.cl	102D5543014F74C63101B999E22ECB4A	B5:41:6E:79:1D:5B:75:EB:FD:34:9D:50:A1:05:E0:62:DB:FB:0F:1C	8D:64:E1:14:E5:77:B3:54:2F:79:6C:20:F1:2E:FD:A9:AD:9E:25:12:46:64:B3:5A:B9:18:D2:9A:82:16:CE:0C
C=CL, O=E-Sign S.A., OU=Symantec Trust Network, CN=E-Sign SC Class 2 Consumer Individual Subscriber CA - G2/emailAddress=e-sign@e-sign.cl	35B6528ECC9FD39066AE03F78E8BC525	CF:0D:BF:2C:4B:DE:38:EA:20:96:DF:A1:2F:18:A8:F4:85:72:C4:09	C3:4A:57:09:12:2D:C9:EA:F3:02:1B:97:9D:48:43:FB:B4:1C:5B:24:32:6B:EC:E8:4D:2F:68:66:75:A1:B6:EC
C=CL, O=E-Sign S.A., OU=VeriSign Trust Network, CN=E-Sign S.A. Class 2 CA - G2	2CE89700BD9947AFB02739AF8EB27920	2D:74:EC:F4:2F:46:00:EE:10:AA:3F:A2:9D:86:4B:E3:A8:B7:18:11	F1:98:0F:99:B8:26:02:67:F4:B7:29:5C:EA:F9:28:9A:EC:52:89:99:76:8B:58:7A:2C:4B:04:9A:D1:62:5B:7D
C=CL, O=E-Sign S.A., OU=VeriSign Trust Network, CN=E-Sign S.A. Class 2 CA - G2	6465C28835B94C3DD5D2AB206D7365FF	F8:0A:F4:D4:B8:94:E4:4A:23:56:A8:41:2E:51:B1:3F:6E:B4:CC:79	96:7F:3B:9A:49:DF:88:BA:8A:0F:2B:B4:2F:28:B0:5C:E2:7D:49:99:E3:14:51:EA:36:A8:76:93:4F:6F:68:15
C=DE, O=Deutscher Sparkassen Verlag GmbH, OU=Symantec Trust Network, CN=S-TRUST Class 2 CA - G3	4F752B276B4ABD3D25CAE9AEDFB89CEA	1A:FE:71:8C:EB:73:3A:01:7E:CA:33:E2:EC:94:59:49:47:2E:43:A3	AB:FB:1B:05:E5:83:7F:AD:3A:B8:A4:81:2B:BA:FB:8A:55:5E:74:09:8D:57:05:A1:6F:6E:45:53:D1:D0:9A:B9
C=DE, O=Deutscher Sparkassen Verlag GmbH, OU=Symantec Trust Network, CN=S-TRUST Class 2 CA - G3	0277771F3440DF7748DCAEFBDA8A810B	A0:93:BC:89:29:29:AB:93:67:55:ED:13:C8:1E:C9:1A:07:33:FE:F9	47:BC:01:5C:35:6E:78:F7:1D:8B:D2:AF:60:59:8F:3B:09:62:2C:CF:79:56:1A:7E:B8:16:C5:A3:22:25:2F:F2
C=DE, O=Deutscher Sparkassen Verlag GmbH, OU=Symantec Trust Network, CN=S-TRUST Class 2 CA - G3	4FDE25B6CA38C79CE5E5298FCC6C5A45	B2:8D:84:57:8F:7F:7E:6F:B2:CB:81:63:67:5D:5C:16:F6:52:27:4F	85:65:A2:A0:D4:41:0B:84:D2:53:F5:A1:3A:F7:A0:97:A6:4B:1E:C7:1F:70:07:CD:27:11:36:B5:32:FE:11:13
C=DE, O=Deutscher Sparkassen Verlag GmbH, OU=Symantec Trust Network, CN=S-TRUST Class 2 CA - G3	766999BE5D370767E9A52BD667602199	C1:88:82:F7:60:D7:DE:3D:F7:09:8A:50:AA:54:84:AD:EA:4B:F3:8C	3A:E1:82:64:FA:23:03:9D:26:EE:2E:BD:F2:43:A2:0F:1B:65:6B:FF:33:0C:A4:4C:23:DD:DD:31:C9:60:ED:7D

Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=DE, O=Deutscher Sparkassen Verlag GmbH, OU=Symantec Trust Network, CN=S-TRUST Class 2 CA - G6	4FDEA54D9E8E89980EE 475DCD9C85F9A	07:5D:9B:A0:26:47:00:08:4B: C7:83:F5:7E:0D:69:1E:E3:69: 35:B7	E5:C0:DD:B7:F5:CE:0B:C0:A6 :BF:AB:6F:B3:32:25:18:CF:F3 :0C:1D:7A:CC:88:A1:60:C0:60 :13:21:86:CB:BE
C=DE, O=Deutscher Sparkassen Verlag GmbH, OU=Symantec Trust Network, CN=S-TRUST Class 2 CA - G6	3CBBAD0218B471168A0 07D987C6BB4C3	0B:95:A9:D9:E1:CD:80:09:A5: D8:50:80:7F:B4:C3:6F:1E:F7: D2:32	F4:E8:C1:38:E4:2C:8F:63:37: 5A:F6:68:90:92:13:33:6C:5C: 9E:D7:2A:A8:1C:3B:64:1D:1F: 68:AA:9A:B8:3A
C=DE, O=Deutscher Sparkassen Verlag GmbH, OU=VeriSign Trust Network, CN=S-TRUST Class 2 CA - G2	D59E3AB1AB7BE077918 9A4983B1014	79:B6:6B:3F:B7:A5:77:A6:BA: 20:C8:68:2D:5C:8A:5B:46:C3: CB:46	7F:01:58:C3:4E:D4:6B:20:48: B9:FC:42:16:73:30:FB:F9:14: E5:7C:61:2B:A1:20:81:2D:6F: 73:9B:0F:06:EC
C=DE, O=EUROIMMUN Medizinische Labordiagnostika AG, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)07 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=EUROIMMUN Medizinische Labordiagnostika AG CA	41B02864486326C86A1 5D6FED1996B4D	C8:23:6E:45:3D:D5:46:54:7D: AB:52:6F:AC:6D:C5:79:71:E0: CE:43	58:F0:E6:FC:6F:06:4B:75:EF: A9:C3:3D:58:38:1D:06:43:EB: 30:40:A9:CF:99:5F:D0:C2:1B: 32:87:E3:4C:11
C=DE, O=Heuer und Partner - Rechtsanw\lx C3\xA4lte mbB, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Feddersen Heuer Public CA	47F12E271C7123A55D5 6DD6CF4C75C11	06:2B:3D:BA:B6:7A:6A:D0:A7 :04:94:56:7F:E2:B8:D5:D7:C3 :9F:78	A4:02:AA:0A:E5:3F:48:4A:07: BF:4E:35:B5:5D:12:74:12:76: 50:AD:61:45:E2:43:B7:19:33: 0B:92:B2:A1:0A
C=DE, O=LfA Foerderbank Bayern, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=LfA Foerderbank Bayern	5642B0D3EDE4EEC766E 0F534B48C2210	25:A5:B3:26:A6:45:95:7E:B6: E6:2C:C8:1B:1B:83:93:4F:0C: 8C:51	C0:33:66:68:30:6A:9A:F0:7E: 39:6D:39:30:27:49:74:2C:17: D7:09:CF:89:A3:6A:AA:21:C0: 1E:83:64:81:38
C=DE, O=LfA Foerderbank Bayern, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=LfA Foerderbank Bayern - G2	2469D0D0D87B1B8FE65 473D2E50E1979	2A:D3:0E:4D:1B:B7:86:93:D8: E8:24:85:7E:72:DA:12:6F:04: C9:77	31:5A:C9:67:89:B4:9D:48:A1: C4:20:F3:2F:9A:4A:73:F4:87: 1A:F7:5A:4C:A5:3C:F4:1C:E3: FB:3E:2E:76:FC
C=DE, O=RWE Dea AG, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=RWE Dea AG CA	4BEBC4721EAA8A4D19 D947C5C587AB98	50:1C:A0:E5:3B:2C:7C:C3:20: 82:DE:BA:5A:E1:1C:AE:7F:EB: 7B:28	7F:C6:CA:B9:6C:16:C8:50:F4: 57:DC:BB:FB:89:35:39:EA:26: 64:39:5F:24:09:69:37:89:F4: 1B:FD:64:71:4E
C=DK, O=A.P. Moller - Maersk A/S, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)11 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=A.P. Moller - Maersk Certification Authority	47BA978E3FC8F2BD5CD DCC1712F76868	01:E5:5D:EC:F6:35:D9:60:7F: EE:D3:98:E0:22:35:27:67:5C: B8:6B	CD:C4:53:96:93:04:BE:E6:A5: 8D:9B:AB:C0:AA:C4:C4:CE:21 :56:A1:C1:72:A2:58:5E:54:60 :79:14:4E:4E:58
C=DK, O=A.P. Moller - Maersk A/S, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)11 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=A.P. Moller - Maersk Certification Authority	37F4E47DEAAFA3B3E48 3A229F69CA2F4	A6:1F:1A:69:51:B1:FC:EB:A5: F1:61:CB:57:66:D2:27:B8:A6: A1:D1	8A:A7:7B:B7:AD:A3:B5:0A:FF :1D:DD:90:12:C5:D7:3B:0D:9 F:87:22:BE:DF:CE:E0:B1:DC:0 A:CC:B0:DD:1E:0E



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=DK, O=APMM A/S, OU=VeriSign Trust Network, CN=APMM Certificate Authority	3ABC7A27558644E61D05EF04C86C8F5F	54:18:7C:F9:3A:69:D1:A1:0D:A8:23:DC:A3:95:B6:F8:1C:89:42:F2	0C:B8:26:87:CD:03:AD:53:5A:42:76:92:40:64:79:9A:49:E4:3D:39:A8:97:CC:86:21:6C:4F:D5:23:47:B9:37
C=DK, O=APMM A/S, OU=VeriSign Trust Network, CN=APMM Certificate Authority	63BE1A60EDED2EA97157B96EB07DC149	56:D2:6C:D9:7B:56:AF:FA:B0:35:BC:91:53:87:D0:7F:96:23:D5:F7	DC:6E:4F:60:22:E9:FC:C9:46:BC:7D:36:EE:C3:84:66:6B:64:4C:08:71:96:39:9E:5A:2D:A9:6F:F1:15:90:45
C=EG, O=Egypt Trust, OU=VeriSign Trust Network, CN=Egypt Trust Class 2 CA	1E5ECC4FB694E066EE6A768CCDCE5E02	66:77:97:41:29:FE:67:4F:40:90:5F:8E:32:78:93:26:82:EB:8C:22	EC:00:57:21:4F:B1:A3:36:98:A4:9F:D4:0A:CC:E5:73:DC:9C:FC:9F:22:3F:22:5C:90:E7:4B:CD:88:D5:49:FB
C=ES, O=GRUPO S21SEC GESTION SA, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=GRUPO S21SEC GESTION SA CA	7F413F2E00F144F0A4EDA00D77FD5D3E	3E:6A:33:13:33:12:36:06:DD:F7:93:B7:3D:53:68:FE:D7:50:99:43	D2:07:23:4E:2C:D9:A7:EA:B5:6C:70:F8:02:C0:54:83:C3:AB:B4:C9:46:B8:CD:E2:97:59:FF:C4:30:26:84:93
C=ES, O=Organizacion Medica Colegial, OU=Symantec Trust Network, OU=Entidad de Certificacion, OU=Class 2 Managed PKI Individual Subscriber CA, CN=OMC - G2	454FFA5AB1CEC97FD370916A0329095B	57:1C:5A:4B:FD:A2:8A:DE:AA:84:6D:FF:D4:4C:E0:F6:7F:71:6E:1A	E1:A1:2F:55:32:3E:B7:E8:D2:73:57:05:8E:0C:1C:24:70:D5:CD:09:8F:6E:D2:A1:6B:A7:93:3F:8A:3F:74:B5
C=ES, O=Organizacion Medica Colegial, OU=VeriSign Trust Network, OU=Entidad de Certificacion, OU=Class 2 Managed PKI Individual Subscriber CA, CN=OMC	0276E34C6242D1DD949EF29209652686	A0:26:BA:B5:EE:97:FF:31:73:0E:FA:0F:43:95:DF:35:AC:F4:6C:25	A4:8A:6D:DD:5D:D5:5C:AF:68:CC:AA:E0:A5:98:97:9C:AE:35:BF:D3:AC:6E:20:B5:11:FA:A7:87:4F:BF:B6:92
C=ES, O=Organizacion Medica Colegial, OU=VeriSign Trust Network, OU=Entidad de Certificacion, OU=Class 2 Managed PKI Individual Subscriber CA, CN=OMC	5D81B34BC38B4A55A3048E5C9990B3FF	D2:F3:B7:9C:B3:2D:5B:22:9D:50:8B:CF:49:23:A3:9C:16:78:0E:4D	78:83:ED:2C:9D:4B:71:5A:FE:BD:49:7F:54:B2:ED:C8:67:99:C6:7A:DC:DF:7F:35:5B:E0:AC:0C:FD:72:A7:08
C=ES, O=Sociedad de Tasacion SA, OU=VeriSign Trust Network, OU=Entidad de Certificacion, OU=Class 2 Managed PKI Individual Subscriber CA, CN=EC-ST	584887776397395A27C3EEE5F275BFB4	7B:65:BD:48:EA:B9:B0:B8:77:7F:0F:AD:E8:2B:2F:52:D4:63:90:68	89:F1:A1:A3:90:46:F8:AB:23:A1:3A:44:61:05:80:56:DE:0A:CC:E3:0A:CD:16:2C:21:07:4A:9E:09:36:78:B3
C=FI, O=Nokia Siemens Networks, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Nokia Siemens Networks CA	0572F5464D9800F92BE6C5A6DEF137DC	D3:CC:95:2B:67:17:83:57:85:80:ED:8E:71:BA:EF:F6:51:FA:12:7A	01:89:FB:D1:6D:79:3B:7E:4F:2B:80:DF:0E:46:D2:52:A9:50:EB:83:7E:3D:77:30:8B:67:14:7D:46:42:E1:B6

Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=FI, O=Nokia Solutions and Networks, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Nokia Solutions and Networks CA	0136F9054978D629BC860DDAE77657C8	1A:7A:F0:1B:31:42:21:14:E7:D5:FA:C9:CE:36:3F:E2:12:D6:65:FB	47:EA:60:09:55:F7:81:EB:14:75:D2:91:5F:47:E9:C3:43:B4:CC:A1:42:AF:93:45:54:DE:70:90:23:B2:E4:C8
C=FI, O=Nokia Solutions and Networks, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Nokia Solutions and Networks CA	274747AA085154AC1A9B1338AA1B9441	5C:97:84:D8:F5:C5:A5:31:A8:D4:0C:A8:13:23:FA:77:1F:8F:30:D9	0B:5F:13:97:4C:EB:57:7E:1C:C3:9D:FF:AD:F6:16:FC:F0:C1:7E:CA:67:47:20:1A:EB:A6:AF:3B:C2:0C:E4:F4
C=FR, O=Groupe SEB, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)08 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Groupe SEB CA	72FBBB2C78E69509927F4B85FE8DE299	C6:7E:73:2D:02:F8:4B:CE:F8:E1:2D:C6:A8:C4:11:58:87:C3:2F:7C	A6:66:0F:52:0C:FF:42:D0:FA:B1:15:71:FE:0E:62:85:B7:60:ED:13:A3:F9:D9:E3:36:A5:17:33:FA:47:AD:42
C=FR, O=Sidel, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Sidel CA	69235AA2CAA72FF4E2E3AE62E809505	71:F3:F7:E1:19:AF:6A:02:98:26:58:54:08:AE:2E:9F:27:0A:A4:60	C8:3B:5E:BB:6C:D9:3E:5F:DF:C5:0E:09:52:6A:BB:1B:EC:77:85:AB:FA:74:FF:CC:86:E4:72:DA:7D:04:4D:31
C=FR, O=The Bank of Tokyo-Mitsubishi UFJ, Ltd Paris branch, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)07 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=The Bank of Tokyo-Mitsubishi UFJ, Ltd Paris branch CA	60C911E4367FE0A3D275512F6DCFBFA6A	BA:DE:6B:1F:AB:11:89:35:72:36:D4:5B:F3:5C:7B:F8:B6:5E:1B:FD	56:CA:F4:87:5E:D7:B5:88:3C:57:AF:95:54:FD:6D:E1:F6:1B:AE:BE:51:B9:39:14:E3:41:64:AE:56:7E:DB:A4
C=FR, O=The Bank of Tokyo-Mitsubishi UFJ, Ltd Paris branch, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)07 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=The Bank of Tokyo-Mitsubishi UFJ, Ltd Paris branch CA	2D350315AD5CB423FB46D4B6D9678C74	04:78:6E:57:94:2B:59:1C:68:30:11:DA:FE:FE:1E:AF:36:AA:52:CD	CF:69:C7:30:21:65:D1:AC:59:E1:04:21:60:9B:8C:F9:A2:7E:42:42:82:DD:99:5E:3B:1C:D4:92:09:8C:F3:DC
C=GB, O=ARM Ltd, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Partner Services CA - G2	5794A7FB5A99538D802244A10E787B73	18:A9:8F:F4:82:8B:DF:8B:CB:30:5E:BA:24:DA:1D:EA:23:E0:84:A6	0D:B1:7C:39:CB:E7:EF:B9:51:E6:BA:E1:25:3E:A6:47:F6:A6:32:51:25:81:B7:E2:1C:D5:1C:5A:FE:01:E4:70
C=GB, O=British Telecommunications plc, OU=Symantec Trust Network, CN=BT Class 2 CA - G3	08E90B09364834EBFEF7E28C1C71D40B	0C:75:87:14:AD:BA:F4:81:B1:51:19:8B:9F:13:E4:C2:84:F3:0C:EE	4F:D9:5A:FC:50:5C:1C:CB:5A:DA:4B:A0:0B:04:94:56:FC:8F:7B:FB:73:AD:0C:1A:9B:61:F2:F8:E8:EE:42:79

Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=GB, O=British Telecommunications plc, OU=Symantec Trust Network, CN=BT Class 2 CA - G3	5908B3F251B1A87A71E EA2FE4D3BCBD4	A1:E6:EC:17:40:7A:C5:2D:17: 61:AD:D9:89:64:A3:00:EA:BA: 56:52	AA:25:7A:6C:E4:A1:EB:7F:6A: 50:8B:50:37:D8:1D:E2:78:2C: 8D:8A:EA:01:27:DE:1E:31:15: 02:18:BE:DA:75
C=GB, O=British Telecommunications plc, OU=VeriSign Trust Network, CN=BT Class 2 CA - G2	0BDF8169F3686B1C5E8 496BA30110E05	26:02:74:3E:F6:47:79:94:5F: 7A:C7:A4:EA:E9:B9:45:F2:44: 78:BB	A0:BD:4E:39:E6:FE:41:5F:8B: 1A:BA:47:73:C3:EA:60:90:5E: D6:1F:8E:A2:78:75:CC:03:E9: A9:4D:44:1C:B6
C=GB, O=British Telecommunications plc, OU=VeriSign Trust Network, CN=BT Class 2 CA - G2	4EB52E47BC7B55E53B4 2F970B7C4AE9B	35:F0:56:7D:58:C0:F6:0C:7D: 30:38:C0:13:44:1D:40:33:90: 04:E3	4D:40:46:D0:7A:37:A5:A3:D9: 61:D0:D6:20:53:BF:A3:95:4A: 33:30:A5:75:8C:A8:29:25:D6: 59:0B:D3:26:4A
C=GB, O=Clifford Chance LLP, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Clifford Chance LLP CA - G2	0E1327EAD942AE70E7 B4C285AA3E894	DB:3D:BB:A5:17:E5:BC:A2:1F :A6:9B:72:E8:86:7F:74:AF:B1 :B7:AA	D0:EF:B8:40:22:8E:B4:DA:AA: B3:97:0A:AE:0E:64:87:41:54: 12:B3:15:93:51:CF:01:73:8E: AE:48:6E:5B:5F
C=GR, O=ADACOM S.A., OU=Symantec Trust Network, CN=ADACOM Class 2 CA - G4	45EB11EE0ABB1E2FE85 EAF9AADF4DEAA	74:9D:77:FF:54:A1:27:B0:53: EC:3F:5A:D7:96:3D:2A:48:07: 5E:25	EC:28:78:2B:FD:B9:97:87:59: 46:D0:78:C3:A9:C6:48:1D:34: D5:F7:75:D2:9F:0F:8C:B8:00: 10:C9:33:13:98
C=GR, O=ADACOM S.A., OU=Symantec Trust Network, CN=ADACOM Class 2 CA - G4	12D4699CE391AB25267 C6C5D0A06F9A6	F0:53:53:C0:36:8C:52:51:9E: C9:8C:23:67:BD:C2:ED:0D:5E :94:1D	4B:FA:DB:4E:B3:0D:4D:E9:2B: C2:38:23:E9:50:E4:C4:8E:86: D7:29:A1:1B:C7:6F:18:79:0E: 38:F3:4A:05:50
C=GR, O=ADACOM S.A., OU=VeriSign Trust Network, CN=ADACOM Class 2 CA - G3	3ED81FB8353FE34AF11 7CED43F81E923	C9:33:D8:28:96:5C:69:67:AF: 6F:F3:72:90:0A:5F:B4:09:85: 91:0C	12:FA:24:6B:C2:CF:80:4C:3A: F6:FA:C7:11:79:47:B9:59:A1: B1:4B:FE:24:13:51:3C:E7:CA: 16:DD:61:A6:ED
C=ID, O=PT Astra Daihatsu Motor, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=PT Astra Daihatsu Motor CA	23284EAAA343A0025BE 2435E289B7D69	57:11:4D:AA:10:4E:17:B7:E9: 79:26:EF:1E:1D:BB:DD:7A:05: B2:01	C0:F3:93:D5:02:7D:52:A5:64: 3A:2E:38:D4:F7:9B:1D:95:8D: 40:FB:6C:DF:1A:C2:57:1C:E6: 10:04:BD:ED:26
C=ID, O=PT Astra Daihatsu Motor, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=PT Astra Daihatsu Motor CA	0DEE65C7316FE4C7261 600F939EDD204	71:02:1E:E4:53:22:D2:FA:53: 54:4E:CE:1E:CC:56:67:D5:57: DE:20	9F:F4:EC:07:4F:E3:70:81:8B: 15:AB:A1:BB:DC:B0:A4:DB:E3 :F8:42:0A:99:3A:7B:51:76:BC :C7:FB:4E:4E:AD
C=IS, O=Skryr Ltd, OU=VeriSign Trust Network, CN=Skryr Class 2 CA - G2	1B4518DD909AF897D38 00560BC503CAA	0E:61:3C:87:96:F3:20:3B:D0: 7C:D9:BA:E3:3E:FE:6F:F3:82: 27:FA	77:A7:7C:C7:5E:FC:87:D5:CA :9E:49:38:3B:A2:0F:48:D7:8E :5B:57:DF:3D:55:C9:61:B4:1D :7B:1D:A8:89:B3
C=IT, O=Trust Italia S.p.A., OU=Symantec Trust Network, CN=Trust Italia Class 2 CA - G3	27E25F64A358498B5AD CB6F4BAB482CC	19:73:0A:CC:86:96:B4:8F:31: 88:58:ED:A0:81:20:2E:DB:BA: F4:92	50:40:F1:79:44:81:45:C3:E9: 62:9D:27:34:3D:34:01:DF:F9: 07:C0:D0:80:7D:A4:AF:DB:B9 :26:D6:6A:8C:09

Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=IT, O=Trust Italia S.p.A., OU=Symantec Trust Network, CN=Trust Italia Class 2 CA - G3	011905A4A301D3D1D8C 44425CA75E7A7	6A:2B:D5:10:BD:91:1E:CC:36: 5A:FF:50:AC:E6:C5:22:70:DC: 1F:0B	33:72:E8:E8:06:44:34:0E:8B: A0:BA:CC:B2:AE:75:77:47:A6: CA:B8:97:79:47:AA:14:EC:88: 38:F2:F0:1D:34
C=IT, O=Trust Italia S.p.A., OU=VeriSign Trust Network, CN=Trust Italia Class 2 CA - G2	767D8CCBB2EF3E2DB90 2D530DDA3C499	C5:DA:6B:CB:55:4A:F3:B4:BD :AE:87:45:1E:A6:D1:3B:1C:95 :37:04	20:8E:A4:F5:E8:F1:91:56:36: 00:C7:38:2B:AF:77:E1:29:1F: 4D:EA:4C:3A:04:CF:D0:61:EC :C5:95:4E:1E:7D
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, CN=VeriSign Japan Class 2 CA - G3	1A48723FEB737354E25 7A53EE0EB2A77	3A:37:20:C3:47:56:AB:C3:5D: 0E:F7:94:68:77:CC:FB:5D:17: D9:D9	E5:0C:65:6D:87:E8:36:CD:16: 22:DC:16:E6:A4:8C:04:CO:16: 5D:C3:FB:8D:F2:55:6A:3C:B4: 58:F7:25:E2:5C
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, CN=VeriSign Japan Class 2 CA - G4	5F6D973A5C1F7354DAC 3F391C063887A	44:25:B4:5B:96:7B:55:E8:13: 47:0F:35:5B:5C:71:7E:96:80: A1:01	BE:6C:16:46:99:5E:84:E9:C9: C5:49:05:0A:95:D4:43:EE:2D: 57:BF:49:09:9E:A4:26:E4:1C: 87:64:D0:7F:AC
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, CN=VeriSign Japan Class 2 CA - G4	54B9B75DEEB4FB56203 E95C21AD5CB9E	B1:10:05:8F:38:9D:0A:7B:03: C8:DD:14:60:53:AB:B7:7B:E3: F0:AD	FD:E9:82:16:66:61:7D:30:97: E5:9E:A3:13:F0:0C:1D:62:BC: 7E:0E:06:E9:7C:81:5D:87:C4: 4C:8B:EC:AA:D7
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa(c)09 , CN=VeriSign Japan Class 2 Managed PKI Individual Subscriber CA - G2	6319AFF52CED717683A 40E85C4168F1E	A5:20:2C:1E:06:C5:1F:83:27: 4D:FE:E5:AA:14:1B:6B:7E:AC: D4:CD	4F:55:0E:D9:61:12:1B:EB:FD: D3:8B:54:79:7F:D1:EA:DC:D0 :0A:18:0D:53:F9:E3:85:E6:25 :67:96:77:C6:91
C=KR, O=KECA, Inc., OU=Symantec Trust Network, CN=CrossCert Class 2 CA - G3	026D89F34B990ACE5D0 9DAED298BFB5	94:0C:89:C3:88:17:9B:D8:0C: 79:8B:6F:E8:91:AC:C3:EF:D7: D1:E5	3B:75:55:AE:65:31:2A:21:B1: 41:F6:10:28:8E:5F:53:3C:68: AB:0D:B5:FB:95:80:F3:7E:B2: 21:8D:0C:27:98
C=KR, O=KECA, Inc., OU=Symantec Trust Network, CN=CrossCert Class 2 CA - G3	72A2FDDE7F29E240DC8 EF6416A654991	AA:EC:64:21:0A:C9:18:79:E1: 81:A8:AB:C9:0F:68:E4:0A:B1: 63:69	25:A0:B8:C9:77:3E:44:60:E1: 99:71:EF:78:1B:E8:1B:DB:77: 04:ED:5E:48:6B:26:78:66:A3: AB:6C:2C:0D:44
C=KR, O=KECA, Inc., OU=VeriSign Trust Network, CN=CrossCert Class 2 CA - G2	3AE4A8A373B650CBBB4 0DDE62D1D5F69	9E:3F:79:C5:65:05:D0:D2:AD: 98:8D:91:E7:8C:52:6C:39:B0: 73:8D	AA:9F:4D:F6:96:C1:B5:E2:F6: 56:66:32:9D:80:01:5C:3B:C6: 5C:3F:40:1D:E6:9B:02:6B:43: 7A:5C:F2:D5:CF
C=KR, O=KECA, Inc., OU=VeriSign Trust Network, CN=CrossCert Class 2 CA - G2	2E22716AEB5752B25EA 0DE2AE115FF46	A7:B6:C4:D4:C1:19:EB:5F:08: E6:55:42:B9:7A:94:97:43:1A: 63:F7	29:BF:73:46:19:88:9F:E3:CC: BE:53:5F:D6:67:6E:D3:00:D1: A8:A1:33:6E:DB:AF:8F:B8:72: 36:3F:4A:25:5E
C=KR, O=KECA, Inc., OU=VeriSign Trust Network, CN=CrossCert Class 2 CA - G2	703A2C162CAFA9DBC3 A188A7395E8F0E	C5:41:CB:4A:59:15:61:64:7D: 37:27:05:AB:21:36:4E:32:B7: E1:52	6E:B2:C3:74:CD:ED:31:38:3E: C1:98:5D:57:58:F2:8D:52:F5: FD:A6:D7:6B:FF:8F:0D:BB:53: 07:0B:A4:3F:FA

Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=MK, O=KIBS AD Skopje, OU=Symantec Trust Network, CN=KibsTrust Certification Authority	6021076ED028A75AE053EA334DC6C611	19:0E:1B:A6:EB:89:9B:56:2B:58:49:23:DF:9A:4E:C6:D9:2D:3D:22	77:36:BC:50:A3:B0:63:48:AD:5D:C3:14:9D:2B:B5:3E:A1:C7:66:38:10:61:DA:F4:A1:8E:E9:9C:48:DD:D0:3B
C=MK, O=KIBS AD Skopje, OU=Symantec Trust Network, CN=KibsTrust Certification Authority	50195F99A1B56D1DDC496C769DED20F0	2B:74:BA:36:68:94:47:5A:A3:F0:0B:57:07:6D:A6:9B:98:BC:B4:14	FE:56:D8:42:A2:A2:B9:03:E0:50:97:14:80:E7:DE:A2:CD:85:E4:27:F3:67:15:0B:C4:49:C6:40:C3:B0:24:5B
C=MK, O=KIBS AD Skopje, OU=VeriSign Trust Network, CN=KIBS Verba CA	5384BD646C75142637C29A603304E7D1	84:33:3D:76:44:8D:71:02:11:F9:86:AB:65:8D:8E:AA:B5:2E:18:E0	5B:81:ED:0B:A1:66:EA:31:84:8A:59:E5:AD:67:E9:6D:88:74:A5:5F:11:2F:AF:BC:2E:9E:64:CE:1B:9F:60:73
C=MK, O=KIBS AD Skopje, OU=VeriSign Trust Network, CN=KIBS Verba CA	5D606088B2BDAF6790AA5B02AC455520	AC:BA:A2:8D:C8:CA:47:4C:52:BF:88:76:1D:70:E3:8E:1B:2B:FD:DD	DC:6D:1D:AF:47:5D:D1:16:44:9F:DF:69:FE:8D:E7:10:69:88:54:29:2A:17:67:DC:73:36:46:44:A5:B3:45:AE
C=MU, O=The Mauritius Commercial Bank Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=The Mauritius Commercial Bank Limited CA	725C0B3772E9E75A5EF9A2F4A7BAC953	C2:4F:A9:A4:3C:54:2A:2A:1E:A6:5A:29:50:91:20:07:31:B2:10:A1	0A:64:6F:DC:70:4F:49:4A:67:73:9A:7E:99:FD:74:95:5B:B0:AF:1A:BA:62:2C:EF:E0:00:B3:95:57:C5:FC:81
C=MY, O=MSC Trustgate.com Sdn. Bhd., OU=Symantec Trust Network, CN=MSC Trustgate.com Class 2 CA-G3	11EDA4EC54391092DDC97BFDF95832C	18:71:21:4A:DD:16:B3:B7:8B:08:7A:35:AD:B7:A9:A0:57:0A:17:1D	88:5B:CC:EC:D1:40:02:A0:69:F5:7E:86:1F:69:19:C1:75:E7:91:C2:CA:60:5B:49:4D:D7:96:06:84:B3:A0:93
C=MY, O=MSC Trustgate.com Sdn. Bhd., OU=Symantec Trust Network, CN=MSC Trustgate.com Class 2 CA-G3	35629FA5234394D5D2120C9F8F7C25E5	FE:C9:D4:25:9B:C0:87:58:A4:92:04:27:E1:5A:F2:FF:88:08:4B:FF	6A:03:92:DD:4B:5B:AA:F8:20:54:60:7F:CD:6F:51:C7:3E:72:6A:F4:44:E2:40:03:82:D7:5C:4F:D2:0C:2B:3F
C=MY, O=MSC Trustgate.com Sdn., OU=Symantec Trust Network, CN=MSC Trustgate.com Class 2 CA-G2	5EF4A3C5109FF2ED77589A4913E47DA0	63:08:ED:4B:91:04:B8:88:7B:77:FA:09:55:E9:9A:6A:B8:DD:22:FF	EA:CB:06:CB:B7:B2:51:C6:BF:46:4D:B4:B6:70:DC:CD:C9:25:4C:9A:F3:93:8C:11:0C:EE:74:D0:0E:A0:A2:63
C=MY, O=MSC Trustgate.com Sdn., OU=Symantec Trust Network, CN=MSC Trustgate.com Class 2 CA-G2	54F4E89C500793C7246ECD56EEB2194B	CE:A4:FD:ED:DC:15:90:78:0B:6C:22:BC:55:7D:03:C9:01:DC:5E:4C	5A:F4:C5:B2:DE:3A:D0:86:02:64:F6:3C:73:6D:E4:B9:08:97:D7:95:A4:82:23:62:4B:EB:E8:41:9F:D2:2C:F0
C=MY, O=MSC Trustgate.com Sdn., OU=Symantec Trust Network, CN=MSC Trustgate.com Class 2 CA-G2	5EF7CC066B0419465DE55F3FA12FA36B	EF:AC:86:ED:86:28:F1:9E:9E:F8:9B:62:3D:DB:1E:C4:6B:AA:65:3E	69:D4:55:F4:81:C2:BB:24:04:76:BD:FC:04:F2:5D:17:AF:7F:AD:E2:03:EE:C6:B3:19:10:A9:AA:4D:0A:86:D7
C=NL, O=Getronics Nederland B.V., OU=VeriSign Trust Network, CN=Getronics Class 2 Certification Authority	5DB7AF7BADD9F66D46B970BD4A89C	5A:92:BA:E5:DA:C9:09:68:B6:DF:F3:DE:C6:AE:E3:51:63:EF:62:A6	34:70:A9:19:80:40:6C:94:48:66:77:BD:20:82:BC:9D:70:8E:64:37:DC:16:F5:8D:BF:FA:AA:06:16:CC:C4:71
C=NL, O=Getronics Nederland B.V., OU=VeriSign Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Getronics Individual Subscriber Certification Authority	030D523C2E7AE7DDD9099F6F08D1CAC1	20:23:A6:41:EB:8B:35:90:51:2C:36:71:BD:EE:7F:68:CB:8B:10:EC	4D:A5:15:0A:DC:78:49:54:6E:74:E4:3D:8F:69:AC:36:0F:57:5C:F5:82:75:30:B0:61:26:6A:EE:BB:18:19:F4

Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=NL, O=Getronics PinkRocade Nederland B.V., OU=VeriSign Trust Network, CN=Getronics Class 2 CA	080132AB919E3E0C6F65B985C79596E8	77:20:27:50:95:38:00:93:3C:B6:27:29:27:AE:E2:EC:BB:EE:B6:66	E3:51:3D:BE:80:50:6D:EC:A0:BC:C6:31:66:8B:47:02:13:64:AB:BE:F9:9F:8B:99:89:FC:39:1D:66:17:83:D5
C=NL, O=KPN B.V., OU=Symantec Trust Network, CN=KPN Class 2 CA	539D508A3DB120B241DBDBB69B878FCB	48:AA:4E:B4:B2:47:83:2C:C7:3C:6C:BE:2C:01:B1:01:F0:50:2B:CA	48:C9:B4:11:32:D8:B7:D9:1E:A0:52:BA:1B:D3:67:CD:AB:25:48:D5:97:95:C7:E0:F2:1A:E2:EE:89:E0:11:88
C=NL, O=KPN B.V., OU=Symantec Trust Network, CN=KPN Class 2 CA	56DEFDEABD703514F01C1907AA4B928D	F4:0B:30:7B:1D:63:5C:0D:8D:37:0F:8A:2C:AA:7C:03:2D:88:1C:0B	23:72:9A:AD:51:9F:B7:32:41:1B:AA:54:1E:EA:75:A6:47:13:EF:76:1A:FB:A1:C2:C3:CF:82:5D:29:D3:59:09
C=NL, O=KPN Corporate Market B.V., OU=Symantec Trust Network, CN=KPN Corporate Market Class 2 CA	405459531DD628E04ACC699971F3525A	05:17:7D:01:8C:5C:F4:EA:0D:FB:63:0A:0C:84:6F:50:E8:D2:45:DF	1A:ED:19:D0:E4:F6:30:58:B1:7F:FE:2A:55:29:75:F0:3F:CB:DE:83:67:B2:87:17:1E:57:58:68:BE:14:F9:38
C=NL, O=KPN Corporate Market B.V., OU=Symantec Trust Network, CN=KPN Corporate Market Class 2 Certification Authority	5BD112D34816C86150F17D87E5CB9E7E	43:88:93:25:A6:C1:E5:88:21:EB:48:48:27:86:26:CE:67:C6:0C:45	77:82:F8:63:50:19:E0:2E:5B:71:B2:74:F5:77:8A:F4:71:7E:BE:B1:62:BD:C5:4B:D5:23:47:74:B2:29:69:BD
C=NL, O=KPN Corporate Market B.V., OU=Symantec Trust Network, CN=KPN Corporate Market Class 2 Certification Authority	071B783CCC8DD5FE6D2175BC5BAD8384	61:65:E3:9A:FD:11:A0:FA:4F:1B:A9:F6:44:AE:DD:BB:FA:6F:8D:4A	F4:E2:0D:17:1A:AA:61:E1:D8:EE:B3:51:79:CA:77:CD:0C:C5:7B:EB:B3:C8:60:E5:B9:22:2A:6D:B3:CA:E1:B4
C=NL, O=KPN Corporate Market B.V., OU=Symantec Trust Network, CN=KPN Corporate Market Class 2 Certification Authority	022EDC04962A044D08F4D772A197D1AF	70:38:14:76:CC:99:B7:13:48:AA:44:58:3F:94:AD:DD:49:8C:A7:D7	DA:1E:85:7B:AD:D8:E3:39:A7:31:DB:13:77:B4:7A:96:55:45:AA:8E:1F:74:20:FA:8A:F0:53:17:D5:0B:D8:24
C=NL, O=KPN Telecom B.V., OU=VeriSign Trust Network, CN=KPN Telecom B.V. CA - G2	1E437EDD50F3441140C3F410E9767680	0C:FD:A3:FB:25:36:60:A6:2A:33:38:F6:BF:40:34:85:65:F6:55:5C	D8:DC:43:C4:C0:62:76:3B:DB:36:DB:72:57:39:FA:F4:50:83:63:FE:6F:15:8C:DA:47:4D:51:D7:19:C2:C2:22
C=NL, O=KPN Telecom B.V., OU=VeriSign Trust Network, CN=KPN Telecom B.V. CA - G2	430A664BB5BDF7772C32FB36A3C2A6F5	70:DA:4C:2B:46:67:93:55:6F:59:B1:57:0C:06:47:F2:DD:17:2A:14	04:83:2F:08:5D:97:CB:A8:43:F4:6D:65:0F:D6:F5:A7:E1:45:84:62:70:6E:BA:F9:E0:B9:E9:FE:FC:05:23:50
C=NL, O=KPN Telecom B.V., OU=VeriSign Trust Network, CN=KPN Telecom B.V. CA - G2	2457111EFD4BF3D56EF206A0CEE4773E	E5:81:29:4B:9C:42:66:AB:E0:DC:B0:78:6E:7E:3C:F2:9B:01:9B:96	26:F8:76:6C:E0:51:E7:CD:65:17:E9:2B:85:73:3C:47:51:17:76:57:78:88:4C:48:1C:79:EC:23:35:0A:BA:71
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS Dealer CA	2F115B7497409B4649FE6454B699C2E6	C0:55:09:FD:DB:10:E2:56:94:1B:AB:62:82:2A:A6:3E:C9:A8:B5:03	76:79:0A:E7:08:EF:BB:36:6B:A1:92:A6:8D:50:81:0A:E5:3E:82:A4:97:CF:F3:91:1F:88:8A:21:E0:4F:E2:D7



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS EDC CA	64BD88CDEE991BFEEB7 5ECB1327FF340	BF:3F:6C:7B:48:F9:50:58:38: A9:FE:D8:56:EA:A5:49:C1:20: 8C:3F	4F:5C:36:41:95:68:CB:1E:70: 84:FB:82:DA:CD:D1:01:5A:DB :1D:57:B5:C3:E3:F1:7F:7F:7C :A0:92:97:74:32
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS EDC CA - G2	4BB55060C1F6772E84C 1BF8CDFB6FB17	D9:3C:3C:30:90:71:A5:FB:BC: A2:8C:45:31:1F:76:3A:EF:2D: BE:62	BC:8E:B1:5B:0F:EE:05:D9:53: 75:8E:1D:2C:29:A9:E7:D1:E1: B5:AF:D5:65:9A:B9:5E:98:1F: 6F:75:BD:1D:71
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS NF CA	6365BA4F31FF7FE2E14 F544B4CFDE2CE	B1:1C:83:ED:BE:C2:7D:EA:81: B5:1C:11:B4:55:86:C7:78:62: F8:58	8D:E6:CA:4D:03:AD:F1:9A:56 :B3:CD:D6:DC:A8:43:C5:11:8 9:D0:A2:BB:60:D8:4B:9A:D0:1 E:BC:74:1F:5F:22
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS NF CA - G2	7ECB51FCA830F0C70BB 4317F6F453F2B	5C:70:FE:74:FA:85:CB:C5:0F: 43:5E:83:F5:C9:D7:5B:EF:63: 4E:8E	22:26:1C:8F:0B:CD:85:57:1A: F2:F8:01:C4:77:12:E6:C1:6D: CA:E3:C7:DF:C4:CD:24:51:D9 :C5:38:B3:49:D1
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS OTL CA	3AD29B805D7C64003AB F73716854D8B5	D2:C7:CB:6E:13:48:3C:60:04: 00:9B:2D:97:45:5B:7F:F8:F4: AF:A6	C7:36:74:03:CF:6D:5C:13:D9: 69:01:87:92:6E:F8:96:CE:6E: 74:13:50:80:C9:AF:D8:C8:B1: 53:24:67:AE:50
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS Test Dealer CA	5A2EC0CDC65C525582 B5904583C0AD94	1A:30:E9:6D:31:54:01:39:4C: E8:9E:0A:61:19:10:79:DE:E3: 82:8F	43:25:F2:A8:87:0C:B6:A9:BF: 08:66:4D:69:73:23:F6:25:46: C4:09:07:F8:85:D6:A6:40:70: 71:B4:A9:B5:40
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS Test EDC CA	1F1A016E607BB42F7D3 FFFD45F92B69C	6B:56:D5:CF:E2:06:04:C7:6C: 04:5A:D3:C2:64:BF:1C:F0:26: 2D:D4	88:99:57:D0:05:61:EF:99:86: 74:02:A9:01:35:9C:77:20:29: AD:43:CC:BE:46:B8:2B:F2:E7: 19:3D:38:54:11
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS Test EDC CA - G2	1E44CD3B7ED1BA22D7 141DC02AD5DB02	49:2B:84:74:73:A3:74:03:B5: EF:54:8E:C6:03:1C:50:F7:D7: 8C:84	26:66:1F:23:04:42:33:2E:5F: 8F:10:9C:05:A3:FA:A3:EA:33: 9C:29:D2:2B:07:B8:D1:A0:48: C6:93:FA:1F:0C
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS Test NF CA	C44000CAA1D52AC4B3 23EFD7A5CC12	D5:96:00:54:B8:9A:BE:7C:3E: EF:4F:20:83:EB:2D:F0:93:5B: C7:D2	D9:E9:09:3F:BD:72:8E:05:24: 0F:DB:4D:0D:F4:6B:7B:EB:9A: B7:E9:55:4D:30:CB:49:D4:68: 1D:63:44:C7:5F



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS Test NF CA - G2	13796E1310DC9DCD1B C1A210D17F8602	77:10:42:A3:D6:B0:A1:5C:F6: B5:45:47:75:EA:B8:C5:FF:05: D4:43	59:7D:5A:28:67:29:E7:3A:32: 4E:56:65:CE:E4:B9:7F:DD:5A: 9F:D1:4E:BA:4B:90:33:19:A1: 6C:FC:94:66:80
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS Test OTL CA	1CB7924D30D1588527E 90502C4D55C30	D0:D6:49:04:B1:5F:FB:D8:AE: E1:60:F5:08:81:CF:EF:5D:7F: 7A:A9	FD:9A:6C:86:AE:90:E3:F7:D5: 51:1E:F9:68:35:7B:0D:0D:74: FE:C0:C7:1C:03:7C:C9:B2:9F: 3F:29:40:F9:F9
C=PE, O=Cosapi Data S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Cosapi Data Public CA	64938DCC64DCF151F06 1AF66FB7A6331	0A:44:D9:0F:30:68:21:A3:92: D9:D0:0B:87:22:CF:F1:FE:89: 15:C6	F9:FC:03:8D:45:18:5F:59:EA: AF:0F:33:83:72:E7:96:07:E0: 6B:FB:4F:EA:23:8B:90:23:73: ED:0F:18:5E:C5
C=PE, O=Cosapi Data S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Cosapi Data Public CA - G2	59993A23DEC78E77C1F 3E5264FE3711C	E0:30:8C:A6:0E:46:24:BE:0A: 0F:15:9B:96:DB:22:93:C6:66: 8F:75	AF:CD:78:EB:A9:5C:08:01:A2: FE:BA:E6:F6:95:D4:69:AF:34: 62:15:C5:A3:E5:54:F1:61:D2: 3C:4B:B4:0F:91
C=PK, O=National Institutional Facilitation Technologies Pvt. Ltd., OU=VeriSign Trust Network, CN=NIFTeTRUST Class 2 CA	76D50B1FC903DA64E1A 51FE0D58244B7	CA:49:68:32:0B:D8:7E:3F:18: B9:EF:DF:DA:36:93:58:47:AD: 7B:74	4F:24:39:00:2D:D5:29:AE:C0: 57:CC:1A:9A:D5:CF:8E:01:DC :52:07:8F:C3:0F:F0:53:B0:72: EB:08:7C:F0:78
C=SE, O=Tetra Pak International SA, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)10 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Tetra Laval Group CA - G2	3C24C5EC6B0FDA209C CCD1778593A862	BF:5D:B0:76:02:BE:AD:80:36: 54:4C:97:10:6B:3F:2F:FB:7B: C3:5E	45:6A:6B:18:FA:9B:1D:68:64: AD:02:A1:B3:E6:D7:37:F6:64: 42:7F:E3:26:C1:CF:6D:65:80: 83:F5:2C:C5:F1
C=SE, O=Tetra Pak International SA, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)10 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Tetra Laval Group CA - G2	4645A86F485E2FF74E4 17F84DB5AD26D	E2:EB:2E:4B:FA:B6:86:12:0D: D9:24:74:20:07:A3:D6:56:A4: 45:51	AF:C5:8C:D8:D6:41:AF:B5:89: D6:31:7B:D6:D0:A1:6A:69:92: E0:45:E4:B4:85:57:77:C6:A9: C3:F6:31:25:D3
C=SE, O=Volvo Car Corporation AB, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)11 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Volvo Car Corporation CA	1825BD408F11B242249 1E889C76BE5A1	5A:0D:12:B9:6D:3F:51:17:79: 30:58:F5:93:1C:B9:A3:08:10: F8:82	E6:67:53:7C:99:73:51:18:F3: EA:33:00:9C:0E:5F:EB:9B:26: 5C:CA:EE:6F:A7:B9:6B:BF:3F: 1D:F1:71:64:F2



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=SE, O=Volvo Car Corporation AB, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Volvo Car Corporation CA	7665CC717A151BB77B6549509996E8B0	B6:B2:DA:D6:8A:37:FF:CB:CC:9A:E8:0D:CD:68:E1:A8:9E:BE:D1:0F	00:71:2A:C5:31:4A:93:8E:0D:61:88:AE:8D:4C:35:66:AE:6C:6A:E9:EB:00:6F:BA:A5:DE:42:39:AF:44:27:A5
C=SG, O=National University of Singapore, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=National University of Singapore CA - G2	269D7A5FD82A0538F2CB61AF80A24B4C	6C:C8:64:71:10:01:45:15:7D:28:85:EF:8E:B7:CB:04:79:6A:B0:9B	43:8B:A9:C8:5C:9A:8C:55:06:AC:D1:14:6A:DA:06:8B:77:7A:32:FA:2C:78:A6:D4:AB:57:24:11:74:88:1A:B2
C=SG, O=National University of Singapore, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=National University of Singapore CA	7AA9DFC38285C28A1BE5C40630AE93CB	F6:8D:4A:97:15:E8:B2:74:55:62:AD:AD:33:9F:3B:DF:E6:51:DF:CE	C7:AF:67:FF:08:2E:57:B2:03:C0:E9:50:1C:62:BD:BB:C1:03:39:CB:8B:D8:9E:4F:91:E8:82:7D:F8:26:E7:DD
C=US, O=Aditya Birla Minacs Worldwide Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Aditya Birla Minacs Worldwide Inc. CA	44AFE307E17F75740514A9CB4682823D	62:66:A2:89:0A:0A:BF:FA:CD:DF:73:33:CD:D8:78:74:0D:90:6F:0E	B1:6A:65:1C:06:83:E8:04:D4:10:0C:21:0C:70:61:8F:4A:BC:87:81:76:45:28:AF:8F:03:65:8F:EA:31:8E:15
C=US, O=Administrative Office of the U.S. Courts, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=AO USC ROOT CA	D86CA5017CF55869BB4A9BA4243B76	49:4A:5D:98:99:85:E4:B3:FA:0F:2F:E7:FC:72:9B:2C:7E:CC:83:16	70:FC:4F:59:FA:70:CB:B6:A2:4B:2B:64:44:E0:D0:97:33:B1:C4:A9:F2:8A:6B:20:6C:11:05:79:05:5E:1F:D2
C=US, O=Administrative Office of the U.S. Courts, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=AO USC ROOT CA	3C90370008547039FE7FB4ED67BCD705	CD:DD:0E:CD:3A:8B:84:EF:76:27:C8:1C:17:82:ED:CA:EF:80:D7:4D	1C:6A:EC:F1:03:31:1B:DC:E0:6B:4B:C1:75:29:26:27:D3:D4:5E:9B:72:9E:D5:D6:29:30:A3:A9:32:B3:5A:15
C=US, O=Adobe Systems Incorporated, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Enterprise Services CA - G2	79FC0B8722B27C02969A53043C69071F	58:F4:73:8D:30:86:96:C1:F7:7C:FF:8D:16:7B:C3:47:3C:17:BE:21	D3:65:73:5D:73:78:54:9B:08:46:3B:EE:B9:C4:F2:9A:D4:D7:5B:D2:B5:51:05:33:3C:81:C0:91:C2:24:50:A0



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Adobe Systems Incorporated, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Enterprise Services CA - G2	792A2FAEFA33DF8FB7302A803C106E37	B2:BB:A9:C7:DB:86:8A:AA:D1:2F:AD:04:AF:96:D0:49:28:DE:D2:84	EA:78:91:2A:E2:E1:55:49:DD:A0:2D:74:CC:05:A1:8D:AD:C2:18:DD:05:C1:3F:04:5B:26:43:3D:23:73:2F:33
C=US, O=Adobe Systems Incorporated, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Enterprise Services CA - G2	7CF066A2006A55356BE1CFEDC9F01499	C8:54:06:44:D5:A0:EE:8E:13:E8:8F:43:48:23:2D:33:03:D3:64:F9	BF:0D:7F:BE:6B:70:DE:10:DA:4A:E5:4C:4B:03:45:BD:91:A3:EB:A3:E1:03:3C:A0:8D:73:F0:AC:13:C9:C7:29
C=US, O=Adobe Systems Incorporated, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Adobe CA 1 G2	0271169419B3554C1DD2D9B80BE19A12	10:3A:EE:6E:FC:D4:A0:6B:F2:9E:B8:B8:6D:DB:85:0A:DB:A7:46:48	8D:FF:0B:67:22:B0:D7:94:6A:7C:C0:C9:A0:09:A6:84:D3:2F:C7:28:04:1A:7B:2B:6C:EE:FD:3F:FD:F1:38:EC
C=US, O=Agilent Technologies, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Agilent Public CA G2	647D3E21AFB097D3BC10034285CFA898	21:87:E1:D8:A7:DE:AB:16:FE:E7:B8:89:63:0F:FD:58:4F:BD:9E:B6	04:A4:99:31:5A:0C:F3:5C:B7:E8:2F:2B:DD:73:9F:70:E7:8E:AF:51:EC:3A:CD:D3:91:46:B4:7E:F8:EA:63:5A
C=US, O=Agilent Technologies, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Agilent Public CA G2	44BFE7C89FC876256EF4A5E34473F1	9D:B8:58:57:BF:AF:C5:0C:2E:96:41:B8:2B:2C:13:83:DA:E4:B7:61	6B:E4:73:2E:5C:0F:BB:61:A4:F8:B2:EE:D0:A1:C4:7A:B7:FC:FA:55:9F:D5:EF:3D:52:50:D2:0E:74:50:3A:83
C=US, O=Alliant Techsystems Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)08 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Alliant Techsystems Inc.	3785BD406FD9D822964A0674109F69C8	3A:CA:26:FA:B8:27:8B:02:AE:92:73:06:A0:2D:9F:8A:0A:D6:C9:CE	00:05:55:CD:CF:3B:5F:AA:C8:07:B9:75:BF:2E:B7:22:B7:78:76:C7:97:38:5A:EC:00:A8:76:7D:AA:BA:90:0F
C=US, O=Alliant Techsystems Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)08 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Alliant Techsystems Inc.	166FC6581FF952F607047E175EFFD6DE	52:93:4B:72:2F:F0:50:B2:DD:EA:5A:E9:CE:94:13:47:48:2F:EE:16	A1:67:AB:86:69:37:55:93:B3:3A:CE:63:CB:23:2E:D4:E6:1D:B4:29:CF:EC:B4:63:E6:E2:B8:5B:A6:E8:EA:2B
C=US, O=APX Inc, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=APX Public CA	1FE2F26A61AC599E72BFC75059C90E9F	A7:5A:8D:3B:EA:83:08:97:E6:7C:0F:BB:4D:FF:DD:7E:3A:F7:DC:0E	B4:BF:93:17:4F:7A:05:4C:7B:02:F8:EB:2A:04:0C:40:60:E0:82:F8:85:C4:36:95:F4:12:A5:6B:18:7B:57:3D



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=ARINC Incorporated, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ARINC Public CA - G2	0A41E2D91389E2C4B7A EBD2C1CDE1E00	B5:F7:2C:2A:A2:0E:46:5C:88: 65:15:FC:A6:D9:36:6F:66:65: 99:86	8A:8D:4C:A7:74:F5:49:64:57: 8B:37:1A:BD:8B:05:59:37:E8: B7:A0:CD:B6:59:A3:15:0E:B6: 48:89:30:E6:61
C=US, O=Arizona State Parks Board, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)07, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Arizona State Parks Board CA	0A108ED1981F08596C4 BBECBA55899EF	2E:28:59:67:F8:E3:A0:08:12: E2:EA:DB:B3:D9:FA:1D:4D:2A :30:BB	BE:43:8D:57:F4:E3:B6:86:F2: 40:56:98:7B:57:D5:A4:7C:7C: FA:D8:71:77:81:81:02:6B:AA: E4:6E:D4:8E:A3
C=US, O=Arizona State Parks Board, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)07, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Arizona State Parks Board CA	216F45D053F0A5523D9 33A9A87D11626	BD:2A:ED:4E:AD:26:92:1D:30 :C0:6E:8F:D4:44:60:7D:7B:5F :D6:92	9A:59:7F:63:BA:60:D6:1D:D8: 34:99:6E:B6:4A:7F:BE:97:45: DC:B6:40:BB:CA:82:6D:02:AF :12:A0:BC:55:D4
C=US, O=ATT Services Inc, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ATT Services Inc Email Certificates CA	604EF3DBA9F823108FD E70EDE78E5A18	4B:B6:C3:F7:A1:61:11:09:A9: C1:49:89:8A:84:5F:8B:87:60: 75:B0	0F:01:AC:A1:D5:10:DF:B7:E1: C5:F3:81:0A:03:77:03:8B:8B: C3:A5:DE:93:55:14:15:D2:D7: EB:6C:DB:8B:94
C=US, O=ATT Services Inc, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ATT Services Inc Email Certificates CA - G2	4775DBF005A1F891BBE 575E369352C82	E3:99:35:C6:94:37:C6:94:CF: 9A:5D:AC:7F:AE:AF:32:FE:E9: DF:8F	AE:7A:31:EB:70:07:A6:F6:42: 37:38:73:43:C0:83:D1:19:50: F1:D6:D5:46:ED:DA:D8:B5:AA :3D:AC:30:B7:0C
C=US, O=ATT Services, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Corporate Certificates CA	56EC504F69CBA02A203 4CC3D2E31CD85	3F:80:AA:42:72:4C:D2:CB:C6: 8D:4F:E6:CD:B8:76:87:53:74: 37:FF	26:19:53:AC:B8:65:15:57:0B: 62:97:6D:AC:DB:78:7B:8B:CC :D2:F0:2F:C2:B9:D3:79:FD:B2 :15:9B:E7:B1:12
C=US, O=Automatic Data Processing, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)08, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ADP CA	2AF0EB1AA5F60FCD72F 5A61CF5543112	EC:B5:9F:2B:0C:B1:E7:0E:0B: B9:FE:B2:C3:25:54:0B:A5:7E: 61:A0	D3:3D:27:B3:8C:72:BF:A7:91: 4F:06:8B:10:FD:18:D8:E1:2A: 45:F5:E6:0B:8C:35:D6:72:8C: 2D:17:FE:3C:48
C=US, O=Avaya, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, OU=Avaya IT, CN=Avaya Client Services Users CA	6D46D49944BFF5D1466 25AE810906BCB	5E:8D:D1:16:44:A3:99:34:19: D2:20:56:4B:70:55:FD:A8:E4: 9E:73	7F:56:D7:81:9A:1A:39:B4:16: 66:9E:AC:8B:65:15:3C:81:C8: 16:F0:16:2D:70:FB:CD:60:77: CB:D1:B9:85:54



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Avaya, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)06 , OU=Class 2 Managed PKI Individual Subscriber CA, OU=Avaya Global Services, CN=ESDP CA	2D19333C4E5CC5FE7D5FD8E81A970E05	AC:77:6D:C8:B4:9E:B6:1A:0C:24:03:A2:F5:0B:48:F1:D3:3E:55:0D	8A:25:62:D8:08:15:DA:F1:FB:01:3B:44:0E:A1:E0:BD:BF:4C:63:59:24:EE:81:C2:31:C1:C5:B0:0B:3E:85:DD
C=US, O=Bartlett Regional Hospital, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Bartlett Regional Hospital UA PKI CA	50F5E3ECCE7A85CD5BF74A8E713FA416	B1:2B:FF:F0:73:F1:2D:40:3E:2C:3B:3F:15:47:B7:02:3F:1C:7C:0B	A6:04:BB:5F:3A:78:5A:F6:4A:BE:28:31:D7:0A:E0:A6:9B:C9:75:4B:B3:3A:BE:A3:C1:ED:A9:40:36:06:8B:AF
C=US, O=Bartlett Regional Hospital, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Bartlett Regional Hospital UA PKI CA	5338B341FA3CA416E2100C2BA85B8E11	B7:8A:6A:BE:BF:ED:80:64:03:21:28:3B:1C:D1:93:A7:79:30:0E:C4	4E:19:52:C9:4E:6D:3D:FE:05:87:1A:45:71:C1:81:2C:E0:4C:EC:40:49:88:AC:B9:F4:EC:43:59:94:B4:BF:44
C=US, O=Blue Cross and Blue Shield of Florida, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Blue Cross and Blue Shield of Florida CA G3	1555DA0AA76BC5F8F4171432DC818CDD	A0:AD:49:93:18:2E:B3:2C:51:24:0D:E7:8D:36:6B:83:CF:A5:66:2A	BB:CA:83:E9:09:A9:56:AA:38:BA:04:EA:5F:C6:A6:A1:3F:99:49:5D:A1:E2:39:81:BE:5B:ED:E0:39:70:45:0A
C=US, O=Blue Cross and Blue Shield of Florida, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Blue Cross Blue Shield of Florida CA G3	1D48798BEE5B9C06E81725C1ABB81521	6B:AE:F7:AD:79:D4:16:CD:D4:24:0F:CA:96:4F:3F:31:6C:BA:4D:EF	30:C9:55:BB:F6:2B:0E:73:57:3D:DD:95:64:A5:12:35:ED:40:B3:B5:BB:DD:5E:9B:55:61:D6:4F:96:AD:65:D6
C=US, O=Blue Cross Blue Shield of Florida, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)11 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Blue Cross Blue Shield of Florida CA G2	0AC392A3E0BA632E60FB4808D555CF39	AB:F6:AE:DB:4E:26:41:E4:04:C3:74:2E:67:19:66:12:61:46:78:90	2B:6B:47:6D:7B:6F:01:18:82:26:DC:5A:73:5A:B9:44:27:B7:00:0D:31:FF:FD:96:78:E9:E7:04:A8:BF:4B:B2
C=US, O=Blue Cross Blue Shield of Florida, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)11 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Blue Cross Blue Shield of Florida CA G2	49DC24D27941748680B8A8BA5AE20E53D	E5:B6:A6:9B:6D:67:1E:C7:92:41:6F:ED:32:35:88:42:BB:78:3B:F1	F8:5A:6F:15:47:43:71:B4:CA:CB:75:3C:C0:9C:3B:ED:71:39:E9:C3:5B:21:E9:57:71:C2:27:29:7F:F0:25:E2



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Bridgewater Associates, LP., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Bridgewater Associates CA	650D6A1364244F149B658E2D4569E6A0	CA:9B:0F:00:A1:FF:14:1D:89:DC:3A:F4:D1:E5:70:EB:4D:C1:E4:53	D8:E7:9E:BE:D9:97:B7:64:E6:D0:DF:62:4F:2D:BB:4E:FF:2A:1B:60:49:C6:F1:A1:A1:E8:82:63:C4:3D:B2:21
C=US, O=Brown Brothers Harriman & Co., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Brown Brothers Harriman G3 CA	2207B10A177AD81E152887BA0AC76892	D6:BE:36:EC:DB:42:A8:50:C3:39:96:C1:90:14:C2:2F:A1:2A:60:E5	B3:FA:EB:D9:49:50:96:D2:C5:B2:6C:E2:0D:7D:E7:85:DF:F8:3C:EA:63:BF:9B:C6:60:5B:C0:8B:89:99:62:24
C=US, O=Brown Brothers Harriman & Co., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Brown Brothers Harriman G3 CA	3249419C7113A392F47818D2CED17969	FC:FB:AB:12:D2:E9:6C:39:24:4B:6C:50:4F:92:F0:96:51:09:29:D2	98:A6:FF:EC:BA:9C:29:C4:02:29:F9:19:4C:96:AF:1E:6E:03:5E:BA:4A:71:8A:76:0F:1C:CE:7F:E0:2E:29:18
C=US, O=Brown Brothers Harriman & Co., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Brown Brothers Harriman & Co. CA - G2	2EFFA325E600BC7650223A75B822F6F7	17:E3:19:29:DB:C7:15:36:8C:36:B6:3E:A7:8E:6A:C9:1A:19:CE:0A	70:82:42:7C:D4:68:34:AE:F6:65:5A:BA:DD:89:8D:E0:1F:9E:1A:98:8E:75:34:01:EF:81:A0:A3:74:10:AB:78
C=US, O=Brown Brothers Harriman & Co., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Brown Brothers Harriman & Co. CA - G2	62669525B7998320608301B9E8464999	87:2B:3F:AB:6D:F3:E6:73:AB:63:5A:41:43:E1:D6:ED:A2:D3:8C:8E	CF:BF:98:8B:04:B4:18:42:82:4B:28:79:99:09:2E:B3:AB:6C:D8:DF:CE:B4:9B:D3:D5:D4:83:45:A5:B4:81:8B
C=US, O=CDC, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=CDC Secure Data Network CA G2	298A747D8D4E7C7329A66CAC68065200	33:4D:3F:CE:4B:84:BB:59:4A:2F:B6:BC:09:A3:E0:99:77:A5:8A:D0	70:A0:FE:0E:DC:B4:89:8E:5B:B0:9D:F8:FC:6B:89:78:E0:2A:28:7E:DB:10:17:58:70:E8:1E:14:91:34:0C:5C
C=US, O=CDC, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=CDC Secure Data Network CA G2	6921E84F71A058E2D1D83B60815C1591	7A:81:ED:19:DD:2B:91:61:E9:2C:AB:1C:81:0F:73:CC:54:21:FE:D3	83:71:CC:B2:A1:42:68:4C:28:25:5A:20:5D:C6:9C:B4:8B:74:E3:61:96:BB:62:65:46:62:E2:94:AC:BF:83:EE
C=US, O=City of New York, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=City of New York Office of the Actuary	5F25D1483920911CC30A7CA8E8C11D0F	F4:FF:FD:2E:C0:37:DD:A7:15:E6:D7:81:24:9F:39:A0:54:59:F0:96	C1:56:56:9E:82:43:DF:60:A5:BC:54:E4:E0:94:D3:5C:41:3E:B5:29:6D:72:04:14:0D:50:31:AF:B1:FE:75:6A



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=City of New York, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=City of New York Office of the Actuary - G2	702FC4A294F0708D77C C93E90FE384AD	AF:53:00:41:49:11:F5:DB:F3: 5B:E4:5B:07:69:BA:C5:68:42: 72:BB	A3:E2:E9:FD:C6:93:C7:53:6C: D3:A9:AB:C8:E0:97:05:C1:13: DD:39:16:35:C6:23:9B:BF:F2: 1D:A2:58:C9:6F
C=US, O=Computer Sciences Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=AGC Public CA	5843DC7507EFE5E57BB 618D320A70C16	5E:B1:59:C4:59:7F:42:04:D4: DD:A7:DF:C7:AB:62:C3:C5:DA: :3C:BC	5E:71:C7:46:D4:5E:BC:FD:6D: 2D:CE:4A:2D:AB:CC:D9:33:5E: :3A:D8:D6:3B:34:99:89:34:19: :11:EC:D7:0E:88
C=US, O=ConsumerInfo.com Inc, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)08, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ECD CA	0845633C696F3B44B23 96E01DBAC5500	49:4E:0F:13:5D:A9:17:A8:C2: A7:BB:AF:49:2F:04:BB:8B:B4: C8:96	5F:9D:F2:7E:4C:42:03:E9:C2: FF:58:7A:CF:26:F6:BB:F8:1E: EE:10:35:79:AD:9A:9A:97:D0: 13:67:10:90:FF
C=US, O=Convexity Capital Management LP, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)08, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Convexity Capital Management LP CA	4BD813D9B0FB2D1723B D698B0C3DC72F	FC:DD:EC:59:09:98:91:BE:20: 67:1C:27:79:FB:03:1D:10:75: FA:C8	C6:4B:49:1C:19:E0:41:47:1B: 86:3B:4E:9D:94:89:BD:F9:35: 3B:8C:67:EC:38:46:09:F3:27: AF:35:39:8C:C4
C=US, O=E. I. du Pont de Nemours and Company, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=DuDont Public CA	6E5ABBB19D1EC141527 E2EF6497ED20C	4D:0C:17:FD:82:A6:C1:4B:C9: AC:2E:75:28:1D:35:01:A5:A0: D1:EB	09:21:8A:D1:2A:C7:67:70:E6: C9:6D:16:13:02:D8:41:27:AF: 08:8D:1C:90:D5:0A:28:BA:6E: 87:CA:FE:1B:04
C=US, O=eGlobalCustody, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=eGlobalCustody G3 CA	362B9707C95752F3CEC 961F2E4A73171	21:68:E0:75:F1:F2:E2:62:26: D0:AD:DB:57:BE:EA:E9:66:F7: E3:81	2B:64:86:80:FE:DC:C5:59:93: C3:6A:B6:5C:AD:B0:3C:61:78: BF:59:5F:1A:22:25:AE:AE:88: 5D:3C:5C:F9:CA
C=US, O=eGlobalCustody, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=eGlobalCustody G3 CA	0FD3403B949A16DC4A C62177650A86B0	31:E5:E1:FD:D2:4E:9D:59:86: A2:E0:70:CA:EE:41:B8:AA:79: 53:57	7C:BA:89:74:C6:4C:34:2A:BB: 7D:29:D6:AC:28:1A:00:2A:61: A9:A9:31:88:87:8B:A3:7D:CB: BC:D2:6C:B8:6F
C=US, O=eGlobalCustody, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=eGlobalCustody G3 CA	09A5D24DCE9224BC31F 91EB575A7B556	D4:52:50:F0:62:05:A9:26:86: 53:2F:59:00:81:DD:2B:1A:A0: 04:3A	2D:E8:DD:6B:E7:50:43:5D:70: 3D:60:CF:87:D2:03:AF:12:D1: E0:F2:96:06:91:88:8F:47:54: 6E:ED:90:87:D6



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=eGlobalCustody, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)07 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=eGlobalCustody CA	740F1EA3718CE52C06E F88AFBA929129	D3:7C:F0:69:21:7F:47:BF:69: 77:05:55:2A:F5:C7:F6:81:71: 7F:DC	F5:A1:C9:29:46:83:17:E6:E1: 3A:3F:FD:FC:CD:92:B9:06:C3: 33:5B:9C:9B:10:AC:F9:2C:A3: CC:E2:2F:49:F6
C=US, O=Fairfax County Government, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Fairfax County Government CA - G2	78DE4BF6D4547BF8FD5 85BA6EAA8E888	7F:FC:0F:D9:E2:A2:FA:0E:6C: 82:F0:1A:19:D9:40:A8:9F:6D: 2C:91	75:2D:D2:F4:38:15:05:29:B9: E8:AC:A1:7C:66:D0:6D:A0:A7: :E4:47:71:F5:F0:8E:46:7B:0A: F9:8E:85:FF:50
C=US, O=Fannie Mae, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Fannie Mae Shared Online CA	5F8DB68FA1FEADA2F19 9093E231A5A50	01:44:1E:0A:2B:12:CF:4C:C6: 52:F2:30:D1:94:1F:3E:DD:5A: 83:2F	D3:94:95:B3:10:66:9D:C6:BF: F5:7D:54:7C:53:E3:FF:9E:7B: 45:2B:B6:09:27:2C:98:1F:51: 4C:CA:0B:14:6F
C=US, O=Farmers and Merchants State Bank, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Farmers and Merchants State Bank CA	498504A9168A4F4F839 C77A64C8DCA59	A4:70:64:C0:1C:90:FA:C9:65: 83:81:A4:75:53:BF:BB:27:8D: 02:13	26:EC:08:8A:52:74:5C:B3:82: 6E:A4:50:6E:14:7E:8C:56:B3: A6:AD:32:A1:A5:95:CD:2F:3C: :E0:A2:7E:C8:89
C=US, O=Federal Retirement Thrift Investment Board, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Thrift Savings Plan CA - G2	749215D9D79EAE5E63 9174EC685099B	04:6E:F4:EE:E3:70:BC:7C:80: 88:BE:A4:96:22:22:7C:B9:64: 65:4A	87:87:4B:27:5B:A5:E6:19:8C: A4:DD:68:C3:5A:5A:71:54:FE: 16:35:C6:3B:15:F9:D5:73:A2: CA:3A:82:0A:46
C=US, O=Federal Retirement Thrift Investment Board, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Thrift Savings Plan CA - G2	579BF799C1C439BD1C6 770AB9383AC3E	5F:F5:76:CB:17:C1:21:13:3F: 8F:98:66:9F:FF:26:7A:22:D3: DD:83	6F:E9:69:B0:E3:29:56:CD:A8: 27:A4:08:4F:93:30:C9:55:9B: B9:10:29:1B:9A:41:07:C3:C4: 70:77:44:11:D1
C=US, O=Futron Corporation, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)08 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Futron Corporation CA	13DAA25A761CD9FDB9 822A8E03F63AE6	1E:E1:B8:F5:AF:EF:3F:9C:46: 20:DA:31:45:35:40:F7:6D:DC: 44:EF	F8:10:2F:E1:B2:0E:2D:43:FB: F1:27:62:04:79:57:A4:76:33: 2A:74:E5:11:C3:28:38:3B:38: 9E:DF:DD:7F:01
C=US, O=General Electric Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=GE Enterprise SMIME CA 1	3C2D52A1F2C62E841A1 338D04AC84BD3	C1:57:66:BA:E4:08:FD:47:4F: 7B:AE:E3:46:3E:63:82:33:72: F5:75	0B:1D:4B:AC:05:4B:0D:CB:58: :66:CF:73:F1:85:69:59:B3:FF: DE:E5:04:56:00:1F:FC:6D:F0: E3:57:48:AB:92



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=General Electric Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=GE Enterprise SMIME CA 2.1	4535CEF4421F8A410740F32C91B5C031	2C:FC:A4:95:17:FA:21:11:2B:82:DA:BF:FC:9A:ED:49:40:14:B9:10	5C:85:46:34:77:8E:6D:DC:07:6A:BA:A3:6E:5B:8F:4F:45:14:05:78:BD:3A:45:AF:09:B7:F2:3C:34:F0:32:AD
C=US, O=General Electric Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=GE SMIME Issuing CA 2.1	705E2ADF8B65BF210B1A3EBEA1896C1F	3D:48:F5:E9:76:61:45:19:3F:68:7E:77:6F:C7:C3:24:71:7B:63:8C	6B:E3:9E:C9:E0:2D:54:00:8A:7A:71:6D:D3:5A:3D:2F:0A:1F:D8:F8:F3:4D:AE:23:54:46:15:0C:6F:48:BC:7E
C=US, O=General Electric Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=GE SMIME Issuing CA 2.1	2E1DD06907726CAD32B11714D6DF2F	C0:8A:01:EF:CD:DA:19:DA:EE:B6:B8:CE:7A:0F:10:91:07:B6:71:65	2D:53:B8:17:70:62:E4:C7:CE:A7:9E:EB:F6:2B:FA:52:A5:B1:8B:C9:B8:94:83:59:7E:57:14:E4:E9:B5:23:15
C=US, O=Hewlett Packard Enterprise Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Hewlett Packard Enterprise Collaboration CA	2352C53C5D8CD0E3C80B3AB061ECB63D	A2:B8:59:83:B4:22:2F:8E:1F:F5:E0:68:89:5E:0C:C3:D9:15:DE:6C	2E:AA:42:51:B3:FF:DD:3A:E9:04:83:3A:08:B7:FE:1E:77:17:C1:70:82:45:5C:07:F6:F6:DA:90:2C:BA:C5:D0
C=US, O=Hewlett-Packard Company, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Collaboration Certification Authority G2	44BDF300D461EB56992A1881029CB8C1	5F:E5:DA:BB:BF:3B:BE:A4:E8:FE:1A:23:EF:5E:6F:3E:EE:41:B1:70	F4:5D:70:C3:41:AF:FC:2D:F5:7E:8F:C4:4F:2C:2B:10:9C:5A:92:8B:FA:EC:38:67:28:90:D4:97:0A:B4:17:9B
C=US, O=Hewlett-Packard Company, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Collaboration Certification Authority G2	3B5713B6B02135FB5E4675CA6CB2C4E1	CC:60:53:57:44:89:41:C2:C6:B4:24:F9:37:D7:42:D9:99:AC:9A:CA	4F:06:0D:74:7E:E4:24:CE:8D:A4:CA:F5:38:15:88:FB:16:4A:9E:55:3E:22:95:D3:7D:86:21:4A:98:CF:A5:C4
C=US, O=Honeywell International Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Honeywell International CA G2	6F5702CEB98AAFA056117CF64D000BA1	69:97:C3:B5:5E:32:D3:79:80:59:35:ED:80:53:1D:52:80:EC:33:BD	19:55:0D:F2:A4:3B:36:7A:FA:19:4C:34:F3:C3:CB:F8:67:8E:34:66:91:F8:95:F4:29:87:1E:EA:DA:53:F7:F8
C=US, O=Honeywell International Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Honeywell International CA G2	512F16E3E15CEA1A0A0FCB7AC9F4DF22	E0:6D:C4:EF:88:6E:71:DF:59:C2:78:45:C5:C3:EB:8C:CB:8C:69:DB	2D:C1:EB:81:1F:15:C7:48:75:6D:B2:60:2F:4A:DF:E7:5E:B8:AA:20:1A:3A:C0:CD:10:E4:38:BC:4E:90:87:EC



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Honeywell International Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Honeywell International Co-branded CA	3FBB6C2F2B520AC80A627A1A6147833E	5D:D1:68:2A:4B:C4:1F:13:A6:A4:C0:71:2E:B6:89:63:05:31:E8:6F	E8:A7:B9:33:5F:B8:25:7B:E2:FB:F1:F1:7A:DF:BD:12:98:98:F9:3B:DF:4E:BD:59:67:E6:9D:25:4C:46:BB:57
C=US, O=Honeywell International Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Honeywell International Co-branded CA	1F19A0893456DB59BEF0D16A9634622D	CC:F3:B9:8F:FE:7F:3B:66:C3:0B:1B:58:F8:E3:6C:5B:CB:6D:9F:F4	7C:93:2E:87:09:83:5B:EC:74:AA:B6:F0:2E:95:8D:F7:09:95:B3:FE:D5:FE:4C:37:5D:66:B1:22:85:55:D8:ED
C=US, O=Honeywell International Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Honeywell International Co-branded QA CA	27F62088D2D4BA9A879E0B58F35DFDDB	94:CF:D1:93:50:62:16:5D:03:FB:26:73:59:D3:57:B1:B6:07:B4:43	0E:45:4C:9F:C3:36:11:BA:88:3B:37:72:CD:29:13:39:C8:FC:ED:15:7A:3F:C5:C6:AD:D4:D6:D4:40:63:5B:54
C=US, O=Honeywell International Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Honeywell International Co-branded QA CA	7E91DB88F203F7890A33EDE7EA8D0937	DE:B0:67:FA:50:7A:C2:41:3B:C8:29:28:9A:24:8D:96:26:09:FE:1F	87:C0:BA:E2:75:BF:11:F2:5A:E3:29:0B:3E:81:0D:97:E8:29:7F:27:6C:57:6C:DA:A9:AE:B5:FA:EF:C4:CD:22
C=US, O=HP Inc, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Collaboration Certification Authority	6366C803F88C0E9C562BDD34FC90E1BD	79:82:43:93:44:C7:B9:93:A6:FD:26:30:12:41:2E:37:08:B1:2A:FA	B8:64:FF:6D:E0:CB:1B:EA:F6:AA:5C:68:DB:87:69:C9:1F:18:E1:72:1E:22:AC:3E:CD:D9:1C:08:89:D7:70:78
C=US, O=Identive Group, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=idOnDemand CA G2	272C3C520C3F7C08F684F484D8C7F5CB	D0:DB:44:81:BA:B8:AF:29:2E:9E:31:2B:77:02:D6:0C:7A:59:77:B3	B8:12:A3:15:6B:BB:9F:0A:AB:F8:F3:6B:E7:2A:95:38:89:36:27:20:70:C4:86:0D:BD:D4:95:5F:0D:59:B4:86
C=US, O=Identive Group, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=idOnDemand SHA-2 CA G2	2801E6E04E8D88F3E1C5FB44FD872D13	56:87:44:5E:C5:DD:82:CC:88:44:AE:D9:17:31:CA:7C:B5:A8:FA:A3	36:CA:B8:A8:61:39:B8:24:76:AE:82:4E:E4:93:9A:92:08:8E:6F:16:C2:BD:27:0E:E3:49:BF:9D:5A:9E:33:84
C=US, O=International Business Machines Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=IBM Certification Authority G3	027A07BBDC96B47E58DFB9039AB8F7DF	46:43:97:1A:59:1F:CD:DA:75:76:55:CD:90:11:59:C8:08:C3:94:24	CB:16:C5:8F:10:AF:FD:A4:6A:0F:C0:5B:F4:9F:0B:70:7C:57:9E:C5:2E:35:27:EE:BA:04:48:F9:B8:C1:6E:99
C=US, O=International Business Machines Corporation, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=IBM Certification Authority G2	04B5F8BDE60614772AC76C767884F843	2D:E4:D7:09:DD:11:D2:1F:CD:45:37:94:E6:B6:D9:0F:2B:FD:33:3D	2D:55:A8:BC:4E:5B:05:32:6C:13:B8:24:F5:4E:7A:CB:EC:6A:03:CA:68:8F:61:39:FA:84:DB:DA:DD:07:2C:3A



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=International Business Machines Corporation, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=IBM Certification Authority G2	4DD82A2C0C4F51E94D FAF1CF1A7C1E15	DC:DF:19:98:6E:72:0B:DE:60: D2:D1:17:18:54:43:00:F7:DC: 97:A1	EE:FF:FC:2E:A3:E9:E9:C9:4D: F8:B2:A2:4F:15:29:74:38:17: 48:35:49:7B:C6:7E:99:20:39: 63:AD:97:62:8B
C=US, O=Invesco Ltd, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)10 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Invesco Employee CA	38259BCEC81A6F4D6FB 9B3E565F9CA15	F5:D5:BA:D2:D3:D3:63:6B:CB :92:AF:4E:0B:D6:EE:ED:32:BF :75:1A	1C:6C:5B:F1:32:C7:F5:12:BD: B0:27:9B:25:06:94:67:7F:AA: 12:E9:C0:D4:8D:3B:86:65:3C: 88:4C:BD:FC:FB
C=US, O=Invesco Ltd, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)10 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Invesco Extranet CA	50E88E2DE41EA0CDDEE BE59B6B1E1D30	27:60:D1:3C:7C:0F:48:92:E2: 09:7D:36:5B:E3:F3:A5:E6:95: AF:E2	A0:B4:B0:FF:FF:9B:7D:38:31: B2:55:76:37:87:FB:AF:59:BF: 72:87:85:74:8C:06:10:1A:AB: 33:D4:70:0F:65
C=US, O=Invesco Ltd, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)10 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Invesco Extranet CA	558C08427B7A0258942 A1D18D99359F2	55:40:95:0E:08:53:BD:AD:F1: 9F:E8:83:83:A0:07:2F:9B:25: 42:1A	DD:EB:32:69:13:28:D2:D9:D8: 55:91:05:3D:65:39:75:EB:EB: 9E:5B:DC:83:DE:9A:04:DF:EE: D0:8C:DE:50:0D
C=US, O=Invesco Ltd, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)10 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Invesco Global Cash Management CA	2A030052A8BD35451BA 9DE5393A4E1CD	7C:F2:39:F8:A7:E7:06:73:76: 67:E2:66:9D:C9:EC:33:D5:B3: 6F:8A	CF:6C:FF:D4:34:A6:8D:6D:49: 42:7F:52:89:77:E6:97:94:E1: D9:1F:7E:0B:9B:C6:17:04:30: BF:7E:D9:BC:AE
C=US, O=Invesco Ltd, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)10 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Invesco Global Cash Management CA	17EAF654D1B99309C27 FA0852623CDDE	DA:65:AC:84:1A:D0:3D:E3:96 :09:38:F4:49:EB:7C:DD:94:2C :06:D9	2C:DD:11:0A:38:D2:1C:06:E3: 05:39:6F:85:A1:BE:3A:AE:1D: 8D:8F:1B:81:D1:E0:D7:4F:E8: 45:43:1C:1D:99
C=US, O=Key Bank National Association, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Key Bank CA G2	2D9366BBC47FFBF5C3 534CBCAB44989	65:FA:B1:8D:9C:F3:B6:3C:A7: D1:7E:3D:66:D9:1D:F1:39:EC: 90:08	F0:CF:E7:BE:D5:73:F7:87:AA: DC:3B:01:03:9D:A9:80:F2:19: 90:F0:7F:0E:4E:16:3B:BC:AA: 31:2F:D1:00:18
C=US, O=Keysight Technologies, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Keysight Technologies Public CA	231C90AB2ABF01E5DF4 ECCB2E76E42E6	21:E8:B5:59:37:4F:53:CC:D2: 21:19:F5:8C:C0:46:92:DD:3A: 6C:F8	7C:D7:18:41:8F:75:41:4A:05: F6:EF:1B:50:D0:A0:CE:48:05: 9E:FA:22:1D:AC:89:A6:83:9D: D9:2B:6C:66:2D



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=KeySight Technologies, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=KeySight Technologies Public CA	7ADF0B0011B8F2AD361E05B7C19A3412	8F:69:42:4C:40:32:20:F1:72:96:0B:0B:EB:64:EC:2E:35:1B:5C:4F	07:1F:22:2B:68:55:FB:CE:74:B0:35:4E:61:98:1A:88:51:0A:4C:E3:03:3A:A7:A4:43:D2:27:7B:F6:EE:D7:BE
C=US, O=Maricopa County Attorney's Office, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)08 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Maricopa County Attorney's Office CA	09BEAA79F9116932827350ED85220B21	10:B6:EC:F5:4A:D3:C6:68:E0:74:A1:5E:8D:C6:4B:20:57:6A:9A:34	19:FE:F8:4E:49:72:8D:5B:8B:3D:50:90:FC:D5:B6:7F:F5:08:B3:E9:C4:A2:74:EC:36:04:54:A2:5F:CB:91:C7
C=US, O=Maricopa County Attorney's Office, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)08 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Maricopa County Attorney's Office CA	5A2C53EEF0D423AC03BC8552B4A1FA3C	FE:60:C3:3B:4D:D8:B0:3F:20:8D:37:44:37:22:DA:2E:5C:96:DD:D1	45:47:9E:AF:52:25:B2:F7:DB:34:4B:F9:94:10:7B:47:C7:6C:95:A2:15:B6:D9:53:D0:2C:23:1A:94:89:7F:00
C=US, O=Moog, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Moog, Inc. M2 CA	615CE094E7CAD42182D68EC01066011D	0B:6B:39:29:F6:7A:1A:FD:7C:8C:83:06:D8:3C:C7:D2:C0:AC:95:30	F9:45:72:FD:5B:15:BC:B9:16:DC:E7:43:27:96:F8:D8:E8:CD:55:D5:14:26:FF:61:BB:D5:33:EC:2A:0C:95:10
C=US, O=Moog, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Moog, Inc. M2 CA	2356997B747D3A33BDA2607B29B6FDD2	1A:23:EE:11:41:CE:00:01:6D:E0:02:3D:AB:35:45:C8:C3:B7:BC:9B	01:C2:35:31:12:74:30:7F:44:57:E0:79:E1:E1:1C:CB:0A:B5:B2:A9:F9:91:9B:26:9A:5D:30:48:21:F9:3F:B8
C=US, O=National Geospatial-Intelligence Agency, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=NGA CA G2	75FCD327B38357D634633CFF3F4C6F7B	3D:E3:0E:4E:4C:75:63:AC:94:E3:A0:6E:03:71:E9:2F:3F:88:95:C0	0B:A8:FF:64:F0:D4:97:54:01:EF:B8:92:83:FA:19:C8:6F:CB:70:B4:FA:C9:22:F1:6F:3C:CB:7A:A7:1F:73:65
C=US, O=Oracle Corporation, OU=VeriSign Trust Network, CN=Oracle Root CA	4BBADC315DBF8B5CC71934118363087C	19:A6:43:7E:84:16:FB:EC:49:80:93:66:BA:49:AB:17:14:B4:96:6D	C4:04:69:CF:7C:65:61:AF:32:88:E2:FF:DD:43:9A:C4:F0:C9:CE:A9:33:59:7C:07:D0:D5:10:FC:82:02:82:AD
C=US, O=Phase Forward, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)06 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=phaseforward.com	34A7B8D9CD6C721FA3619EF852EBB70C	83:55:C3:94:46:55:3E:68:17:AC:00:58:B0:3C:45:FF:E4:A6:5C:A2	5D:F7:72:1E:6D:5C:88:1E:9D:A1:40:38:9D:A5:DD:F1:EA:D9:1F:EE:08:AA:68:FB:34:66:7D:3B:4E:B3:52:56



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=PricewaterhouseCoopers, LLP, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Advisory, IPMG	71F198F14923ACBCEE8 B2DB3E3E9CF69	FC:69:68:C7:14:7E:CA:E1:EC: 41:2E:9D:6C:DF:75:7D:43:8F: C3:02	AB:42:FF:82:32:F2:86:12:3E: 13:62:03:41:C2:E5:41:6C:FE: 75:C7:C1:29:D9:D4:EA:91:9E: BC:9A:E3:FE:42
C=US, O=QTC Management Inc, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=QTC Management Inc CA - G2	4B2224CC561AB2A8EC5 90CF81901831E	5E:69:44:36:76:CB:FE:D9:95: 42:8E:97:71:B1:27:60:40:1A: 71:B8	76:5A:29:59:6F:5F:74:EE:A3: BD:AC:06:70:E7:DF:42:BF:DB :70:87:65:AD:4F:89:2F:EE:F7 :14:C2:14:E7:AE
C=US, O=QTC Management Inc, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)06, OU=Class 2 Managed PKI Individual Subscriber CA, CN=QTC Management Inc	15EC9C354A643EE3415 344ED9074C0C9	A7:B1:DC:C5:66:9C:4E:72:D5: 3C:26:E0:88:09:EC:47:FB:FD: 31:C6	3D:EE:8F:6C:2C:58:80:E1:69: CC:79:57:DC:C4:59:03:E6:E3: D1:7C:4A:41:50:A2:28:BA:B3: 18:D3:D9:4C:C6
C=US, O=SCF Arizona, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=SCF Arizona CA	74E69E47B90DA8CD2B9 01612B724801B	03:FD:CD:1D:7A:16:5E:83:46: D4:56:99:CB:2D:4C:F4:72:08: B3:11	BE:3A:96:2B:7A:F9:31:D7:AD: FA:F7:45:2F:E8:52:70:02:0E: F8:53:A5:DD:33:4A:ED:80:D2: 9E:89:2F:03:91
C=US, O=Spirit AeroSystems, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Spirit AeroSystems CA - G2	3270302EE1748477990 516307098F2D1	74:2F:64:EC:CD:63:BA:6C:35: FC:B3:F0:AE:6B:E9:C2:F9:C3: 4D:65	DC:D9:AA:D1:D3:3A:A7:33:01 :75:84:C9:1C:4E:4D:D0:51:98 :CB:A0:B0:71:CE:5F:ED:AF:A B:61:63:FF:6B:11
C=US, O=Spirit AeroSystems, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Spirit AeroSystems CA - G2	3263378309BF6ED5D38 2DB9C1C374DE9	82:A6:E1:F9:15:CC:C0:D4:4B: 28:12:9A:35:A9:AF:9B:9A:31: 57:98	4D:76:5D:11:7C:B1:B1:BB:26: A6:36:82:AD:B5:13:26:AE:50: 06:E7:88:F9:0F:F8:22:F1:FD: A9:6B:CE:A2:C7
C=US, O=SRI International, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=SRI International CA - G2	74DB4F8C81D60841C73 C964E0CA88BCF	0E:A2:F7:7C:94:0B:79:B9:A6: CE:4B:0E:D8:79:05:3F:B5:7F: 49:09	5D:8A:65:72:2E:CB:78:42:EC: 49:89:DA:6D:15:00:4B:EF:61: 4E:BA:97:C6:0E:D9:6E:04:A8: 41:44:BB:E3:FA
C=US, O=SRI International, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=SRI International CA - G2	0C17A8665F5413BF7D6 2F67F53205C07	38:48:6B:1A:EB:A8:3D:7A:FC: 18:87:4A:26:6B:BD:9E:A6:4F: 28:D7	5B:6A:31:D1:4E:D9:8E:8C:F2: 3A:11:5B:C4:5E:87:B8:EC:D8: 2A:93:7A:29:DB:E0:EF:BA:3C: 81:33:49:4B:74



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=SRI International, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=SRI International CA - G2	7FEOC1DA1A8835CF4F59EBEDB0D63FCF	58:B4:A0:85:4B:99:65:90:E2:20:AF:2A:95:37:1C:F6:57:38:83:E8	12:4C:5A:3D:03:99:EE:D6:F0:A3:45:62:E6:9C:4A:88:31:D1:5A:57:5F:B8:FC:E5:61:83:B2:4B:33:FC:F2:49
C=US, O=SRI International, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=SRI International CA - G2	0597D4A78033303F331AD87011580081	FB:DB:42:10:B8:29:EB:93:39:9A:0E:3B:09:12:0D:C5:7C:D3:1F:AE	8F:11:E6:AE:16:2C:D9:47:2C:AB:0B:6C:02:3A:56:D8:A4:42:BD:59:81:DD:0C:DB:BC:D5:D5:01:92:32:23:B7
C=US, O=State of California, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=California Correctional Health Care Services CA	40F7C09406C720A54472CC12B3B11640	C8:B8:19:48:4D:E6:0F:92:FE:B6:CE:63:20:0C:D7:2B:73:7F:0B:B1	9A:82:B1:E3:1E:8E:77:D1:17:F8:F8:84:75:47:CD:95:4C:BF:24:25:1A:41:20:F7:10:BE:3E:82:2F:A3:A8:11
C=US, O=State Street Bank and Trust Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=State Street Bank and Trust - Global Markets CA	6A0ABD9D3978E43108A4A850E5D26AB8	DA:AE:31:C7:1C:3C:56:28:57:F1:8A:1B:B5:F3:79:37:38:DC:0C:C9	2C:68:D7:76:FF:D5:11:55:D9:89:57:A6:60:43:F8:96:E2:BC:69:CB:19:43:57:03:89:35:00:57:A2:C7:06:16
C=US, O=SunGard Brokerage and Securities Services LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=SunGard Public CA	22113F1A94B9C5D0C5C174399F80C432	E9:18:E0:3A:E2:C5:A9:2E:E0:AE:80:60:22:51:25:25:4F:FE:40:EA	01:5D:37:61:C6:44:EC:CF:05:D2:1A:C1:42:0F:30:8C:90:73:67:9D:70:39:CB:D5:28:32:9D:E8:F4:E1:2A:99
C=US, O=SunGard Brokerage and Securities Services LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=SunGard Public CA G2	56B93A60E6EA9E1441C7318DCF07FA15	F1:EA:8C:57:6F:90:E4:EF:77:96:22:11:03:26:F6:7F:F5:4A:76:15	CC:0F:03:0F:83:02:FF:E2:BC:F5:C7:84:A3:FD:12:D7:24:22:B8:D6:57:32:A6:DA:05:18:B4:CA:4D:EF:3E:83
C=US, O=Symantec Corporation Sales Engineering, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Corporation Sales Engineering CA	7FD2630F8A6A85C1EF3AF04E41231492	89:0F:CD:A5:97:86:0A:3B:55:DF:FF:F9:24:06:EC:1B:B9:30:1B:0F	57:01:DA:4F:07:DE:35:41:F7:85:FD:0B:33:CB:CF:88:7F:03:84:86:DC:BF:62:E2:A2:F0:DD:1A:5F:39:34:46
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Signing ECC Intermediate CA	4C6D6420F4F4D2853682CBC32029ED56	3C:AE:55:86:B2:5F:AA:D3:73:E3:ED:FF:C9:16:E8:D1:F3:DB:EA:C3	FD:02:51:0C:EC:14:5E:52:66:86:04:82:DD:4C:32:86:09:C1:A7:88:AF:3F:CB:10:A0:96:78:DE:30:F4:6B:95
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Signing RSA Intermediate CA	0869544B0438EC59742EB7C004207299	C1:9D:F8:CB:7B:6A:C5:A3:59:D4:B2:9A:1E:CD:FA:E3:E1:09:07:C5	66:F7:B0:14:7C:09:F9:DA:79:E6:38:00:A9:6F:64:9D:A7:E5:97:57:F8:76:F0:81:26:D0:7E:8F:B8:54:24:88



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 SSP CA - G2	0557E079E1C3DC67D64818B75CB2EA97	4D:62:6A:46:78:53:86:9E:B3:E2:60:28:9C:96:05:20:D7:99:81:A9	3C:18:17:6F:EB:A1:D2:0C:8B:FA:7B:48:40:66:E2:A5:82:5A:22:62:37:E1:E7:BE:38:28:E6:F6:C3:77:1B:23
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 2 CA	226AA5C3AFEF2A198745E44AA532AC9D	63:30:55:F1:9B:7F:89:D2:14:C6:B1:B3:66:5C:5E:AC:C0:8A:5F:C8	AB:62:A0:A1:DE:53:BA:06:E7:71:43:8E:5D:05:26:D3:D8:B0:23:53:30:C6:5A:A4:BF:80:D8:55:90:8E:2D:C4
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 2 CA	05926C5994BBE474AE3D441BB7BE82FB	D8:DF:58:53:9E:55:6F:7E:FE:1B:BC:53:80:3F:62:F2:07:46:09:78	8C:82:B7:6F:CA:9C:ED:6A:0C:6A:7B:31:41:CC:B5:85:EC:94:19:21:EC:0B:33:D9:56:CB:29:07:18:51:C7:D9
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 2 Managed PKI Individual Subscriber CA	4C6B0B98B6E1BA34D5457677FD09E23D	63:91:2D:37:F5:97:76:CE:D9:9B:0B:7D:A6:FE:C0:72:6B:20:D4:17	0B:52:5D:37:8D:85:7F:F1:80:7C:FD:33:1B:E1:59:21:42:29:1E:98:09:4C:6A:DC:FA:94:2B:58:40:05:00:BA
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 2 Managed PKI Individual Subscriber CA	2B15CDCBB478A6CD6CAFF955EA2A677F	67:DF:AA:88:90:D2:7F:53:6C:62:71:AF:B0:F3:B1:E6:1F:A2:BD:22	D4:4A:18:8B:F6:6A:9B:68:1C:31:25:DA:7F:1D:1C:05:01:1F:26:55:52:CE:D9:9A:10:F9:F6:7F:AE:4E:B1:2D
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 Employee CA - G3	1C372DCBB9703E6BB73EF3FAD10B4206	F1:9E:D0:92:68:90:32:12:95:26:B7:FC:97:3A:61:29:C3:BB:AF:CE	2F:32:06:24:CC:3E:BC:01:79:60:80:BE:DE:B5:B2:ED:91:6F:02:A0:AE:5F:53:7E:DC:47:66:BC:45:56:59:DD
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 MPKI Individual Subscriber CA - G3	0917D7C9AA0CCA8CF1B8AA1A06B4A7CD	5F:09:07:24:0A:F4:77:B5:E4:B7:85:62:93:35:F9:2D:6B:08:60:26	A6:75:82:B9:27:72:24:D9:80:10:27:21:71:56:D2:83:13:6B:29:FD:2F:33:03:17:81:F6:04:EB:80:79:70:D7
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 MPKI Individual Subscriber CA - G3	2FED6E8F92D45E05D447F2C5AA5D8860	8E:F2:47:A5:2C:75:0F:5E:2D:F5:9D:AF:71:CD:AF:10:F1:55:7F:91	E7:9B:AC:E9:FF:58:B8:EE:6D:3B:D9:4A:E8:AD:B1:3D:F4:2D:FD:86:B3:70:1B:FF:8E:DF:F5:C4:E8:4B:AE:91
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 Shared Intermediate Certificate Authority	7685CB07A8E0CC0FD2C54D8F3935B312	15:24:50:2C:A9:95:BA:BD:76:88:23:1D:58:D5:6E:12:D4:DF:F2:DB	52:65:BC:A0:D3:1C:47:DB:16:C3:59:C5:DA:88:B4:C3:10:FA:0D:4A:B1:A8:6F:F7:E2:D5:BF:A1:54:6C:55:59



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 Shared Intermediate Certificate Authority	1935587E2C208EB44D4 98092FB667564	44:0D:16:F3:18:10:55:5B:2E: C5:2C:43:9D:55:DC:BB:60:B9: FF:AD	0F:E7:E3:78:1F:96:03:BB:ED: 69:B2:14:58:42:FA:87:82:F5: 52:BD:35:F3:D4:38:D6:95:78: 79:40:14:E9:1E
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 Shared Intermediate Certificate Authority - G2	1BC530DD2DF052E80D3 606D48DF65F92	6E:24:A9:54:58:34:E2:CF:2C: 51:CF:D4:92:A2:12:94:03:A8: 2F:45	68:E6:33:95:02:90:61:64:13: 85:B8:AF:F7:7F:6D:66:F2:D1: FD:87:A8:21:63:0D:27:EC:36: 45:C9:FE:23:5D
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, OU=FOR TEST PURPOSES ONLY, CN=Symantec Class 2 Public TEST CA	6F83A0B8F1902A6816D 4FD7629BA5E59	3F:80:CF:4C:77:80:31:1E:FF: 24:F9:4E:2F:AB:55:DD:7E:00: 0C:FE	11:4A:C8:DD:B6:DA:D8:FF:59 :A9:C5:A1:3C:E6:A9:EF:13:33 :17:7C:BD:86:80:2F:77:2B:71 :3D:A4:B2:01:4A
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Universal Root Managed PKI Individual Subscriber CA, CN=Symantec Shared Individual Email Certificate Authority	66D2E649E4758A5ED79 3866259F40EB9	4C:F9:36:27:F0:AC:9D:EF:60: 20:E1:BC:1F:6D:DB:DC:A6:A6 :97:FE	B7:02:1B:CF:34:6E:85:02:B1: 27:5F:80:05:7F:3B:97:46:7A: C8:B8:A7:61:60:83:40:EC:F8: 48:4E:C3:84:8C
C=US, O=Symantec Corporation, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)11 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 Employee Email CA - G2	7CC4D16C60A9DBC29 9F213FBB9DF36C	D7:0B:AF:DA:6B:E5:FF:41:47: 8D:E3:AB:31:78:0A:E1:2B:0E: AC:D7	1E:02:28:EE:ED:B5:33:0D:D9: 11:6A:4A:0F:CE:81:14:19:54: 8C:E8:19:AD:18:EF:CE:12:72: 4F:8F:59:6A:4F
C=US, O=Symantec Corporation, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)11 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 Shared Intermediate Certificate Authority	0E48EEFAD33A9D6B265 CCC253EBF3F3E	03:2F:3F:EF:A1:CC:2F:B0:FC: 77:5B:01:6F:96:BB:E1:52:4D: 90:64	CB:38:7E:39:2A:90:E8:B1:A3: 82:BE:8E:DB:9E:7B:29:43:E9: 00:2F:73:A5:63:F1:8B:06:14: 22:18:F1:11:8C
C=US, O=Synchrony Financial, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Synchrony S/MIME CA	5FB1C98024C6E6546A3 810992FE3A835	17:56:11:72:B9:B3:CB:56:CC: B4:7D:34:71:9D:A9:B9:FA:49: AD:42	34:5A:7B:5F:38:D8:20:2D:09: ED:80:34:39:4E:DA:7C:E4:E3: F6:C5:2B:D6:AB:50:8D:62:96: 15:5B:30:3D:A3
C=US, O=Texas Department of Transportation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Texas Department of Transportation CA G2	2D838948A6FE01D6CC DEE84D7A7D75F0	C9:F6:C1:AC:8D:92:F5:35:3C: D8:4A:0E:85:23:2C:42:9B:6E: 85:1A	7A:72:D9:09:7A:8D:54:7E:F7: F9:42:23:E1:86:EB:B4:46:7B: 7C:34:25:DF:73:E6:8B:F0:E1: 0C:F3:64:D4:20



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=The Bank of Tokyo-Mitsubishi UFJ Ltd., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Global Markets Division for the Americas CA	59D104BB36B889CBOCE BC1D2E819CB44	13:A8:22:44:62:70:28:44:3D: 95:BB:AE:87:8F:65:3B:3B:0B: 02:3B	B5:68:53:B0:5C:1D:80:97:DF: D6:41:47:04:B6:7C:A7:DA:56: F6:C6:8C:DC:85:06:CC:6D:FB :87:74:3C:DE:FF
C=US, O=The Bank of Tokyo-Mitsubishi UFJ Ltd., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Global Markets Division for the Americas CA	52C0564F1B3ACA2ED51 41D2252E7BB9D	15:B8:CE:94:35:05:1B:84:60: DC:B7:EE:25:0E:39:A6:DC:89: 15:DD	F1:6E:D4:67:0A:AF:38:AD:3D: B3:BB:72:98:2A:E6:89:CB:84: FB:0B:C6:B0:9F:2B:57:9F:B4: F7:23:65:2F:0A
C=US, O=THE GLOSTEN ASSOCIATES, INC., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=THE GLOSTEN ASSOCIATES, INC. CA	56A5FC1DA2328D64F37 74D578877FF29	B0:A0:5E:A0:28:3B:F5:39:60: 86:26:56:AC:81:99:E5:82:45: BF:C6	26:A1:EB:BB:E7:71:C1:89:C4: 3A:56:C7:14:CB:B1:DE:9A:C2 :5A:2B:6A:FB:D1:E8:FF:A3:3C :33:81:B8:06:2C
C=US, O=THE GLOSTEN ASSOCIATES, INC., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)09, OU=Class 2 Managed PKI Individual Subscriber CA, CN=THE GLOSTEN ASSOCIATES, INC. CA	08037E5743F72BDE52B 17A671182C3A8	F8:F8:56:11:7B:20:2A:96:59: 83:37:5E:6A:CB:47:73:D7:D5: F2:78	A5:4F:A9:FF:E9:83:B9:A1:9A: 1E:42:F1:46:23:54:10:8F:41: B5:C4:6C:DB:72:71:0B:2D:94: EC:FB:C8:8E:5F
C=US, O=The ServiceMaster Company, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ServiceMaster CA	60A6360C7D9889A65E9 B388F42AF0CA8	BC:FB:AD:F0:B8:75:AE:2C:F4: C3:3C:B8:86:98:93:42:12:EE: 13:42	2E:26:D1:55:C1:B8:12:40:4C: 41:E7:36:0C:F1:D9:3D:46:64: AE:26:72:74:F6:4B:81:14:BB: E7:98:1E:83:B2
C=US, O=Thomson Reuters Holdings Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Thomson Reuters - LEDO CA	7AC08185DCE029D685B 8191D6B2A3804	51:6F:69:D7:7D:16:8D:79:83: 1B:DD:EF:12:4E:8C:2D:E5:CA :29:32	F5:DF:7A:85:24:0E:93:C6:02: EE:9C:6F:77:C2:B1:26:C7:A3: 7C:ED:8F:34:DD:71:4B:82:C4: 7F:31:F3:54:4D
C=US, O=Thomson Reuters Special Services LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Thomson Reuters Special Services CA	13EFA736D422459692C DBDB247B27201	83:D3:0A:2E:C9:67:C1:28:5D: AC:55:A1:12:E0:6B:88:4B:10: B7:19	D9:A0:EB:D9:5D:3C:90:3F:A7: 5D:C1:EA:19:F1:96:37:60:CF: 79:39:18:3A:66:03:34:60:F9: 1D:E1:D3:73:72
C=US, O=United Launch Alliance, LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ULA CA - G3	7FD013CBF14A501D4CF F45B34C5ACB3D	95:98:85:3A:A1:08:98:EC:58: D7:43:39:CC:F0:1C:9E:64:4C: F8:20	23:2A:D3:38:F6:4E:3F:C7:10: 48:E1:D6:CC:C9:6E:A6:FD:57: 82:27:4A:A9:6F:D6:18:F5:42: 50:87:BA:2F:FE



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=United Launch Alliance, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ULA CA - G2	606DEFF1E74AA9DA30C0DBBE449AA060	EE:A8:54:E3:D1:D2:79:C5:7E:C8:B1:CB:F7:CA:6A:6E:7D:98:23:82	4A:84:F8:4E:88:0F:3D:96:C3:BF:BA:2A:ED:67:B0:EE:30:0F:BE:E0:A4:A9:0D:73:6E:F7:38:A0:89:FD:6B:17
C=US, O=United Launch Alliance, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)08 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=ULA CA	5D160C4901B3FF3CC77DADC8F6DD6063	01:A1:98:14:E8:06:56:D7:AA:08:CD:3E:05:F8:AD:4B:D2:2F:F4:A1	EC:3F:C8:BF:83:8B:A9:B8:AE:78:6F:4B:B0:7A:59:01:69:06:30:D7:0E:67:BF:40:19:76:1D:12:C7:0D:B8:C6
C=US, O=United Launch Alliance, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)08 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=ULA CA	6E3FF8BCB01125C58E8B36DB518248CC	0A:85:25:59:D6:F6:14:71:97:7F:E3:FA:14:B0:20:56:F1:6A:9A:FD	FA:2F:B1:C0:35:76:A7:07:09:D4:3C:DE:B6:EB:12:9D:A1:09:B0:0D:0F:C4:A7:A8:28:6F:DO:24:11:EE:FA:23
C=US, O=United Launch Alliance, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)08 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=ULA CA	664273D3D84F55838D03F526C33D71AA	2D:94:41:31:2A:AD:23:39:FE:06:47:2F:F8:C6:17:F5:DF:F4:E4:EE	82:A4:69:52:AD:9E:DB:68:7D:A6:AE:14:7A:88:3E:80:72:3C:01:19:E2:F7:49:3A:AF:B8:04:B8:6C:AB:8A:ED
C=US, O=United Services Automobile Association, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=USAA Digital ID CA	123B4EDFAB890E1140055A25E491D3F6	06:17:8E:E0:AA:CA:6A:54:40:3A:66:BD:63:79:8D:56:5D:54:AE:3E	8E:FE:CF:B4:D5:9F:1A:7E:46:75:1F:1A:3E:55:39:CB:99:DB:3D:F1:B6:8C:BC:2F:20:0E:DC:30:38:16:87:7D
C=US, O=United Services Automobile Association, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa(c)09 , OU=Class 2 Managed PKI Individual Subscriber CA, CN=USAA Digital ID CA	1B784DEADC44EEC87D1CEC83DB852A8C	9F:EF:BC:EE:4A:8E:F4:FA:FD:E1:32:D0:1F:19:07:01:40:50:26:B5	B9:66:63:78:7F:91:52:66:F4:A0:F4:B6:3A:28:12:4C:8F:0D:8E:41:A6:8C:EF:6A:7E:05:A7:F5:50:E9:DA:4E
C=US, O=University of Houston, OU=Symantec Trust Network, CN=University of Houston Intermediate CA	5138A1BE03884C5D63AA16E765CDD940	F1:FE:C0:EC:46:F6:4F:75:6F:A6:C9:72:80:CB:97:5E:8F:2B:9E:2C	8A:D8:E9:5B:7B:83:F0:BC:77:2B:EB:C7:5F:FE:0C:51:F6:5C:77:B6:3B:08:21:AD:C1:3C:DC:5A:C9:C2:72:67
C=US, O=University of Houston, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=University of Houston CA - G2	7052A61D92DEFD2E950C978A345DAF3C	12:81:ED:A2:12:0F:A6:25:E4:43:C8:48:C1:32:E4:50:C5:A1:72:47	69:FF:03:E0:52:30:DF:D6:1E:4D:6F:6D:D6:66:28:08:C6:5A:85:CB:E8:FE:A5:E4:3F:BF:38:71:28:E8:B4:F4



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=University of Pittsburgh, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=University of Pittsburgh CA - G2	16474687F78AB351B91DBAA4670214EF	C6:CF:4F:D7:38:40:30:39:CF:A8:6D:F3:96:10:D8:55:89:D0:86:44	00:19:BD:B6:2B:38:21:61:7E:E0:9B:AD:08:A9:D3:72:BA:E4:D9:02:B0:20:10:02:FE:3D:C6:E8:11:15:17:23
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, CN=VeriSign Class 2 Shared Service Provider CA	442682C193EF07AF75028F1AE4A2A5C7	97:2D:FD:4A:C2:9A:46:5C:50:54:A0:E3:70:6D:DB:4A:0D:10:9F:A4	BF:AB:8C:5E:54:0A:40:63:C7:31:72:C9:57:33:BF:87:FE:3E:0E:B3:05:19:26:4F:32:59:28:67:86:5B:8E:0C
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, CN=VeriSign Class 2 SSP Intermediate CA	7284279439B3CADAC92F47E06E40ACB6	05:A5:C4:43:D1:94:65:31:C8:98:52:A4:69:1E:E2:BF:91:CD:CC:38	AC:C8:43:51:EE:B9:B8:35:39:45:8B:BB:76:A8:C3:68:41:55:8D:1E:A2:4C:B5:3B:A4:22:A8:8F:B6:0F:B9:46
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)08, CN=VeriSign Class 2 MPKI Individual Subscriber CA - G2	63A800C76E9BE8E27A08FEE55C95F663	A7:D8:A9:53:0A:2C:F9:CB:EF:B9:5C:95:33:4A:2A:57:56:68:F3:52	C9:4D:D6:3A:6B:93:AA:5B:B8:11:F0:E4:A8:EB:AE:4F:88:21:6B:32:FD:DF:1A:F7:70:4A:31:03:DA:F9:D4:C3
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)08, CN=VeriSign Class 2 MPKI Individual Subscriber CA - G2	24A479B3761EEB8D3FD DA91709AC1737	EC:ED:2D:A4:16:99:94:79:F3:1C:A0:0C:C0:1C:2F:86:2C:DB:EC:F2	BF:DC:5D:34:2A:41:39:F5:B6:FC:F3:7F:6A:D8:32:5F:DB:48:53:0C:D9:6D:5D:6F:BA:2E:41:60:AD:2F:43:12
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)09, CN=VeriSign Class 2 Employee CA - G3	173402FA69B7ABD3F4A25600A2EC2930	C5:22:88:3F:01:E2:1E:A0:39:3E:FA:5D:51:F0:1D:DF:00:45:80:0B	D4:D8:FC:83:C3:AE:98:AC:D1:20:DA:B0:D6:37:48:C1:A5:92:60:41:8A:C4:1B:3E:D1:34:50:9F:56:5C:2D:74
C=US, O=Veritas Technologies LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Veritas Technologies LLC Class 2 Employee CA	2AF9F4E2D580056E141BDB799EB3F09C	4F:32:F1:93:31:9D:AF:52:5F:31:C9:D5:C5:90:15:E8:DE:05:71:4A	1A:B7:DC:A7:F8:B2:80:27:F2:B7:1F:BB:A8:CB:87:16:2F:E1:12:C4:7A:C4:D0:96:38:C8:EA:01:91:5A:17:7D
C=US, O=Voya Financial, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Voya Public Issuing CA1	45858ADC4D825B0580F AB82B2EBB4286	C5:99:BA:10:51:FD:7F:14:32:F3:97:50:D3:A6:63:25:BB:C6:83:E9	63:B7:40:4D:57:FE:17:FD:7E:32:DA:C9:8D:93:4E:C9:8A:B6:9F:64:D0:33:89:87:19:36:57:A6:43:64:BE:60



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Westinghouse Electric Company LLC, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Westinghouse Access Programs CA	1C474A29EF2AB32B0B2 F2CC4E74BC131	6D:BC:CA:95:97:82:34:ED:73: 36:02:C4:DB:A7:D8:08:90:42: 74:17	F8:68:5D:2F:A5:A8:4A:84:8B: 61:DF:06:1E:B9:8D:9D:CE:59: 60:ED:9B:C8:75:38:52:8F:E5: B0:C1:69:BC:E0
C=US, O=Westinghouse Electric Company LLC, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Westinghouse Access Programs CA	4DA0EDA8917DB48E300 42F53178BE6E5	F0:9D:4D:FA:FC:07:4F:A8:41: F2:D5:2A:20:2D:12:00:48:FD: 58:87	66:E3:1B:54:C2:5A:C7:38:B0: 1C:6B:1E:08:EA:74:EA:5A:9B: D1:9D:CD:25:85:1F:20:7F:D0: 8F:B9:5E:C6:A3
C=US, O=White & Case LLP, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=White & Case LLP CA G2	17E0DE869D57F6D4FEB 063A9DDB9A5A9	35:E3:EB:0A:C5:C1:39:86:56: C3:B3:F9:1D:64:8D:4B:CE:5D: 20:7E	14:E9:61:42:FA:EB:EB:6A:9A: F5:03:C8:71:66:CF:6C:D6:AF: 02:F3:1A:AC:A1:94:9C:32:56: F2:9E:0C:40:F5
C=US, O=Yaana Technologies, LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Yaana	24780201934A5B2740D 65D3A46C56D9C	2C:6A:AC:73:47:B4:F0:4A:11: 21:9B:7E:04:4E:15:37:ED:B9: 5B:3D	7C:73:C0:E9:D5:2B:C6:3E:71: 31:10:DA:47:05:C7:CE:CC:B4: D4:9F:1F:5F:ED:0B:6D:1A:70: 7E:63:A4:E3:1C
C=ZA, O=Absa Bank Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Absa Bank Limited Public CA	79BA45D8665079BEF68 44BA57FAD0770	0A:21:92:2B:58:1B:FC:E5:A3: 30:78:AE:D8:64:3D:47:55:11: 56:B9	02:30:2C:4C:F8:31:33:5C:9D: D1:45:DF:91:A8:C1:C7:03:00: 8F:D2:34:21:5D:0E:18:78:95: 09:2B:D8:1A:D4
C=ZA, O=Altech Card Solutions, OU=VeriSign Trust Network, CN=Altech Class 2 CA	7081CB20197433D37DD 0D36367087048	38:34:3D:71:BC:DC:7E:64:14: 7D:B4:75:3F:33:C0:90:8B:2F: 1A:36	E1:15:05:8D:5C:83:D2:E3:BB: FB:F3:F4:6E:38:56:43:5D:3F: 6A:2E:71:3F:FD:26:98:3B:D8: 84:E5:21:C3:F9
C=ZA, O=Altech Card Solutions, OU=VeriSign Trust Network, CN=Altech Class 2 CA	3E921EF50D49515BB99 CDFEE07580A0	9D:06:C5:44:91:07:12:B2:C8: BF:CF:E1:2E:30:51:80:F2:58: 20:59	78:3D:2D:C8:CA:CA:DC:88:C4 :64:A1:AF:E5:65:4B:7F:6E:48 :DE:91:47:B1:82:A7:28:4E:BA :16:0C:2C:84:76
C=ZA, O=Altech Card Solutions, OU=VeriSign Trust Network, CN=Altech Class 2 CA	5DAA89035A5892948E4 ACB7B1E67317B	D3:B4:00:66:1D:C5:B7:64:31: C3:59:36:28:72:E3:A6:A0:D7: EA:04	EE:3E:E6:A6:DA:54:7C:C4:9D: FE:41:17:A2:38:AA:1C:68:36: 0F:D1:97:4F:0D:64:9A:D1:CC: 81:02:5F:67:CC
O=CertiSur S.A., OU=Symantec Trust Network, CN=CertiSur Class 2 CA - G3	02C1AEC63D80C5C5A4 B821EB34CD2DFF	DB:34:DC:36:48:59:F3:78:9F: 07:CE:5D:B0:C7:6C:BC:3C:CE :D4:7A	04:1E:70:B7:DD:DD:0F:2F:90: F2:85:C4:C7:1E:0E:20:53:33: 12:A1:07:73:79:4A:21:B5:79: 1E:C8:75:59:58

Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
O=CertiSur S.A., OU=VeriSign Trust Network, CN=CertiSur Class 2 CA - G2	56D1FD8A578C5C66FC127CFE1320B6A8	E5:99:69:23:CB:E0:B0:B6:EF:D1:5A:03:50:31:0E:31:B6:05:BF:13	9D:3D:D9:1B:C6:2B:68:4F:F5:14:0C:17:E1:DF:AC:A8:8A:5D:A9:E5:20:BF:64:FF:AC:6C:45:4A:EB:23:4C:AA
O=KPN Telecom B.V., OU=VeriSign Trust Network, CN=KPN Telecom B.V. CA	5604B8770A05A32ADCC8DFE1F3A39E8B	8E:4D:73:B1:1A:36:21:5E:2C:D8:C6:F1:DA:E3:E8:DB:EB:F6:40:09	D5:EC:F9:25:E4:01:32:A3:B6:D4:B5:F3:AC:62:9A:31:85:ED:AE:E8:46:AE:03:3A:79:9D:BC:DE:B6:68:AB:8F
O=NamiTech, OU=VeriSign Trust Network, CN=NamiTech Class 2 CA	4D7184F87C2A1A73B8B768CB336C8285	A0:CB:A9:F7:1A:1B:F8:2F:E8:3D:C5:5B:69:DD:C0:EE:8F:E6:E4:28	0F:0C:18:C7:14:00:9C:A0:14:4B:4A:66:BE:74:A8:72:16:0E:C8:26:A0:85:A4:3D:90:DF:16:4F:1E:9A:A2:19
O=Safescrypt Limited, OU=VeriSign Trust Network, CN=Safescrypt Class 2 CA	5E9A752B01DF0F9043F6A5660915A9D1	7F:21:9D:9B:89:93:EE:05:C4:67:26:60:79:CD:EF:3F:CC:B4:2B:21	A7:E7:AD:64:2A:7F:11:A1:89:A4:A0:F7:01:CF:5B:71:BC:F9:C9:A4:27:30:BB:C0:5A:91:97:D3:C6:10:96:3B
O=Safescrypt Limited, OU=VeriSign Trust Network, CN=Safescrypt Class 2 CA	3C553C1EB4AD7A8F0CE5BD7037BA90F4	F4:38:42:22:73:91:07:0E:C8:71:08:AD:D4:22:FF:97:20:CE:24:51	85:6B:93:23:8C:0D:74:BB:4F:C5:08:7C:A9:67:C7:B6:CC:92:03:02:7A:A5:5B:30:B2:4D:11:C1:E0:B1:C1:05
O=Soltrus, OU=VeriSign Trust Network, CN=Soltrus Class 2 CA	66233CF4ED6CE44002B913CE440FC2CD	B7:24:67:97:50:EF:29:6D:5A:39:F9:87:91:01:CC:F0:87:6C:71:8A	F0:D0:E6:39:2E:14:34:7A:52:C4:A7:FE:55:50:17:30:B5:94:3F:7F:AC:9D:CD:2A:43:C8:BF:C0:64:3D:9B:12
O=Soltrus, OU=VeriSign Trust Network, CN=Soltrus Class 2 CA	1F0A0F797E8FDF1FF92B828A1A88348D	BB:C5:BC:9F:E1:5E:D2:64:3D:6F:E6:9C:8F:EA:EF:4B:F3:63:D9:CA	55:B5:04:A4:F2:B3:79:96:B7:AA:65:C9:10:80:E9:6D:7E:54:AB:F0:8C:0A:39:12:A7:2D:F5:67:A6:A9:77:60
O=Sun Microsystems Inc, OU=VeriSign Trust Network, CN=Sun Microsystems Inc Root CA	6E65207753C19222D56615A17A882FEC	D9:37:85:C7:3B:DF:61:C2:21:A2:E0:70:71:21:79:D2:3E:A1:A6:FA	35:6A:86:A3:A0:B9:FF:C7:07:EE:F8:18:CE:C7:FD:FC:14:8F:A4:A9:2C:13:7B:1B:E9:55:7C:FD:2B:D0:B8:B5
O=Telia, OU=VeriSign Trust Network, CN=Telia Trust Class 2 CA - G2	381192A5F6B73B3E9AEF3785FCECB032	06:CC:D8:D4:59:4E:E6:D1:26:6A:28:A4:E3:5C:CA:B9:00:6E:34:52	16:23:FF:FD:5C:DD:38:D2:71:75:B1:1C:7B:B3:12:70:EE:CD:3E:57:DD:E6:91:BE:96:FF:BA:1C:D3:C0:D5:3E
O=Telia, OU=VeriSign Trust Network, CN=Telia Trust Class 2 CA - G2	75E87980555E8FDFAE401AA56F57C88A	4B:CD:E9:D4:46:37:AE:68:93:74:98:EA:3F:02:AB:16:6B:B0:8F:D3	A0:26:51:D6:A6:32:56:53:5F:82:CB:3C:75:E8:70:A0:F6:5A:65:2C:F5:76:CA:3A:D3:DD:A1:74:9D:F8:C9:CC
O=Telia, OU=VeriSign Trust Network, CN=Telia Trust Class 2 CA - G2	08717BE9819474F30C089E278DFB27C1	BE:EF:FB:F7:B4:E0:43:38:EC:77:8B:5E:AE:E5:0D:E0:35:E3:71:3A	9A:95:0C:1A:F7:17:C1:53:E3:A4:CC:96:B7:D7:41:21:B3:5E:3B:30:42:37:39:48:82:D0:67:71:0A:24:CE:01



Class 2 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
O=VeriSign Australia, OU=VeriSign Trust Network, CN=VeriSign Australia Class 2 CA	37F25EE7FBBFE13F87A 5A274EE93FB02	32:57:26:D7:CE:55:87:4B:7E: FC:DB:AD:8C:3C:BA:FD:A9:42 :1F:17	6E:63:58:EE:C1:6B:DF:23:98: CF:08:86:E9:B9:F8:57:34:97: D2:7F:24:73:EA:78:5B:4E:5D: 43:CC:53:05:1C



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Booz Allen Hamilton, OU=Certification Authorities, CN=Booz Allen Hamilton Device CA 02	29BB1BC2B62C9FBE6A43D5CA7E1B6DA4	A5:27:EF:94:F5:28:1D:AC:71:E9:C2:E8:AE:AF:F6:69:FC:D2:FF:A0	47:C8:0D:55:A3:86:37:92:86:2A:A9:B4:CE:24:A4:AC:9A:D9:95:EC:63:C8:B5:FE:39:75:E9:CF:87:18:21:EE
C=US, O=Computer Sciences Corporation, OU=NPS, CN=CSC CA - 2	0F76B14F6E3C3F3D78C7CABF1E9D1F2	29:38:CC:1B:58:6C:8B:1A:76:83:29:73:38:9A:B2:5C:53:F3:65:8F	4C:6D:7E:17:52:CD:BF:FB:71:DC:D3:ED:5F:71:FE:CB:46:06:2A:47:9C:EC:DA:E9:34:C5:32:5C:45:89:96:35
C=US, O=CSC Government Solutions LLC, OU=CSRA FBCA Devices, CN=CSRA FBCA C3 Device CA	45AABDFDFAE1621D52B260DAF7EF3BD7	CF:92:29:CB:50:BF:5D:C2:5C:15:6C:4F:82:5A:67:E2:96:42:36:C8	DC:4B:00:8E:AD:BB:51:0C:2C:DB:D6:CE:33:08:BB:D3:56:27:16:74:13:35:46:7E:2A:53:4B:D3:59:85:C1:94
C=US, O=CSC Government Solutions LLC, OU=CSRA FBCA MedHW, CN=CSRA FBCA C3 CA	48B53C25944E6ED645339ECF1079FD37	FA:ED:5B:3A:A8:5B:FE:A0:BA:8B:A8:84:68:97:06:04:4D:FC:0E:C9	36:5B:15:FF:E6:F5:45:DB:AA:6F:92:C8:81:6E:AF:F8:D9:29:76:36:7F:A0:A3:CD:FC:33:CD:00:12:7D:3B:7F
C=US, O=CSRA LLC, OU=CSRA FBCA Devices, CN=CSRA FBCA C4 Device CA	22058F804D89EDD93122C840987AC7AB	3D:FB:1C:B0:9B:E5:D1:43:0D:F9:CE:8E:04:F5:01:AD:B8:6C:A1:76	34:77:83:54:B3:51:50:5F:D5:A5:F6:12:36:5D:97:13:52:92:67:EC:71:BF:79:9E:D4:D6:7D:C3:FD:E7:27:65
C=US, O=CSRA LLC, OU=CSRA FBCA MedHW2, CN=CSRA FBCA C4 CA	2AAA084CCE8D13DC0B3B05B34E325922	1E:C9:84:49:B1:84:72:D6:C2:F5:16:A4:D0:97:63:50:D5:DD:82:9A	34:87:C5:36:26:4C:FD:DC:EC:C6:D6:62:BA:20:35:60:2A:58:2A:01:51:7E:3D:9B:29:0D:A4:8A:2A:A2:B7:38
C=US, O=Eid Passport, Inc., CN=RAPIDGate PIV-I Agency CA	1384040B5940AC2B5498FBA7593944	83:AE:1F:C5:4B:54:96:32:0F:1D:63:A5:84:FE:21:5D:D2:83:C9:77	57:B5:49:19:F6:68:4C:F3:02:4F:95:2E:EF:D1:1B:EB:FD:28:85:91:FE:AB:54:47:96:9F:27:6D:28:50:D8:17
C=US, O=Eid Passport, Inc., CN=RAPIDGate PIV-I Device CA	75815C5B8528355F919C9D813DA42BB6	A5:3D:92:51:31:BE:01:5F:1F:71:C4:89:05:56:B4:A6:8F:06:10:71	D8:2E:60:83:FB:66:F8:9E:EC:CF:6E:A5:89:EA:20:88:3D:97:37:14:5D:0A:08:16:27:2A:FA:50:64:EA:9E:89
C=US, O=Eid Passport, Inc., CN=RAPIDGate-Premier CA	3C3FE36894D0802C73CB31DD3131490B	9C:65:E1:64:D3:B6:7D:9D:1C:07:D2:B6:0C:77:07:56:A7:15:B1:EB	37:C5:BC:1E:7E:E3:18:A7:B2:75:D7:2B:00:CE:8B:D6:31:CD:B7:CE:51:6B:A4:39:10:E0:28:ED:CA:C1:1C:9C
C=US, O=Eid Passport, Inc., CN=RAPIDGate-Premier Device CA	7F70E7CA4D45EA30D19ABF0053132F6D	E4:B6:4E:10:79:21:BD:F9:46:DC:58:BD:3E:2D:31:8E:7C:7E:F3:6E	91:34:6F:83:8D:CD:82:BD:D8:F2:35:5F:1A:C3:58:B1:32:D9:02:BC:88:9E:28:39:90:B1:05:40:2F:34:C7:FE
C=US, O=Eid Passport, Inc., OU=Eid Passport PIV-I LRA Network, CN=Eid Passport LRA 2 CA	74FA80B580B11F82CDE84EF3AD8E36A4	03:35:E3:67:01:06:DA:48:DB:61:E0:06:65:FA:16:F8:D8:C1:10:AE	6F:D4:02:F1:76:0C:BF:48:A3:74:98:40:FB:B0:65:39:7F:63:57:28:43:C8:6B:8B:C4:9F:CE:FB:BE:E6:E3:D7



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Eid Passport, Inc., OU=Eid Passport PIV-I LRA Network, CN=Eid Passport LRA Device 2 CA	404D442E9C097771209 218AC534936C3	F8:91:2B:3C:9F:3E:B3:0F:8A: 8D:5A:14:E8:03:8B:D9:BC:6B: 77:1D	6D:79:82:E8:47:18:A6:FA:69: C3:D5:BD:02:D9:EC:C0:BA:C0 :9A:3C:79:23:14:7F:3F:58:79: C0:2A:53:63:97
C=US, O=Eid Passport, Inc., OU=RAPIDGate PIV Interoperable LRA, CN=Eid Passport LRA CA 3	0BD336FF375ECB6E918 7B1495254DEFF	5F:A7:A6:22:3A:B3:D3:F5:7B: B5:54:E6:7C:ED:8B:BB:8B:6E: 58:7C	46:A8:1B:2F:99:1A:67:5E:8B: 9A:13:D5:94:13:74:C5:45:AA: 43:16:A0:20:05:18:BE:69:C8: 5B:BD:1B:7D:02
C=US, O=Eid Passport, Inc., OU=RAPIDGate PIV Interoperable LRA, CN=Eid Passport LRA Content Signer CA 3	7BC54C654C3A41D738 D48AC17AB603AF	82:E6:53:61:72:F6:9E:30:78: 6C:96:70:84:0D:B3:70:77:B5: C0:8C	F9:FB:0B:F3:0A:04:DA:85:31: EA:1A:BA:E9:C7:9D:EB:70:7C :9C:53:5A:09:ED:BE:17:4E:BB :EA:B5:86:6B:97
C=US, O=SureID, Inc., CN=SureID Inc. CA2	75C13DBED31093353C7 3618EFFDABE6E	D4:C7:86:46:85:11:92:0E:53: 8C:24:38:4B:31:32:D0:7D:BA: CA:F0	6C:BD:A6:87:45:5D:60:96:26: 02:3F:35:CA:64:C0:00:29:1D: 38:18:02:C6:53:1F:96:97:33: 91:7D:07:55:0D
C=US, O=SureID, Inc., CN=SureID Inc. Device CA2	2BF8D00AE1B9D45A084 6EDDDCA9CFF45	26:CD:E7:F6:D3:5B:37:B7:13: 11:50:94:ED:AC:86:4C:A3:F7: D4:AA	F8:FE:5F:A9:5E:D0:4E:EC:B4: 6C:09:A5:06:8B:18:9D:D1:2C: 70:84:00:89:3B:93:D6:37:B4: A7:0C:A5:58:F5
C=US, O=SureID, Inc., OU=SureID PIV-I, CN=SureID Inc. CA1	6353433BC55FBF2E550 AB0594D6CE5C3	80:64:02:25:2C:DE:85:44:33: 38:48:04:CA:F0:53:F1:52:FF: 48:3F	D6:F0:91:9D:DD:90:4D:87:5A: F9:53:D3:9B:A3:CF:32:78:A8: 4F:2D:0E:3D:AA:8D:99:11:19: CE:67:E7:3F:F2
C=US, O=SureID, Inc., OU=SureID PIV-I, CN=SureID Inc. Device CA1	4FF47DFA24D3AA3633D D4E55DE80F870	D5:14:63:2C:E3:4B:F9:4C:81: 6A:56:5D:BB:8F:BB:6B:AD:5F: F3:35	62:7B:02:12:DB:A9:C9:84:B6: B9:55:3C:41:06:CE:DA:42:9E: 7E:71:86:ED:6F:AC:C9:B2:66: 17:AC:20:F6:7D
C=US, O=Symantec Corporation, OU=Healthcare Applications, CN=Symantec Healthcare CA	3B43568D789703A038F 80931EFF939A3	97:0C:D9:25:33:78:BA:E8:1B: B6:13:C9:2C:3F:8D:7C:D0:71: 86:09	B0:A4:F0:5A:7E:CB:0F:9D:C3: 2C:8C:B4:82:2E:ED:EA:8D:6D :66:09:B2:6B:02:CE:77:4D:09 :F4:7B:82:16:F3
C=US, O=U.S. Government, OU=U.S. Senate, OU=Office of the Sergeant at Arms, CN=Senate PIV-I CA G4	52C8B762E38B3021228 8790964B7AB2C	3C:9D:0B:C4:63:DD:1A:C0:F9 :10:12:B4:40:E9:BD:C1:CD:C D:0E:FF	81:1D:63:FE:72:CD:72:B0:4C: FD:15:A9:C7:CB:90:9B:31:92: 98:94:4F:ED:EC:B9:0F:DD:80: 99:82:8B:46:0E
C=US, O=U.S. Government, OU=U.S. Senate, OU=Office of the Sergeant at Arms, CN=Senate PIV-I Device CA G2	50F504C03B7AAFFCB12 63AD5FCC202E2	45:4D:2D:EC:1A:D4:81:BE:75: 04:A7:3D:A9:68:18:F4:5A:05: 25:B3	34:22:01:5C:DC:4E:70:40:13: 17:C6:EF:F1:E3:DA:F5:A9:F0: B3:F3:0A:29:E1:C2:B8:52:06: DF:B6:92:FB:E7
C=US, O=U.S. Government, OU=U.S. Senate, OU=Office of the Sergeant at Arms, CN=Senate PIV-I Device CA G4	2879814EEF5B5F6E7BA 35946CA23A988	51:8D:39:38:95:7B:1B:55:0F: BD:57:9C:5B:90:A7:37:72:80: 83:F3	F5:D8:CB:62:4D:D6:E2:83:64: 5B:3C:33:83:D9:05:52:9E:8D: 53:8C:15:35:FB:B7:5F:3A:ED: 36:AE:9D:19:AE



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Booz Allen Hamilton, CN=BAH Device CA	1BCB33F9B9BEBD08D3 A5034187909F32	93:BD:57:01:DA:A7:2E:8E:2A: AB:C4:A1:82:BB:90:55:62:3B: 54:BF	04:8E:9E:F0:89:BA:DB:8F:63: E7:B7:B5:A5:BA:E3:D3:F6:0E: 2C:EE:FF:D7:6D:53:F2:59:F9: 59:FD:87:8C:8A
C=US, O=Booz Allen Hamilton, CN=Booz Allen Hamilton Device CA	38E90B15969AE025C6C 8994B4C812351	F6:11:DA:23:44:40:8E:EF:11: AD:0C:4F:BB:B0:A4:28:4B:6B: 83:6F	54:EF:D2:97:7D:89:ED:E2:4D: DC:37:97:CE:B5:A8:06:68:B3: 90:57:88:B5:8F:B1:AC:68:93: EF:4B:78:A2:4A
C=US, O=ICF Incorporated LLC, OU=ICF International, CN=ICFI Device CA	54FDDB405FD474D7F1A BF50ECA9535CD	9F:4B:60:C3:10:AC:BF:FC:EB: 05:36:8D:8B:F5:A5:B1:F0:BF: 87:B2	D7:D9:0D:0F:CF:B5:CD:EC:57 :54:D6:63:EE:B3:91:5D:53:70 :3E:1A:29:FA:EE:B3:98:DC:E0 :E2:2B:5D:4F:9A
C=US, O=ICF Incorporated LLC, OU=ICF International, CN=ICFI PIV Interoperable CA	1AE2746860588428570 0E963A28259DC	7D:CE:42:1D:A0:74:E0:09:0C: 54:F8:2F:83:26:12:28:A7:70: 32:25	58:FE:D8:9E:47:BC:48:DD:C6: 59:41:9B:B6:4B:D0:86:2A:44: 8F:CB:25:84:2F:8A:3F:A3:67: 1F:F6:46:8F:42
C=US, O=Jacob and Sundstrom, Inc., CN=JASI Device CA	3E60E7D78030598DBC2 2525E057903BC	44:5B:AE:F7:5D:66:56:91:97: 0D:05:59:26:22:F9:86:A1:0A: 7D:D2	31:24:1D:CD:95:5A:43:A4:BA: C3:C9:80:32:53:AA:A2:8E:2D: 60:6B:79:79:BC:5E:07:59:9E: 50:3E:21:94:50
C=US, O=State of California, OU=California Prison Health Care Services, CN=California Prison Health Care Services SSP Med HW CA	25B914A4A17A8684548 2424E49C7AADF	99:7F:9D:63:27:8D:BB:FB:61: F1:F3:19:65:A2:75:ED:67:C9: 79:08	54:D0:41:92:9D:B3:20:F9:3A: AC:BB:E6:A1:A7:AB:05:16:83: F7:73:74:9A:59:4F:B2:FD:D0: 46:59:8E:E4:47
C=US, O=State of Colorado, OU=Office of Information Technology, CN=State of CO Device CA	67B24275C652C7FE20F 209556D119725	E3:6D:F2:AB:18:A5:BB:A8:AC :37:62:61:14:0C:96:E5:31:32: 32:C9	DE:EE:55:27:B7:53:A1:8D:02: BA:2D:AD:6D:FF:B6:74:CE:D0 :AF:65:7B:C0:F4:30:D4:B3:2D :97:58:0F:4D:0E
C=US, O=U.S. Government, OU=MCC, CN=Millennium Challenge Corporation Medium HW CA	5FBD68A82CED07F6CC 8DD4481FC398E4	03:52:5B:98:FC:F3:80:F4:77: 49:18:EE:0C:BA:D0:DE:2F:E3: 55:34	4B:E6:E2:8F:4E:0D:6B:49:ED: 31:F8:51:C5:AD:79:5E:33:41: C6:19:B7:DC:D3:88:D1:71:13: 28:A2:64:01:4C
C=US, O=U.S. Government, OU=U.S. Senate, OU=Office of the Sergeant at Arms, CN=Senate PIV-I CA	09FD35D37B429BDA2E9 47D502B4C1E4C	83:F8:53:16:47:EB:A2:D9:9C: B2:5A:0D:1B:5E:47:C4:EB:EB: 66:D4	91:27:78:3B:F5:19:0D:85:BC: 52:48:36:41:45:AA:68:3E:C4: 9C:D6:3F:34:47:21:B3:91:4E: 2C:AF:61:D7:A0
C=US, O=U.S. Government, OU=U.S. Senate, OU=Office of the Sergeant at Arms, CN=Senate PIV-I Device CA	03F9150D0A44EDCF61F 96C6559017349	0E:14:AB:46:3B:61:31:DF:1A: 18:4C:5B:BB:2A:30:96:E1:9C: 0B:31	CC:6D:4E:8F:D2:05:99:A8:CC :23:E7:39:77:4E:AF:B7:0D:03 :B2:4A:82:4C:0E:05:D9:46:66 :F5:E2:9F:C5:CA
C=US, O=Amtrak Police Department, CN=APD MEAS Medium HW CA	455D313EDDF650629DC 735F7C13ECB84	E6:BD:F8:DB:6B:45:D6:3C:2F: 19:CC:3F:5B:32:3C:4C:02:65: E5:AA	F6:37:F3:FD:04:43:E9:C2:9C: 29:A0:02:8A:75:CA:4A:FF:71: 9B:C6:A8:79:F6:D9:E0:2B:99: 01:44:83:57:C3



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Booz Allen Hamilton, OU=Certification Authorities, CN=Booz Allen Hamilton CA 02	7B15016346C0BD9532E A3B3EE366E865	F8:9A:25:F0:D3:5D:67:F9:45: 40:CF:69:6E:79:86:06:88:98: 59:C0	8D:C2:94:C3:AA:3D:C6:1B:A5 :DD:3D:88:E6:D1:44:4A:50:A6 :6B:F1:FC:E7:1C:0E:59:69:F6 :C7:38:31:E8:98
C=US, O=Booz Allen Hamilton, OU=Certification Authorities, CN=Booz Allen Hamilton Device CA 02	6E9ED777FB55AAF0D72 BFE4A0E8ED7A8	8C:80:06:F1:53:52:38:BD:09: CB:A8:4A:A6:63:E5:1D:21:18: EC:A3	09:BB:FF:D5:99:E3:38:43:38: 3B:F2:EB:60:D1:51:52:33:9B: 31:EF:4D:BE:C9:A6:F2:3D:2A: DF:09:2E:73:61
C=US, O=Computer Sciences Corporation, OU=NPS, CN=CSC CA - 2	547B28C1E722F86897C F9ADF96940EC6	B3:4B:9D:DF:3C:59:05:D1:28: D9:51:D5:0E:F9:7D:41:29:55: 4B:BA	02:68:A9:65:B1:70:33:3E:C1: 63:8E:0B:16:74:59:45:27:42: 14:E2:EB:51:DA:0D:6E:5F:8E: 0E:44:30:8F:B2
C=US, O=Computer Sciences Corporation, OU=NPS, CN=CSC Device CA - G2	46FD677950339931DB5 4B57754C390E0	C5:3D:41:7A:2F:F7:8E:49:58: E0:B8:76:A7:C7:E1:4F:6F:66: 1A:40	87:BC:21:D2:1C:E7:94:E1:A2: 7B:B2:C5:1A:53:DC:23:9B:AB :62:5E:A3:B4:D7:48:DA:E9:83 :4C:F1:53:58:DA
C=US, O=Computer Sciences Corporation, OU=NPS, CN=CSC Device CA - G2	6FE860178E583DA94FE 0653083AC9632	CE:E1:6F:E7:11:D6:6E:7F:5F: 87:5E:4D:30:FF:7D:46:9A:A3: 0E:D5	39:C2:ED:E3:BA:52:37:A0:5F: 70:EA:46:4C:12:41:1D:43:C6: F5:FD:5E:CF:34:9A:05:14:A5: 4C:86:DF:45:B6
C=US, O=Eid Passport, Inc., CN=Eid Passport LRA CA 1	369B091F2B77A35538E C0020C3750D5C	80:25:C5:5A:C9:3B:E4:F3:00: 17:B7:CB:FB:01:C8:F0:13:AE: 71:4F	DC:15:8D:B6:1F:A7:70:1E:32: 46:2C:C5:46:3D:77:4E:5C:1B: 84:EF:9C:82:FC:60:1B:28:0A: 38:F0:79:49:31
C=US, O=EID Passport, Inc., CN=EID Passport LRA CA 1	2654D448498E78F7C22 3CF61FC80928C	E3:28:A5:03:93:A6:BD:03:A1: 98:C8:01:E3:A8:0C:F8:28:FC: 52:13	C5:10:FB:DE:21:FE:42:B8:70: 34:A6:64:0B:28:D5:27:BC:D6: 83:2F:65:A4:9C:C0:BB:53:16: 8C:99:54:AC:65
C=US, O=EID Passport, Inc., CN=EID Passport LRA Content Signer CA 1	684E5892724DE19748D 7F07FA994579F	16:D0:0C:42:56:74:A8:B5:45: 82:1E:A0:64:F0:22:2D:44:B4: FA:9D	27:E9:43:47:83:9E:BE:C7:63: EC:44:1C:25:0A:E7:E9:75:4B: D1:5C:25:C4:7D:74:EB:3C:73: 78:D6:47:E4:53
C=US, O=Eid Passport, Inc., CN=Eid Passport LRA Content Signer CA 1	7618E736D631E9CA237 40139E5380804	C0:8A:F2:AE:6F:76:C6:7F:25: 81:28:80:4B:6F:DE:A0:9B:31: 43:E1	03:30:F3:B5:82:F3:82:74:3C: B5:F8:3C:92:83:19:39:89:F0: A5:E4:A7:6E:A7:FE:26:A3:98: E3:11:0B:50:08
C=US, O=Eid Passport, Inc., CN=Eid PIV-I Test CA	795889D865F6EA5A791 DB17E5CDA7591	FB:38:B6:98:CE:AE:70:F9:41: C3:D8:82:06:81:B0:82:73:97: 8C:24	97:C7:8E:41:48:FB:B3:1D:9F: 9C:41:87:DB:8C:14:DF:58:95: 67:6E:D3:88:57:54:05:05:EF: ED:99:0C:FD:01
C=US, O=Eid Passport, Inc., CN=Eid PIV-I Test Device CA	5372869BA513A89FE7B OCCAD7A251ADA	6A:FA:20:DE:0C:76:FC:1A:57: B5:2B:B7:31:D6:62:BD:83:15: 4D:FA	9D:90:EA:EC:2F:01:71:2E:CF: 0D:79:26:B2:B2:30:B5:97:1D: 4E:E0:04:F2:1F:31:C5:51:2C: 83:E8:70:78:46



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Eid Passport, Inc., CN=RAPIDGate PIV-I Agency CA	7C5123D5F59B9A2C88E D864873B1EE68	DE:6E:C5:29:7A:56:FA:57:D0: 16:62:5A:C3:CC:8A:F5:23:4B: 39:6B	D1:81:5F:25:23:40:9D:1E:7C: 93:76:59:43:86:DA:36:F9:86: 99:25:79:F4:2A:B9:00:A6:0B: 06:FB:FB:12:CA
C=US, O=Eid Passport, Inc., CN=RAPIDGate PIV-I Device CA	4D32A64D4588CF5241A 9D92890AFC152	E8:EA:F8:13:25:33:D5:C7:F0: 99:64:49:7D:85:BE:17:2C:82: CB:27	09:61:9A:CF:9B:28:3E:EA:C7: A7:3A:91:CD:71:EB:68:51:55: D1:97:6E:69:B6:9C:B9:68:4A: 1F:E8:67:03:BA
C=US, O=Eid Passport, Inc., CN=RAPIDGate-Premier CA	1414A035C1288EC17AD 8FD3D1171E211	61:71:C2:76:18:99:6F:E4:E7: C2:48:F2:3F:17:51:59:8B:5E: 0F:08	EC:35:73:DD:8C:8A:EC:C2:53 :10:87:DC:63:D6:39:D1:82:49 :47:2F:7D:AE:A1:AB:AD:88:57 :C2:6F:70:8C:FA
C=US, O=Eid Passport, Inc., CN=RAPIDGate-Premier Device CA	6F57414BD9853E920C7 D5ED295B2C594	B3:5E:82:DC:78:F7:16:58:8A: 04:D3:59:31:8D:BB:B8:71:B4: 4F:03	97:37:D1:7F:66:57:45:DD:C5: 77:1D:2F:1F:46:95:DA:A7:E1: DA:85:7F:34:B0:B4:99:26:C6: 30:B4:91:92:89
C=US, O=HID Global, OU=Certificate Authorities, CN=HIDSigningCA2	59E715132E9E1E8FD2D C91C4939922F6	41:05:B9:A4:46:58:EF:4A:91: 7F:7A:BF:AA:5C:97:58:78:EA: 59:40	F6:A3:44:AF:37:24:E0:F9:BF: C6:70:51:3E:A4:3C:D3:87:24: 02:42:4C:61:61:40:05:75:A4: D3:43:E9:E4:EC
C=US, O=HID Global, OU=Certificate Authorities, CN=HIDSigningDeviceCA1	60FC8E8FA42B5761C88 52EE3DD0C64CB	BC:AF:F9:40:A5:1C:48:10:31: 50:31:13:65:26:B4:06:C3:D4: C9:48	3A:11:60:4F:3E:A3:90:82:F6: 59:15:20:AA:E5:9C:0A:62:56: 6E:E2:B1:A4:B6:AE:B7:57:C6: BF:7D:F3:A0:BD
C=US, O=ICF Incorporated LLC, OU=ICF International, CN=ICFI Device CA	69AEC83167D5026C504 8CF9AA542A672	10:2A:62:C0:12:57:62:74:92: E0:3E:C1:C9:E9:C2:6F:E2:40: 97:54	79:BA:D0:7D:D1:F9:A7:40:FE: 84:B4:2D:D7:C3:15:60:00:7D: 31:28:D2:8B:F6:06:B1:D8:59: 6C:CE:1C:CA:A0
C=US, O=ICF Incorporated LLC, OU=ICF International, CN=ICFI PIV Interoperable CA	7EF7F0186038DCFF484 2A2D8F3570BA3	14:77:93:46:E3:6F:D7:6D:66: 84:B0:E7:46:D7:60:19:A9:41: EB:B6	BC:98:3B:E6:43:56:22:EF:64: C8:EF:D2:30:84:D6:F8:E5:DC: FB:E9:D7:BC:FC:E6:A5:E5:1C: 75:A2:9D:54:9A
C=US, O=ICF Incorporated LLC, OU=ICF International, CN=ICFI PIV Interoperable CA	017F58CF4020CD0DEE0 DF7B5D2C7DF47	A3:20:60:18:F2:8F:96:D1:AA: 66:7F:76:65:FD:B8:52:A7:BB: 52:7A	82:95:D3:EB:42:F6:57:1C:26: 17:12:77:25:AC:C1:FD:33:5A: 2B:25:C2:C4:C3:8D:8C:04:08: 7B:E1:49:4D:ED
C=US, O=Noblis, CN=Noblis CA - G2	476B8E3FF2C064A9217 1A881DF48F702	B8:48:9F:56:61:10:09:BD:CF: 27:3D:22:44:80:D1:9D:60:A5: 5D:13	26:85:FD:10:C1:1D:72:61:9F: D1:CD:BA:F1:F3:16:30:9C:9A: 4F:00:EF:97:D5:C5:82:CD:21: 5E:24:BE:96:C6
C=US, O=Oregon Health Authority, CN=Oregon Health Authority Medium Assurance CA	5D4D7B72BC33A36DF9 417223D63B3C69	D2:7A:A6:2D:85:6F:4A:93:96: 81:7D:24:CE:90:1F:C5:B0:EE: 95:2B	A6:58:7C:41:2F:6B:59:50:23: 31:A7:2A:ED:CB:4C:3D:DF:BA :A1:B3:12:27:D9:4F:93:2A:0D :C8:2A:04:39:04



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=State of Colorado, OU=Office of Information Technology, OU=COFRAC, CN=State of Colorado Device CA G2	1BB63AB730B1E013179 88AFECB905347	1C:35:E9:8A:CB:E3:66:A3:70: 85:01:F0:A9:3F:DD:A3:87:36: 90:8F	68:DC:36:1F:54:19:5A:3D:93: 6E:2D:E9:C1:D8:F4:C2:DE:6E: 81:30:C7:F9:D5:7A:CE:3A:4E: D8:C0:16:7B:6F
C=US, O=State of Colorado, OU=Office of Information Technology, OU=COFRAC, CN=State of Colorado Medium HW CA G2	635089D2C31B80E8F49 0C3467F214700	C6:B6:EE:CE:8C:D6:03:F1:7A: 8B:4E:86:8C:06:0D:23:5A:B3: 8F:0D	C9:7B:EC:F3:24:F6:FF:90:DF: 25:52:9B:3B:66:17:9B:14:DE: A8:1A:04:24:B5:EC:03:1C:3C: 7C:D7:EC:8E:A5
C=US, O=State of Florida, CN=State of Florida AHCA Medium Assurance CA	0F33D1CE3340916981B 8AA5FBD454B79	F7:4E:81:2A:84:CC:C6:0B:17: CB:32:A2:11:80:FA:06:A7:A2: AD:85	F1:0D:7C:4B:3E:94:80:9F:B2: DB:39:AC:B0:82:BD:FA:91:7B: :80:B3:04:EC:0F:7A:29:0A:26 :84:84:7C:40:24
C=US, O=State of Kansas, CN=State of Kansas Non Federal SSP CA G2	394F9A116B244FC953D 9B46BA1BB53AC	BE:57:77:74:91:2F:6F:3D:1A: D3:C9:A0:56:76:01:34:C3:1C: 56:13	6E:2B:E4:A0:11:EA:05:00:BE: AF:A5:83:F2:E9:16:89:3E:1B: 11:41:88:4D:B1:38:E8:25:0A: 4E:77:D3:E6:1B
C=US, O=Symantec Corporation, OU=Healthcare Applications, CN=Symantec Healthcare CA	39286F9F3C17065603D 5FEA95110FF42	BD:64:39:91:DF:ED:79:BB:C9: 24:CF:90:12:7B:14:CB:33:DD: 90:C8	BE:82:2F:D4:2C:18:C9:9C:40: D2:F5:CE:F9:2E:18:12:E5:36: C3:5D:1B:4B:B2:08:D8:D1:7F: 5E:D1:F1:A5:38
C=US, O=Symantec Corporation, OU=Organization Signing, CN=Symantec Non Federal SSP Organization Signing CA	36C13DB922580EB9672 7B8161095EE93	EA:7E:CC:C9:02:3F:C5:3B:77: 26:F4:00:57:B2:C2:B4:F5:7B: 24:9D	D0:08:7F:05:75:9D:6D:44:8E: 1F:AE:1A:91:F9:E7:75:B8:DD: 7E:3E:3E:DE:0A:A6:B6:71:3E: F2:B2:72:7C:55
C=US, O=U.S. Government, OU=MCC, CN=Millennium Challenge Corporation Medium HW CA - G2	4CF5B1F83DE78A00C4F BAD4D5E761D08	B7:81:96:70:B3:88:76:20:27: 93:3B:A5:7D:FE:3A:88:52:6F: 45:5F	A3:AC:11:CD:A1:B2:CE:DB:F0 :1A:4E:EE:C0:36:31:17:5B:87 :EB:EE:FA:1F:5A:A0:B5:28:6F :D1:21:3A:8F:FC
C=US, O=U.S. Government, OU=U.S. Senate, OU=Office of the Sergeant at Arms, CN=Senate PIV-I CA G2	0954E4BCD441044BCB1 44691027E0DB4	4B:EA:1A:78:ED:4B:9B:E5:A4: 12:34:EA:E8:D6:44:5D:9C:AB: 74:72	B4:7B:EE:D2:D7:BC:18:12:EB: CD:ED:66:0A:2A:03:92:43:5B: 98:5C:F0:08:28:07:32:20:97: 65:8F:C7:22:62
C=US, O=U.S. Government, OU=U.S. Senate, OU=Office of the Sergeant at Arms, CN=Senate PIV-I Device CA G2	74AC3284C494BBB4B4C F2E3473BB6992	81:F8:35:5A:1A:EE:28:31:CB: 69:2F:37:ED:7C:26:C2:F5:DA: 60:E1	92:A0:CB:DD:5A:D2:E7:73:C5 :A8:2B:48:EF:1B:62:64:E3:E6 :87:98:C6:48:71:6C:AB:EE:27 :8F:57:EB:C2:EE
C=AU, O=VeriSign Australia, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com.au/rpa (c)10, CN=VSA Class 3 Managed PKI Enterprise Administrator CA - G2	1A8698DA8CC7DF0344F 08A3DDBB620D4	70:83:2A:0A:D2:1F:6C:C3:DF: 82:1A:05:83:FB:E0:39:1F:09: B7:09	DC:B6:C7:95:5E:A1:4C:28:FC: 1C:DB:C1:E7:8A:1F:56:B9:DC :B6:50:AE:05:A2:FF:64:41:D5 :F1:B8:FC:2E:FC
C=AU, O=VeriSign Australia, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com.au/rpa (c)10, CN=VSA Class 3 Managed PKI Operational Administrator CA - G2	22306CC830D1DAFB040 5A069B9967ADC	A9:6A:2A:EE:50:14:C1:BE:25: BD:03:46:07:AF:6A:FB:A5:84: 18:CF	01:6D:20:8E:7B:F0:F7:26:08: A3:53:94:CB:1C:78:30:16:49: 87:80:27:0A:88:71:A8:E9:44: 2C:6A:6B:9C:B5



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia ECC DV CA - G9	6DFF21109CB0A35940A7850D70B97913	36:28:72:EA:6F:16:23:5A:90:OD:90:60:40:2B:38:15:A9:C0:E6:05	15:7D:3A:B9:9D:C5:1A:C9:F5:F4:F1:0C:43:C6:85:42:AC:6B:16:23:63:8F:1D:51:1E:8E:EA:11:C4:88:E9:08
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia ECC DV CA - G9	73410D3D10DB468CE353CDE06AB66B74	60:DC:47:B7:99:65:57:83:45:A8:FF:71:2C:BF:B9:F2:6F:4E:5B:CF	7F:03:8A:44:FC:04:49:18:B6:A8:9E:2B:95:55:7D:4B:43:80:31:95:8E:62:85:CD:E2:E0:5F:B7:E1:CC:B3:8A
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia RSA DV CA - G8	2638DC5EB7C68D30A2D6E83F00479896	3F:B1:7D:9F:02:58:EA:BD:4F:AC:04:E7:74:52:5F:58:C1:0F:56:D3	D6:4C:1E:38:CB:68:A4:63:62:37:9A:33:2E:5E:D3:D8:A8:44:36:65:E6:25:1A:19:B1:40:53:BE:03:03:34:51
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia RSA DV CA - G8	0AE50428424CE318719455EB68F712A5	67:90:18:03:65:A8:DC:D6:52:94:4D:37:AE:AD:BC:66:6A:90:91:FC	6C:1F:52:00:A1:15:88:0E:D3:F6:5E:36:CA:79:50:89:96:8E:50:FB:4E:CC:FF:30:D1:9B:08:47:90:9C:51:44
C=CN, O=TrustAsia Technologies, Inc., OU=Symantec Trust Network, OU=Domain Validated SSL, CN=TrustAsia DV SSL CA - G5	3A100E7F109E1AC59CC5FFF640D5E442	51:A5:1E:10:E1:FA:FD:5A:2C:50:08:0E:CD:E5:56:73:AC:E7:5A:1F	B4:1A:B8:45:CA:B4:DB:9C:B1:FE:65:05:76:5F:36:A0:86:8A:DC:5D:F4:19:B3:89:79:FB:6A:4F:E4:13:1F:70
C=CN, O=TrustAsia Technologies, Inc., OU=Symantec Trust Network, OU=Domain Validated SSL, CN=TrustAsia DV SSL CA - G6	15C20B71AC2C36527A07667D871BC6D8	A6:33:0A:ED:72:6F:80:67:B5:80:04:E1:89:22:76:8A:B5:A9:11:0B	B9:0E:17:AB:4B:87:78:B1:0F:9F:28:CB:AA:76:64:DE:2E:E3:D6:6E:1A:FC:57:4D:16:8E:DD:24:A1:03:39:FF
C=CN, O=TrustAsia Technologies, Inc., OU=Symantec Trust Network, OU=Domain Validated SSL, CN=TrustAsia ECC DV SSL CA - G7	25815D93D5C9B8A65E7F367C01D3C3D2	97:11:31:77:A5:41:19:04:F3:57:88:B0:3E:E7:9E:18:D5:3B:FA:97	AD:80:6A:93:57:B8:7D:1E:B1:DD:85:A5:A3:C0:92:D0:20:4B:A4:47:FF:4B:37:14:E3:F1:03:4F:4D:3D:E8:A0
C=CN, O=TrustAsia Technologies, Inc., OU=Symantec Trust Network, OU=Domain Validated SSL, CN=TrustAsia Technologies, Inc. DV SSL CA - G3	5E6A370085B654779E268474A34F5119	DC:FF:49:03:16:2E:7B:D6:A6:25:BA:D5:7B:39:42:AE:70:2B:53:1A	7E:12:64:6B:4C:25:25:74:79:EC:DC:4F:BE:DF:A5:22:5B:F5:C4:52:03:01:EA:BB:1F:FF:A2:56:6C:93:25:60
C=CN, O=TrustAsia Technologies, Inc., OU=Symantec Trust Network, OU=Domain Validated SSL, CN=TrustAsia Technologies, Inc. DV SSL CA - G4	40EBB46B967DAC2930E8D93B460D7F01	AB:D1:2B:FD:ED:67:B4:0D:56:7C:62:3F:EB:3A:C9:F0:5B:91:48:DF	E2:87:EF:DE:5F:79:1B:80:8D:AC:D5:55:0B:A2:BD:19:0E:74:30:54:25:7B:3B:25:5B:2E:83:0F:C1:DA:89:CF
C=DE, O=CertCenter AG, OU=Domain Validated SSL, CN=AlwaysOnSSL Web PKI RSA DV CA - G1	59F3D4B279D2174E1285655811AFCA44	22:75:26:FB:3D:48:31:FB:BE:F1:29:D5:BF:16:FB:E2:B3:0A:0D:4B	47:9A:91:F6:93:68:BE:C9:B4:D8:A6:92:EF:D9:38:D1:E9:48:C7:33:30:2E:E0:B9:C4:90:06:F3:62:F6:65:88
C=DE, O=CertCenter AG, OU=Domain Validated SSL, CN=AlwaysOnSSL Web PKI RSA DV CA - G1	39E2AFD308BE0130F17D0E825A2AF5BC	EB:7C:BA:6F:62:FA:D1:D1:2D:5A:AA:F6:61:AE:03:9D:CA:9D:97:41	09:BA:1A:34:CA:16:6C:C2:34:66:01:F1:3C:34:5B:B3:28:9C:54:B2:23:2D:E7:57:11:99:EA:0F:E0:50:CD:67



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=DE, O=STRATO AG, OU=Domain Validated SSL, CN=STRATO Web PKI RSA DV CA - G1	2917D03AE05D392A449 80C52A4364666	2E:FF:07:98:88:33:08:AB:1F: C7:49:79:A6:9F:8B:9B:41:68: 8F:C3	A3:EC:7D:8B:BB:8B:9F:99:28: 7B:CA:4C:AC:67:A4:65:01:D5 :43:24:AC:B6:A0:78:15:14:ED :D5:11:B1:9E:BE
C=IS, O=Advania, OU=Symantec Trust Network, CN=Advania SC Class 3 Consumer Individual Subscriber CA	0FF5651AA9B3F4D6A2D 72C02C9D4FF45	B7:00:71:15:BB:11:C0:E4:88: AC:B6:6F:B1:9F:EF:1B:CD:8B: 4B:78	70:8E:45:A6:4B:54:D2:E9:1F: 6C:7C:99:F5:1E:64:B4:7D:DD: FA:3D:15:04:8F:79:BB:86:6F: E6:05:B2:62:3A
C=IS, O=Advania, OU=Symantec Trust Network, CN=Advania SC Class 3 Consumer Individual Subscriber CA	4EB2843216F63CA92D1 FC947834015E4	E3:37:A0:0F:76:FC:4F:D8:9A: 83:61:A5:1C:60:33:26:B5:6C: 40:F1	8B:FC:A8:22:FE:73:83:C6:85: F0:5D:69:EA:BB:01:F0:DE:31: 4B:D3:44:E4:A8:43:C3:59:37: 66:BA:80:48:2C
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa(c)08 , CN=VeriSign Japan Class 3 MPKI Enterprise Administrator CA - G3	4F1F16C0A1BB833DB0A 33EA85B284918	E0:10:98:54:6E:A0:6F:B5:34: E3:69:5B:96:E5:BD:1E:67:C7: AA:B5	0C:C8:DD:55:87:7C:ED:80:CF :9E:55:35:31:18:37:D7:17:28: 10:BB:F0:98:E5:79:7F:56:3A: 4A:AA:94:A9:E8
C=JP, O=VeriSign Japan K.K., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.co.jp/rpa(c)08 , CN=VeriSign Japan Class 3 MPKI Enterprise Administrator CA - G3	62FC3BA71842BFCA904 DD0FB65303D68	EE:F6:36:43:93:C4:4D:27:F8: 63:D2:44:D5:95:72:E6:F2:08: A5:51	2E:3D:FA:EA:7C:0C:ED:71:D1 :22:4C:62:0A:FF:FC:FF:C3:DE :7E:A9:F8:78:BB:D3:8B:F0:D7 :1D:55:B3:F0:2A
C=NL, O=Trust Provider B.V., OU=Domain Validated SSL, CN=Trust Provider B.V. Web PKI RSA DV CA - G1	14AFAB551140D28D0F9 D6F97E95EB481	85:FE:52:98:00:30:B9:83:BD: CE:91:D1:5E:DD:98:9B:69:67: 4E:C0	0B:33:61:60:6B:BB:C6:66:26: 8A:46:07:C5:D3:88:60:05:0A: 49:98:1E:0A:F2:9C:26:CD:A8: 3B:33:97:0E:85
C=NL, O=Trust Provider B.V., OU=Domain Validated SSL, CN=Trust Provider B.V. Web PKI RSA DV CA - G1	2F355878F925737BC7D E3924D0166BF6	E4:50:45:FB:13:6A:4B:2E:0F: 50:E6:40:60:08:7F:46:26:C4: F0:A4	67:FF:03:C0:C0:1D:1F:01:D4: 00:6E:B8:69:B4:53:F1:15:AE: 48:EC:B7:51:7F:29:C3:0C:D0: 1A:FE:76:F4:95
C=NZ, O=IBM New Zealand Limited, OU=Symantec Trust Network, CN=IBM New Zealand Limited Public CA	7C8E8FF07BCA9C7A1A B3E26BE3729410	DC:4B:C2:BD:A3:A8:7D:5F:8F :B1:8D:73:CA:BF:BC:4E:F6:96 :D6:12	A6:AE:79:59:A1:95:74:9C:A8: 87:38:6F:A0:44:82:BD:16:9D: C1:15:7E:31:2D:30:1B:0D:5C: 33:3F:AF:2B:02
C=US, O=Blue Coat Systems, Inc., OU=Symantec Trust Network, CN=Blue Coat Public Services Intermediate CA	51630EBDFE2D8FFC797 103763D7552C3	8E:DC:EE:98:F5:78:8D:38:B8: D8:AD:0E:0C:61:37:A6:FB:D1: 66:6D	AF:70:11:C3:EF:70:A7:96:26: B1:43:A7:14:99:96:FF:15:2F: 75:62:85:1D:08:C3:AA:DC:DE :E8:29:9E:57:2B
C=US, O=GeoTrust Inc., OU=Domain Validated SSL, CN=GeoTrust Class 3 Web PKI RSA DV CA - G1	6BD1C36F56DEA906269 2F147D2A13172	21:C1:C9:A0:78:C8:39:43:1B: 7C:69:7A:5E:9F:3F:30:DB:F7: C2:E0	7D:EC:B7:88:02:94:C6:81:D6: 19:79:53:4C:1C:2F:1D:88:AD: FA:AE:8A:57:33:CD:2D:B6:73: 0E:05:E2:A5:47



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=GeoTrust Inc., OU=Domain Validated SSL, CN=GeoTrust Class 3 Web PKI RSA DV CA - G1	12505462FFDFFBAFA09DB009DB7AA700	F7:D9:8A:CC:BB:0D:40:C2:69:12:B0:09:06:2B:94:6C:9E:01:07:B6	3B:FD:23:AE:50:48:3D:76:58:99:80:B7:67:27:CB:96:51:0A:BC:70:9C:91:7C:4C:3A:43:0D:7A:43:D1:14:58
C=US, O=GeoTrust Inc., OU=Domain Validated SSL, CN=RapidSSL Class 3 Web PKI RSA DV CA - G1	2AF4390332BAB50CBC781CBB3400FF95	4C:03:A7:CE:30:0E:0C:FB:3F:02:31:39:AD:9A:F4:6E:4B:66:C1:74	40:6C:3B:BD:7D:08:EA:DF:E8:A6:2E:8A:52:C5:7F:7C:BD:43:83:DA:ED:BD:32:3E:66:CF:78:B0:B9:A1:AA:9D
C=US, O=GeoTrust Inc., OU=Domain Validated SSL, CN=RapidSSL Class 3 Web PKI RSA DV CA - G1	4238AE5F4CB56A05D042A983076CA1DF	84:A0:AF:53:56:B6:B8:C6:15:8A:4A:58:27:5E:A9:45:C1:B9:CE:49	4B:04:99:89:E0:34:CC:16:F5:86:24:7B:0D:38:78:95:0F:39:38:2E:28:E1:10:87:42:0B:AF:2B:6F:27:D6:79
C=US, O=GeoTrust Inc., OU=Extended Validation SSL, CN=GeoTrust Class 3 Web PKI RSA EV CA - G1	77C4E83780DFB3946A0F6C9F029D76C9	81:79:65:22:37:BC:2D:B5:F5:E1:CC:6D:6D:48:18:7C:CA:58:59:1B	17:69:80:6F:D5:68:40:9E:98:5E:1F:30:61:F2:D4:25:CD:B6:F4:19:9E:CC:D3:E7:F4:2B:7C:07:A5:47:FD:66
C=US, O=GeoTrust Inc., OU=Extended Validation SSL, CN=GeoTrust Class 3 Web PKI RSA EV CA - G1	75206CABFB5ED21CD96AE287809DC45A	B5:43:0C:91:AA:71:FA:08:E5:72:DA:AF:C8:36:14:28:77:FF:63:C0	E8:41:E1:36:D3:85:3D:E0:C9:B8:D3:A7:01:66:AD:EE:A9:76:7B:F0:94:2E:C8:B1:8A:18:06:DB:A8:72:04:C2
C=US, O=GeoTrust Inc., OU=Organization Validated SSL, CN=GeoTrust Class 3 Web PKI RSA OV CA - G1	630B2556A1B073D08791A6645CD678C7	43:A9:74:9E:9A:AC:D7:C2:8B:E6:51:25:30:DA:86:FC:94:51:72:24	E5:7B:96:72:61:9D:2C:58:C6:80:5A:2A:05:8C:8A:2C:3E:41:8E:33:7F:95:8E:26:65:BB:1C:F6:DD:2E:D0:41
C=US, O=GeoTrust Inc., OU=Organization Validated SSL, CN=GeoTrust Class 3 Web PKI RSA OV CA - G1	54814F9C7DC8A363A617427928AF20CC	9B:CC:FC:B0:60:12:A3:AF:94:F1:86:A6:44:0D:AD:46:04:83:B0:46	FF:60:AD:08:32:C2:94:49:5C:90:76:BC:C0:09:D2:A4:60:38:ED:98:6F:E7:D1:1E:FA:54:A6:1E:76:AC:16:88
C=US, O=GeoTrust Inc., OU=Organization Validated SSL, CN=RapidSSL Class 3 Web PKI RSA OV CA - G1	7D9D7433209EE758C08D90AC0E0A9AC4	1C:5A:60:C9:8B:00:45:F9:A4:0F:C0:54:FE:1C:DD:F0:B4:CA:16:D9	8A:8F:5C:E1:DD:74:54:0A:8A:57:49:38:93:1F:22:7B:D6:E3:12:65:6E:7D:F6:BC:6E:3A:0E:B3:D8:90:35:20
C=US, O=GeoTrust Inc., OU=Organization Validated SSL, CN=RapidSSL Class 3 Web PKI RSA OV CA - G1	5F80B9489206D010DE26FA50AB89E00B	8F:F5:BB:22:77:F9:BE:E3:20:20:43:D4:48:00:C9:4B:13:53:C1:6B	5D:11:56:44:95:71:2E:AB:67:24:54:E4:B3:BD:E9:CC:E4:93:23:15:91:EF:DB:C4:0D:15:2C:3B:FE:FC:72:36
C=US, O=GeoTrust, Inc., OU=Domain Validated SSL, CN=GeoTrust Class 3 Web PKI ECC DV CA - G1	513E86B5319B102E925C9B5E5802B2DA	11:63:C2:3C:BE:9A:96:E0:11:B0:49:B7:80:DE:F7:B8:6D:E4:66:6F	13:E9:5E:44:CC:D1:32:FD:21:90:61:BF:9C:86:46:2A:31:9E:F6:C4:90:35:C7:E8:E1:7B:FA:A8:6C:9C:51:03
C=US, O=GeoTrust, Inc., OU=Domain Validated SSL, CN=GeoTrust Class 3 Web PKI ECC DV CA - G1	2C9F3029BAD05E04FC544C59EAF11F58	40:28:7C:56:06:AC:90:A2:80:B3:09:EE:FD:6B:26:F8:55:E6:53:4A	C5:EC:25:5A:B5:9D:A0:91:F5:87:B9:CE:14:61:BD:D6:3A:7D:56:41:1E:49:9F:24:FD:9C:5E:1C:FA:8A:3F:E0



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=GeoTrust, Inc., OU=Domain Validated SSL, CN=RapidSSL Class 3 Web PKI ECC DV CA - G1	3DB5DD80037303208E0 99E6A6BFEC4E8	5D:13:A1:73:E6:79:63:84:84: A7:B4:0C:EB:B3:02:9F:AE:B3: C2:70	CE:A2:3A:E9:7F:B7:3D:36:AA: D2:56:0A:B7:73:0A:1E:9D:7C: 21:C0:8E:80:0C:2B:05:33:C9: 67:30:EF:DE:92
C=US, O=GeoTrust, Inc., OU=Domain Validated SSL, CN=RapidSSL Class 3 Web PKI ECC DV CA - G1	124A1A2A28D54C65582 3973AD388B07A	87:9B:EF:12:03:E4:07:EE:A9: 24:10:BA:12:B7:B8:D7:98:5E: 90:36	23:03:30:E0:21:E9:B0:49:B9: 9A:16:66:9D:B6:8B:38:4C:35: DF:74:4D:6F:E1:85:13:20:B6: A8:BE:67:30:0C
C=US, O=GeoTrust, Inc., OU=Extended Validation SSL, CN=GeoTrust Class 3 Web PKI ECC EV CA - G1	1187E856BC92C7B5773 94AAACE312AF80	34:01:A4:1A:29:39:CC:64:CE: DB:A7:DE:D6:F5:FE:67:BC:A6 :7D:0E	52:3A:92:33:CA:2B:CE:63:14: 16:36:B5:73:7F:08:29:10:3F: 6B:5D:BE:BB:EF:8A:6E:BE:62: B1:6B:F3:95:0F
C=US, O=GeoTrust, Inc., OU=Extended Validation SSL, CN=GeoTrust Class 3 Web PKI ECC EV CA - G1	120B49D5FFBFB59C251 9F83452EED709	35:F1:AF:D5:BD:00:46:B9:6E: 92:C4:1C:BB:1C:8D:04:55:15: 6F:BF	6A:67:55:BA:10:DC:5D:5E:AE: 9B:EE:C7:AC:E8:D9:73:DE:53: D3:D1:85:01:74:D4:E0:2E:C2: 33:63:E1:2C:C8
C=US, O=GeoTrust, Inc., OU=Organization Validated SSL, CN=GeoTrust Class 3 Web PKI ECC OV CA - G1	1B3E2E1EB2F6BACAD36 6B3C21DEB85E6	16:E1:E3:4B:AE:7E:95:87:EB: AC:53:6D:1A:9B:6E:D8:43:3F: 91:A9	3C:4A:B6:84:92:BC:0D:76:AA: 06:DE:99:61:DF:25:77:4C:9E: F2:6C:AF:71:22:D3:99:2E:B8: B2:FA:31:35:49
C=US, O=GeoTrust, Inc., OU=Organization Validated SSL, CN=GeoTrust Class 3 Web PKI ECC OV CA - G1	38825D02F6311E62DBE 9869A326C268E	97:78:88:85:9D:65:45:82:3A: A9:37:BE:20:F3:B9:D2:6C:01: 3A:E8	3D:F7:31:77:2A:8B:6D:73:ED: 8B:F8:24:A9:10:3D:E2:BF:5B: 1A:A0:55:2C:F6:58:7F:EE:82: F6:EA:95:69:80
C=US, O=Oracle Corporation, OU=Symantec Trust Network, CN=Oracle SSL CA - G2	3135BB7E6DE2663AB0E 233E6B0E1A5CC	03:86:D9:39:CF:7B:A7:88:55: 27:34:18:5B:EA:D0:B1:3E:87: 39:14	E4:AF:2F:AE:41:18:7D:58:F2: 09:B0:1B:1D:87:53:C2:DC:CB: 3F:60:1C:E8:62:73:E3:7E:87: 38:C2:A5:CC:B5
C=US, O=Oracle Corporation, OU=Symantec Trust Network, OU=Organization Validated SSL, CN=Oracle Web PKI RSA OV CA - G1	4AB435DB9ABB51C2DF C5529EA71FA546	2F:44:11:74:43:88:29:49:97:7 C:BB:05:10:A1:C3:6C:DC:01: 2B:F9	5C:E4:0C:18:02:9E:9D:77:5F: 24:A4:E7:2E:4B:0E:D4:87:CD: 0A:BB:B9:AB:31:10:4D:AA:90: 7C:1A:97:BF:49
C=US, O=Oracle Corporation, OU=Symantec Trust Network, OU=Organization Validated SSL, CN=Oracle Web PKI RSA OV CA - G1	056B9C903E1D3C76585 B94E106C97E69	8A:74:0F:49:39:A1:58:EE:08: 05:5F:4B:D5:47:3E:52:6F:D5: 7F:08	70:BA:89:67:F6:92:26:9B:0E: 40:08:DA:12:54:D3:7E:A9:FA: 02:FC:1A:EB:A7:C4:AA:C2:20 :3D:A4:81:79:65
C=US, O=Oracle Corporation, OU=VeriSign Trust Network, OU=Class 3 MPKI Secure Server CA, CN=Oracle SSL CA	71636635EBF3823D7E1 30959A2D8E5DE	5B:FC:FD:DB:69:63:A8:70:C4: 91:13:A9:15:1C:E3:8A:C5:53: 57:1B	C7:6F:70:98:05:98:C6:6A:8E: 32:7E:17:B4:95:A2:27:62:65: C4:B9:A3:57:5E:FA:1D:55:05: 02:A8:23:D5:91
C=US, O=Oracle Corporation, OU=VeriSign Trust Network, OU=Class 3 MPKI Secure Server CA, CN=Oracle SSL CA	2585C838A4C935E3838 66B6BA2422FC7	4B:E8:0A:AC:65:90:EE:FE:50: 08:A5:A1:DD:33:40:66:54:BA: 32:2A	7F:68:89:FF:E8:B0:20:45:E2: CA:C9:9A:2F:2E:E4:F4:C2:EE: D2:49:34:B6:52:18:72:D3:4B: F8:12:67:1C:4B



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Symantec Corporation, OU=Adobe Trust Services, CN=Symantec AATL ECC Intermediate CA	7175CCDB5831CC21D0A8B5BDE1EB8CB	62:B6:3D:6E:19:F7:A4:69:D2:3C:F8:65:53:6A:00:93:E4:51:6A:C6	A2:C2:70:00:B6:BD:98:9B:46:21:FF:0D:45:F2:2E:01:5F:E4:FF:74:92:49:D1:D2:91:99:53:66:B0:5F:0D:7C
C=US, O=Symantec Corporation, OU=Adobe Trust Services, CN=Symantec AATL ECC Intermediate CA	466238E0044354250E81734AF400806E	ED:F7:A1:3C:25:A4:13:C5:0F:87:44:49:70:11:54:EE:3A:B4:53:51	68:A9:87:8D:55:AD:42:10:7C:FE:B7:58:E3:48:73:68:69:69:B0:A4:7C:74:68:FB:18:99:91:AC:B6:2D:A7:98
C=US, O=Symantec Corporation, OU=Adobe Trust Services, CN=Symantec AATL Intermediate CA	791D67504CFC93E9C34810FE6DBE6E21	4E:68:EB:95:2F:3C:30:5F:12:C9:4B:99:1E:71:BC:D1:F3:06:92:F6	D1:38:59:AF:77:C9:F6:9A:A6:36:3B:34:07:83:EE:EE:9D:4C:84:A1:F9:9C:14:B1:B1:C8:DB:CC:6C:A6:81:73
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Admin Intermediate Certificate Authority	4E2545EA7B4811D46F89BB855BDF324D	42:81:D0:3C:0A:22:59:61:54:76:71:DF:0B:AF:6A:93:CA:BC:B6:8D	06:2A:76:E5:19:6E:4C:62:20:AC:A7:D3:2A:A4:19:76:11:01:37:4C:11:86:6C:36:27:D5:F8:A0:55:EC:E2:CE
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Admin Intermediate Certificate Authority	38CDC26A02ABA9B2494C55785B011132	E3:25:61:06:E2:41:57:DE:25:CC:84:AB:31:90:48:32:8D:FD:08:9B	6D:0B:D6:E1:AC:0E:C3:98:EE:85:37:90:6D:98:F3:78:FC:7A:B4:9C:1E:29:6A:F2:33:37:4F:A5:A2:71:DB:34
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 ECC 256 bit EV CA - G2	71223CA522185EAC44CF1770D1A8AA5D	0B:69:D3:71:3F:1B:05:84:F1:C8:89:45:A8:5B:4C:EB:5F:CF:D7:21	66:36:36:C0:3F:D0:B5:B1:71:F2:B0:44:07:C3:DF:76:7B:34:9C:8A:99:0D:87:CE:48:58:98:16:6E:2B:51:20
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 ECC 256 bit EV CA - G3	4934B1B39646024939700C645B4F1FA0	5C:EB:F0:3C:1A:8F:E1:EA:16:19:57:AC:F9:44:66:D1:A8:8D:74:C4	4B:2C:BA:18:EF:BC:E6:C3:C4:A8:0A:AA:BC:95:23:37:00:0C:D9:34:6B:76:8D:06:24:12:A2:DE:D8:46:ED:C9
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 ECC 256 bit Extended Validation CA	4D955D20AF85C49F6925FBAB7C665F89	CA:C5:5F:77:BC:17:B2:47:B0:B9:F5:91:F5:8E:6A:E9:7B:FB:9E:1B	5A:D4:18:3B:54:F0:E2:76:2D:A8:D9:10:E1:E7:E9:F2:AB:2F:1B:C4:CE:6A:63:8F:0D:BB:F3:37:EB:4A:13:9F
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 ECC 256 bit SSL CA	0BB8A60497D81E27BBF5F2687D12FD04	16:17:2B:72:98:09:74:4A:36:E2:6B:A0:E5:A5:99:86:29:EF:8A:C3	AD:EB:F8:3F:D3:D3:F9:54:6B:B7:7F:AA:B5:16:DD:93:37:CC:F9:1E:11:98:F7:43:37:76:9E:C6:8E:6E:82:6E
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 ECC 256 bit SSL CA - G2	567F888DFFA505DA21E375370091936A	57:7A:8D:F6:E2:62:F9:A7:64:82:9D:A9:37:5D:94:D2:59:6F:20:AB	3B:6D:70:13:31:A8:CB:80:94:43:E4:2A:73:2B:AD:67:5F:22:5B:15:CC:43:9A:CF:26:A0:95:87:C8:85:EC:FD
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 ECC 256 bit SSL CA - G2	14DB7E7A40B856200DD8EB382C262BC0	DD:2B:89:2F:DB:0A:69:78:38:11:51:D6:62:98:0D:53:04:E9:E2:AE	74:EB:30:7A:78:AC:7E:85:70:CC:1B:AE:1C:51:10:2A:60:53:C9:6F:33:32:D7:03:28:5A:74:3B:CB:D3:5D:9E



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 ECC 256 bit SSL CA - G2	3F9287BE9D1DA4A37A9DF6282E775AC4	FE:3C:41:90:1F:36:59:C6:ED:DC:0C:1C:2D:85:D0:B2:0E:64:96:14	2E:28:61:28:9B:5C:CE:DE:CA:E4:C3:1B:F2:62:E0:FB:0C:29:B6:C1:53:05:73:44:27:31:CA:65:D8:21:E9:01
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 ECC 384 bit Extended Validation CA	7A760B273C322398D3D4F86B6EBB2D50	38:CC:3D:7E:F8:69:60:4D:B3:9D:34:FD:B7:BD:66:D0:74:42:E9:B6	77:FE:87:6A:1C:47:63:49:F5:EB:9A:E9:BF:53:F7:81:4A:0A:E4:11:56:26:67:C5:8B:7E:D2:78:69:C5:40:91
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 ECC 384 bit SSL CA	535E42B75BAE2F1EB66C725D2F10C6F6	B9:05:04:ED:56:CC:18:39:9D:23:54:0D:E2:46:68:02:C7:43:71:0B	14:21:45:83:E5:F4:9C:E2:DB:88:B9:3C:FE:3F:7D:81:B6:78:C8:6A:FB:CA:92:40:BA:A4:B9:E4:CE:90:BF:2C
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 EV SSL CA - G2	366585077A8867AB58F4A094F8103733	E4:99:59:A4:B3:36:AC:BD:2D:AC:75:9B:B5:21:B9:46:03:3E:82:3A	6C:66:B7:6E:68:D6:C7:9F:AF:E5:C9:4E:9B:7D:0C:F7:53:C7:15:CC:85:38:7E:11:32:3B:79:35:F8:61:C1:87
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 EV SSL CA - G3	7EE14A6F6FEFF2D37F3FAD654D3ADAB4	E3:FC:0A:D8:4F:2F:5A:83:ED:6F:86:F5:67:F8:B1:4B:40:DC:BF:12	9E:6B:C5:F9:EC:C5:24:60:E8:ED:C0:2C:64:4D:1B:E1:CB:9F:23:16:F4:1D:AF:3B:61:6A:0B:20:58:29:4B:31
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 EV SSL CA - G4	5398D1998C7CBF2310C0F999A0051833	A5:65:3F:4A:81:6E:00:09:7C:CF:0F:CC:65:6A:89:1B:29:BE:19:93	31:86:22:33:62:0E:78:93:30:CC:89:3E:8B:5E:66:70:53:31:B8:B8:8B:0E:D3:0A:44:57:4D:9E:0A:71:C4:F1
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 EV SSL SGC CA - G2	7A0F41DF1CCD14DCB269298EE22C6A35	37:8F:E7:3E:16:E4:F1:E3:39:49:B7:60:A3:BD:22:51:49:35:90:25	B2:74:5D:0A:9B:71:D9:48:F3:4E:92:1A:F5:9F:34:2A:DF:6E:40:7D:88:BC:51:D3:8A:C5:2B:58:3A:0E:BD:15
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Extended Validation Code Signing CA	6C59EFA9E100E10EE306BA8FE0292559	F8:D2:C1:03:80:ED:A2:77:46:55:E5:61:9D:B7:D0:2F:7D:9E:85:0A	16:9D:AF:83:C0:87:0A:B8:92:7C:99:D3:FC:07:74:DD:F3:4F:BA:28:B0:2B:88:1D:CD:0B:63:3B:6D:71:B2:BA
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Extended Validation Code Signing CA - G2	191A32CB759C97B8CFA C118DD5127F49	5B:8F:88:C8:0A:73:D3:5F:76:CD:41:2A:9E:74:E9:16:59:4D:FA:67	F7:26:C8:89:13:36:B1:B9:7C:BC:86:F5:96:F1:26:7F:C1:80:15:21:22:57:3E:76:D5:14:5A:7C:64:E2:CF:F7
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Extended Validation Code Signing CA - G3	2A953218E10B4B7B6FD14B2A9EC30D26	E9:EA:87:52:65:C6:A3:39:11:4B:3E:91:48:4E:E5:02:46:E4:A7:06	C2:67:DC:11:5D:57:DD:02:26:27:9B:34:6D:F1:95:3D:D2:C0:7A:85:CB:48:A0:D8:99:FD:57:24:F5:AF:68:1F
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Extended Validation SHA256 SSL CA	09B749FD7F0B4916CA055656CFF6D982	CD:F4:28:A8:90:D3:74:8C:5D:28:ED:1F:4C:69:49:9A:3E:16:F1:33	1F:9B:31:F8:20:92:9E:BF:A0:31:17:EC:2B:77:BA:6B:0F:B6:EC:C9:E0:27:68:2A:55:93:78:DA:31:1C:54:EF



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Managed PKI Administrator CA - G4	279B540CE029884522D 41481AE406EBA	B5:23:DE:44:81:C4:77:5D:5F: 5B:11:DC:AF:A7:29:61:EE:5F: 5D:02	5D:81:D0:AA:34:76:F4:8A:5A: 67:5D:6D:3E:6A:B7:66:BD:C8: AA:16:7A:1A:94:D7:9D:F9:1B: 42:51:08:2F:A4
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Organizational CA - G4	7073F023B8AA895A4EA 86BDF780F3A07	C9:75:8E:86:59:5C:6F:35:2E: 7E:14:A1:58:0D:FF:8A:9B:00: 4E:F8	6F:6B:2D:4A:30:9A:15:6C:61: 97:7F:BC:CF:7D:2A:C9:F5:96: 23:FF:CC:EA:C3:E4:EE:5A:83: A1:8D:89:52:75
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Organizational CA - G4	24D3C6B9184F6FC5E47 E7250C7ECB030	FB:D6:E2:E7:90:B5:66:E2:3F: 0F:1E:92:11:C2:0E:02:D6:8C: E0:C2	E3:71:0F:0C:66:7E:58:9D:E8: E4:AE:A3:7E:70:1A:FA:F3:FB: B6:27:57:62:E6:FE:A3:FD:66: 29:54:42:79:D6
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Organizational CA - G4	06A13ADA000BAB77B35 6DE957B9280E6	C7:C5:9A:89:91:86:28:21:F2: 35:75:23:DC:40:F8:69:DB:1C: 8F:92	FD:33:AE:FD:33:A1:61:FA:C0: 19:0E:41:DF:9D:D5:0C:33:39: E8:83:C0:3F:49:C4:A2:AB:2B: 89:56:EF:54:D4
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Registration Authority Intermediate CA	026C067ACE225063C5F 00EB132C9D939	AF:E0:6F:31:21:D6:0C:3B:EA: BD:64:2D:9C:6F:BC:7E:A0:03: E1:4C	83:C9:35:F3:4C:50:B7:66:54: 09:40:4A:FE:5D:FA:07:AD:CB: 5C:7B:52:B2:BE:FO:AC:6E:99: 3C:00:54:5D:76
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Registration Authority Intermediate CA	14D33F07E6160DB59D8 98CDEC14751A5	CC:F5:3C:01:49:EF:C2:BD:94: 47:FA:48:02:BB:00:E6:D0:70: 81:EB	5B:69:0E:1C:D2:BC:00:16:E4: DB:2A:AB:AB:50:37:45:E4:1F: 86:B2:44:8F:2E:C0:6D:29:F2: 49:99:DE:BC:A2
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Secure Server CA - G4	282E2791793392E428F 221A74EC937AE	CD:EE:2C:D3:C6:EE:A1:1D:B3 :35:AB:DB:9A:D5:6E:EA:F8:EF :C1:F6	56:4D:BC:6A:76:55:0F:D2:D4: F4:BA:C6:44:8A:11:57:B3:3C: BD:8E:0B:3F:D7:6D:72:10:75: 40:96:4A:85:B5
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Secure Server CA - G4	13B3E302180397668D5 034E0E674E28D	44:9E:3B:9F:21:04:A9:64:09: 32:6D:A6:F2:9B:B4:E8:46:9B: EF:D4	59:F8:CB:7D:7E:9E:13:CB:77: 8F:F6:21:98:EB:E0:55:51:B5: 15:A5:8B:BB:A2:EF:19:C3:3C: 76:0C:82:39:16
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Secure Server CA - G4	513FB9743870B734404 18D30930699FF	FF:67:36:7C:5C:D4:DE:4A:E1: 8B:CC:E1:D7:0F:DA:BD:7C:86 :61:35	EA:E7:2E:B4:54:BF:6C:39:77: EB:D2:89:E9:70:B2:F5:28:29: 49:19:00:93:D0:D2:6F:98:D0: F0:D6:A9:CF:17
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Secure Server SHA256 SSL CA	69879419D9E36270749 DBBE59DC6685E	E7:32:73:E5:3A:CF:E8:0F:41: 0B:3E:F4:6B:18:02:87:A0:04: 40:CD	E0:89:8A:D6:62:47:4B:9F:75: 3C:79:BE:A8:78:03:1C:9A:5D: 63:4A:49:ED:D6:31:0B:96:0A: B0:23:C0:2C:0E
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 SHA256 Code Signing CA	3D78D7F9764960B2617 DF4F01ECA862A	00:77:90:F6:56:1D:AD:89:B0: BC:D8:55:85:76:24:95:E3:58: F8:A5	58:2D:C1:D9:7A:79:0E:F0:4F: E2:56:7B:1E:C8:8C:26:B0:3B: F6:E9:99:37:CA:E6:A0:B5:03: 97:AD:20:BB:F8



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 SHA256 Code Signing CA - G2	7C1B35354AE7DB74E74 15F1169CA6BA8	13:92:E4:C7:FF:25:B9:51:7E: 93:10:77:BB:E2:66:4D:C8:7E: F7:0D	20:42:E3:8F:C5:73:88:F1:DB: 32:22:C7:AB:5B:E1:1C:6E:DB: 7E:45:4B:F4:54:87:AE:44:FF: 2D:6A:2B:76:45
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Shared Public Organization CA - SHA1	2CD28B18754D012A4E3 D7AF21567EB67	DD:5E:46:EF:42:38:2A:A2:40: 84:25:52:DE:77:EC:95:40:61: 51:52	A8:29:44:4A:D2:FB:48:07:9A: 59:5F:BB:D8:8C:4E:65:8E:E2: 08:9A:5E:12:9B:89:AA:AC:CE: 85:11:98:FF:D7
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Shared Public Organization CA - SHA256	63E8F4DEFFC155416A7 B978E661ED14B	AA:75:89:03:CA:A1:99:2B:0C: F1:C8:A9:3E:F1:5D:8D:41:28: 9A:CF	2F:72:01:9C:B4:5B:07:AB:05: CB:1B:B8:EC:C3:07:6D:70:72: 66:0B:57:A2:9E:42:EB:E2:AA: 57:B8:3B:C6:0B
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 SSP Intermediate CA - G3	45B1BEB5F3D47BFBC14 5F4D9179E22F2	55:DB:7B:0B:02:A0:CD:64:4E: 2B:B7:62:45:F8:F0:89:3A:E9: F9:A9	C4:92:FE:DA:1D:7B:D8:F7:6B: 33:19:C4:05:C8:36:86:D9:6E: 53:CE:46:AF:A8:29:7F:F8:4B: 5B:FD:4B:03:4C
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec SHA256 TimeStamping CA	7B05B1D449685144F7C 989D29C199D12	6F:C9:ED:B5:E0:0A:B6:41:51: C1:CD:FC:AC:74:AD:2C:7B:7E :3B:E4	F3:51:6D:DC:C8:AF:C8:08:78: 8B:D8:B0:E8:40:BD:A2:B5:E2: 3C:62:44:25:2C:A3:00:0B:B6: C8:71:70:40:2A
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Domain Validated SSL, CN=Symantec Basic DV SSL CA - G1	4C4CD8A0FC4FEAAE15 54A87F090EDA87	54:C5:AA:E5:07:D2:12:FD:07: 02:E0:90:70:66:1A:FD:59:53: 5C:57	52:6E:30:DE:D6:BF:9D:5C:E2: 16:F5:0C:83:24:02:B4:8A:B7: 0D:55:AE:DA:91:8A:18:73:A5: 88:3E:BD:B1:B5
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Domain Validated SSL, CN=Symantec Basic DV SSL CA - G2	1877F66568A782BBA9F B42DAE44E33D7	47:F2:DB:11:60:6B:7A:58:36: C5:B9:58:2C:EF:C3:3A:0D:67: C4:FE	DF:F5:83:E3:A1:ED:35:E5:7D: 95:10:48:17:AD:82:3C:05:5F: B9:07:1C:D4:00:43:5B:5F:C7: 4E:69:20:81:DB
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Domain Validated SSL, CN=Symantec Class 3 Web PKI ECC DV CA - G1	75422A9AB720ABFDDBA D5B45BA3B7CCD6	E5:8B:98:6B:AE:83:96:42:38: BA:5A:D8:90:1E:E6:FA:4E:01: 44:30	0B:FE:6B:96:08:54:FC:06:6A: 8E:79:6C:81:3A:46:32:46:71: D1:3F:2F:DC:2D:5C:EE:E1:B8: 2E:8C:5E:CA:93
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Domain Validated SSL, CN=Symantec Class 3 Web PKI ECC DV CA - G1	6B618A9D16D8319D286 64473244F0D23	E5:DC:C3:E5:75:33:17:8B:DA: 98:4F:6D:6F:0A:B6:70:61:F4: 0D:2F	5C:69:E8:2F:B2:48:F8:0B:5E: 43:14:B9:D2:C4:88:3E:D1:4F: 5A:06:D5:8F:10:9F:33:50:0E: 86:DD:C0:73:8F
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Domain Validated SSL, CN=Symantec Class 3 Web PKI RSA DV CA - G1	4EC6830D3861A32857D 7449444EDCD32	0E:E1:0E:D9:94:EE:2D:7F:1E: F7:B7:63:D1:B9:DF:57:0D:F5: C5:94	4D:F2:95:46:78:93:5B:E7:E8: 0A:E9:05:11:30:4B:08:FA:04: FF:40:BD:DA:69:CE:E3:33:DA :80:C1:3A:D3:10
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Domain Validated SSL, CN=Symantec Class 3 Web PKI RSA DV CA - G1	3834C6511AF4BD8D785 A422DD79847AE	1D:EA:D2:0D:F4:E6:91:E7:F2: 40:9B:C4:21:47:D2:F6:54:08: 5E:40	08:12:2F:5D:9A:8B:3D:B1:77: E6:CA:20:6E:CB:A6:8C:6E:C2: 51:06:68:C7:31:3F:A0:0B:B1: 7E:C8:8C:06:9B



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Extended Validation SSL, CN=Symantec Class 3 Web PKI ECC EV CA - G1	594FA398C84602E9A17B0A952AB6419A	5E:05:C1:3A:3F:9C:24:8C:7D:16:95:45:5F:B1:55:B0:E0:61:05:23	EE:F0:DF:01:CB:6B:92:9A:5F:BB:CE:41:14:7F:08:3F:49:C9:39:C9:3A:1B:CF:11:25:C7:F2:12:84:5C:D0:6C
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Extended Validation SSL, CN=Symantec Class 3 Web PKI ECC EV CA - G1	20044AAC18E52902F25460385F9D8BEF	EE:C5:84:18:DB:F2:79:31:DE:5A:F4:1B:B3:17:DF:47:9D:AF:3C:BE	B1:3F:9D:19:08:2D:8C:D7:CD:1B:EB:0A:B7:C2:45:ED:25:2F:21:AE:2A:30:16:3E:91:B6:E8:BE:2E:0E:96:14
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Extended Validation SSL, CN=Symantec Class 3 Web PKI RSA EV CA - G1	51F33CA5691C9A62C6462188572766A0	9D:66:7D:4C:E5:38:A3:3B:D0:6F:76:CA:82:5A:BC:B5:4A:5D:2C:93	56:2E:47:F4:43:A2:C1:DD:F6:41:4D:58:96:25:0F:46:53:C6:12:22:16:74:BD:D9:68:E7:6B:F5:49:3B:29:64
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Extended Validation SSL, CN=Symantec Class 3 Web PKI RSA EV CA - G1	0B6B506566F67A8403D970B7179252CE	BF:63:51:0D:A8:C9:7D:DF:D6:4A:67:68:57:A6:B9:51:22:EE:62:2F	87:B8:50:BD:37:15:C0:10:4B:5E:C9:D5:E8:0B:FE:78:85:0A:AE:41:25:55:9B:BC:DD:E0:85:24:97:0B:5A:FF
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Insattningsgaranti Service CA, CN=Symantec Class 3 Organizational CA - G3	71B16489BFDD39B7A34F3B2094C579E3	86:07:2C:CB:81:ED:8F:F4:73:63:D9:F3:5E:FD:65:C0:E4:06:FB:F6	CF:6F:24:FF:E4:8F:84:08:A7:5C:FA:DF:2B:65:F8:A4:E4:17:2F:3B:7C:24:C4:1B:5B:74:81:D2:40:18:19:7C
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Insattningsgaranti Service SHA256 CA, CN=Symantec Class 3 Organizational CA - G5	5439D1F8B5C1A15231EF40B64DABBCA0	F4:C8:DD:37:72:7A:8F:9F:9C:19:C1:5C:BE:D9:4C:76:2C:8F:90:B0	5C:CA:1F:2F:F3:9A:4A:89:24:A3:60:60:36:D8:AA:DE:2E:23:C0:24:EF:CA:FF:3D:C2:C6:67:59:FE:F7:76:FB
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Organization Validated SSL, CN=Symantec Class 3 Web PKI ECC OV CA - G1	50A33F08D1763AF0B88226270141BF02	6C:83:88:18:D8:25:5E:D2:31:13:05:AA:EA:80:0F:7D:2A:C8:65:CB	ED:34:8B:62:45:A3:C1:90:2C:7F:8E:F7:CC:A8:CF:05:4B:94:B8:F1:8C:D7:8A:A7:9A:36:BF:9C:32:99:82:6A
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Organization Validated SSL, CN=Symantec Class 3 Web PKI ECC OV CA - G1	435AF47519241BD9A2B878FF639DA2CF	C6:71:AF:FB:65:6E:83:C3:73:42:0D:9B:90:FD:85:EA:EE:B9:A7:B2	88:85:B6:6E:F8:F0:AE:20:1F:51:8D:88:F1:A2:24:54:D6:AD:C3:8B:2E:B4:89:14:55:AD:2C:ED:77:D1:43:2A
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Organization Validated SSL, CN=Symantec Class 3 Web PKI RSA OV CA - G1	7DAF5A80682E3077C1A2B3135D731DF6	AE:0C:B2:38:63:48:AF:85:AE:78:C0:3E:5E:E4:6B:F4:A3:CF:F0:69	A5:A6:B2:EF:89:14:26:EA:B0:F6:10:6B:2B:0B:13:2D:01:A1:CE:C5:20:08:5F:80:64:59:05:94:9B:D3:28:6A



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Organization Validated SSL, CN=Symantec Class 3 Web PKI RSA OV CA - G1	5DB3C7D2EE0C8E822B5 B337C4028A57E	BB:BC:4D:0D:65:4F:BC:6B:C9 :3E:35:5A:33:04:BD:8F:13:FF :9F:95	F4:5F:0C:B7:2B:A8:22:76:D1: 91:AC:7A:B1:6C:F2:0C:B3:38: B4:73:3F:CC:D5:32:9A:B5:DB: AE:38:45:CA:2F
C=US, O=Symantec Corporation, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, CN=Symantec Class 3 Admin Intermediate Certificate Authority	1FC4E48C98DE1214407 D6E316FCC8E3E	E0:61:A7:A7:19:A2:D6:F1:E6: 03:26:A7:4F:B2:D0:63:FC:C4: 43:D1	F7:1B:3E:31:B6:CE:7D:73:5E: 78:1D:B1:56:CD:D7:7F:99:3A: 3B:7A:14:19:50:58:D9:A6:D1: 5C:0A:97:C3:B3
C=US, O=Symantec Corporation, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, CN=Symantec Class 3 Organizational CA - G2	383AD93F4D4C6A2F1D B87486181A625B	51:42:61:ED:CD:64:E8:50:1C: 81:39:0E:C0:AC:AA:93:2D:78: 18:3C	F5:06:8C:42:93:A2:6A:0E:42: 0D:02:AE:4B:EF:27:00:83:77: E3:E7:EC:D8:E5:CF:19:44:28: 16:2E:3C:40:F4
C=US, O=Symantec Corporation, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, CN=Symantec Class 3 Organizational CA - G2	1A9EF98C09DFB7F3D45 486676718FEA6	7B:01:00:19:9F:0E:D0:F6:26: E0:B0:63:FE:2F:1A:41:EE:12: 1B:72	DD:E4:BE:BF:26:2C:9D:8D:F5 :CB:54:FE:4F:59:95:19:1E:AF :58:AD:CB:92:FE:5A:ED:31:28 :AC:0D:19:16:C7
C=US, O=Symantec Corporation, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, CN=Symantec Class 3 Organizational CA - G2	54B3765D515F9D0DEE4 9A7C0DA1FF5CA	1C:48:6D:AC:A6:15:29:EF:25: F8:DB:3B:49:4D:E2:F0:6C:A1: DD:7B	05:BD:D9:A7:C6:70:6D:39:D6 :DB:1A:58:0A:AF:F6:7D:46:73 :02:7B:6C:F0:1F:D1:53:67:D8 :ED:84:A8:90:F0
C=US, O=Symantec Corporation, OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)11, CN=Symantec Class 3 Registration Authority Intermediate CA	25090050CE7814FE6F6 2E10625CBDEA3	77:72:B0:DD:5F:C2:DC:72:80: C9:B3:30:FA:15:51:FC:78:E3: 4A:B5	CF:A1:F1:93:79:D9:F0:A3:FC: 8D:44:06:49:66:B6:97:12:76: 0A:E4:75:91:D8:65:1B:76:33: 17:54:69:A8:A7
C=US, O=Thawte, Inc., CN=Thawte SGC CA - G2	18A2236CD727C7528DF 67B4B856EFFED	BE:BC:70:D3:DF:2B:3F:8F:55: AE:D9:83:BF:20:F2:E3:B2:1A: 36:F6	0C:EB:F9:7D:1F:AB:C6:47:53: 79:9F:7A:9A:50:8C:7C:5F:2B: 58:B9:28:FB:1B:3C:DC:6C:41: 09:C0:CF:2E:99
C=US, O=thawte, Inc., OU=Domain Validated SSL, CN=thawte Class 3 Web PKI ECC DV CA - G1	5F7894773C4212D3802 A98932ECAA304	C6:0C:7E:F6:65:37:48:B4:A6: 47:26:93:89:50:60:F2:12:26:6 1:86	3E:86:87:28:08:2E:19:9B:77: 3E:DF:91:EB:3E:B9:73:6A:E7: E2:BC:68:7E:42:BA:35:A2:B5: 8F:DE:55:6C:82
C=US, O=thawte, Inc., OU=Domain Validated SSL, CN=thawte Class 3 Web PKI ECC DV CA - G1	54D6F61E36A2FEDEDD9 82B4ECD15D77B	F3:C9:75:22:52:15:92:74:81: 1F:98:AD:1D:18:BA:9A:81:1E: 5B:9F	B5:85:C6:78:EF:37:6D:0A:1A: E1:30:B2:5E:40:6D:1F:D9:A6: F8:FF:29:EB:DD:82:0C:68:88: 79:20:04:EF:90



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=thawte, Inc., OU=Domain Validated SSL, CN=thawte Class 3 Web PKI RSA DV CA - G1	1C60F646DBD731A3C3A8720F2DD5E873	13:47:6F:79:21:50:D1:E7:91:9B:36:7C:E2:17:E5:6D:F3:2E:19:6C	FA:AE:92:82:05:90:F2:D8:DB:52:1C:20:C9:EF:4B:53:CF:DF:3C:07:C9:0E:17:6A:D9:13:DA:CF:E9:54:81:ED
C=US, O=thawte, Inc., OU=Domain Validated SSL, CN=thawte Class 3 Web PKI RSA DV CA - G1	50DEFc1CB10A7FB5BD BD0624CD8A499F	4D:8A:AD:58:C5:08:97:CD:32:8D:47:7D:06:B8:8B:92:B2:CD:43:8B	45:E2:6A:64:C5:20:9B:59:E2:B8:ED:8F:0C:4F:BD:36:81:DD:E9:7A:4F:A9:DF:B9:8A:F0:30:CD:79:57:DA:5F
C=US, O=thawte, Inc., OU=Extended Validation SSL, CN=thawte Class 3 Web PKI ECC EV CA - G1	086A3FFB8D9EEF924127625C38468C17	16:C5:18:7F:4B:10:12:EF:75:1F:E5:62:64:58:7F:34:5E:67:83:7F	59:5E:FC:F7:F8:92:4A:31:D3:5F:9E:9E:D6:81:2A:88:8B:42:FB:B3:0C:E0:19:E9:69:E6:F1:B7:BC:00:F7:40
C=US, O=thawte, Inc., OU=Extended Validation SSL, CN=thawte Class 3 Web PKI ECC EV CA - G1	42CA5B1F1CD66F8D525FD4D4845D4DD4	52:78:7E:18:6C:FA:34:05:B3:7F:19:F0:D9:DC:9B:AB:08:70:33:99	94:AC:33:E6:72:91:4F:A5:8B:BE:64:4A:58:29:36:79:C8:8E:8A:5E:40:BB:08:FF:F1:CD:9C:37:EE:81:FC:94
C=US, O=thawte, Inc., OU=Extended Validation SSL, CN=thawte Class 3 Web PKI RSA EV CA - G1	5CE64C6CF290B89130F086F99DE0D5A5	22:AA:80:5F:9A:29:AA:81:85:36:3C:B3:60:14:B6:6E:25:36:95:BA	B2:66:AF:8B:13:2B:E6:74:91:76:8B:DD:44:A1:35:DD:17:43:BE:6D:B7:26:FB:24:0E:7D:5C:0B:0F:BE:BA:5A
C=US, O=thawte, Inc., OU=Extended Validation SSL, CN=thawte Class 3 Web PKI RSA EV CA - G1	1AC917AC8164CCB4BE E32A2140CF4450	55:5F:F7:DF:34:78:09:B7:63:07:48:D5:66:E9:C7:5E:EF:55:C2:1E	B0:DA:8C:71:E8:52:0E:CF:3B:9F:A9:3D:AE:E2:F8:C6:DC:D2:5C:1F:7B:8C:02:47:9D:BA:52:23:B6:B0:91:84
C=US, O=thawte, Inc., OU=Organization Validated SSL, CN=thawte Class 3 Web PKI ECC OV CA - G1	28D8605FC5EE25DB987222326ADA4E42	5B:F7:31:65:99:D1:AD:A9:4A:EF:16:3F:16:87:F2:8C:CA:BA:87:BC	83:0C:BC:80:2D:69:CE:FA:22:27:F0:63:18:CB:5B:1E:81:CF:E1:06:16:A8:06:A3:68:76:09:0E:B5:2C:6A:DA
C=US, O=thawte, Inc., OU=Organization Validated SSL, CN=thawte Class 3 Web PKI ECC OV CA - G1	4DB3F20FD367B04731C8AE8B22CAFBF2	CB:3A:FF:9E:C5:F0:00:7E:CB:7A:09:1F:DD:14:93:C9:BA:53:5C:EB	90:C9:EA:1E:92:A1:C8:5E:37:CB:2A:2F:BF:74:CC:5E:96:15:AA:19:07:55:ED:E8:EA:6C:7B:AE:33:F1:83:30
C=US, O=thawte, Inc., OU=Organization Validated SSL, CN=thawte Class 3 Web PKI RSA OV CA - G1	0E83FB692744B3FDF2FA8D868FDCE058	3A:21:C3:0E:0F:96:48:40:02:70:EA:12:44:CC:66:92:90:B1:41:9C	57:E6:03:51:F0:DC:CB:85:D4:3F:4F:91:FD:32:9A:31:57:91:2D:4A:4E:E6:79:5E:21:A5:D6:3D:22:36:C2:C2
C=US, O=thawte, Inc., OU=Organization Validated SSL, CN=thawte Class 3 Web PKI RSA OV CA - G1	29464C5CE523DAC758DA2D917E0A7FE5	42:94:5E:B7:60:55:EF:B6:46:93:08:0B:71:C7:01:DC:35:F4:BF:10	FE:62:99:E9:D2:12:CA:34:6B:54:DD:1A:69:4A:E8:4B:43:4A:63:A8:C3:E6:2C:61:E4:67:73:C8:8D:D8:2F:8E
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, CN=VeriSign Class 3 Managed PKI Administrator CA - G3	399F0AABA202BEA84D777CE127B83EDE	49:F6:DB:4F:C0:DD:60:75:8F:BA:33:0F:76:F4:D6:95:DF:56:2F:E8	57:1A:E2:E7:36:9F:B1:93:B4:BC:55:59:90:07:8B:B2:22:AA:10:37:28:59:8E:1E:FC:09:7A:7F:EB:77:97:2F



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, CN=VeriSign Class 3 SSP Intermediate CA	3A0C57CA7B476015E73 C01C3C58D0E5E	CF:5E:3D:16:02:FC:8A:A8:5E: DC:BD:3F:0A:D0:78:FB:25:D1 :39:05	AD:52:FD:EF:D3:16:26:51:B0: 9E:5F:32:C4:D6:69:92:A0:86: 7D:25:C7:B2:B3:5D:A2:42:55: 5A:F1:85:F5:77
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, CN=VeriSign Class 3 SSP Intermediate CA - G2	1933CE1133857F9988B 1BBB3AE88C67F	A7:43:BC:36:F3:6A:F0:35:52: 66:E3:EC:7D:AA:56:71:3E:ED: EF:20	FA:67:00:F3:8E:E5:6B:47:09: EA:C2:CE:48:1D:7E:6E:11:81: EB:09:16:8B:F7:8C:CB:D7:26: CD:EB:20:58:27
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, CN=VeriSign Class 3 SSP Intermediate CA - G2	316CEB691DCB2E153D9 BFA8A121BD52D	D1:D6:05:84:7B:A3:11:1C:83: EA:EF:32:E4:C8:E2:AE:93:61: 50:54	55:DB:B3:CF:47:94:56:6B:47: 9F:13:B3:2D:23:99:FD:B6:22: F4:5A:4C:2C:4A:B1:73:9E:74: B9:EC:C9:BE:BC
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)07, CN=VeriSign Class 3 Extended Validation 1024-bit SSL SGC CA	6EE44E2FF9761AE5C84 AFFBF2552E474	FA:3E:E1:06:C9:17:CD:FF:9F: CF:46:F3:F2:25:85:FE:B7:4D: C4:CD	49:A0:3A:1A:88:D2:A7:32:E1: D6:29:FB:10:07:81:21:DE:EF: F3:33:D6:A9:8B:59:15:D3:52: 13:51:2E:16:83
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)09, CN=VeriSign Class 3 Secure Server CA - G2	1F532AF85493D7826 B5930D6515940	44:32:01:47:89:47:51:13:62: BA:58:E2:25:3C:FD:98:3D:76: D3:24	0E:48:FE:8D:F7:98:36:EF:81: 1C:61:B3:6E:A2:C5:47:05:31: AE:80:04:1D:B6:4D:29:B6:94: B4:A1:C1:BE:1F
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)09, CN=VeriSign Class 3 Secure Server CA - G2	2F006ECD177066E75FA 3820A791F05AE	76:44:59:78:1B:AC:B0:47:63: A5:D0:A1:58:91:65:26:1F:29: 8E:3B	0A:41:51:D5:E5:8B:84:B8:AC: E5:3A:5C:12:12:2A:C9:59:CD: 69:91:FB:B3:8E:99:B5:76:C0: AB:DA:C3:58:14
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, CN=VeriSign Class 3 Code Signing 2010 CA	3D881D656DEA1C951F0 9E1DB52DD9C07	5F:C3:86:A0:E8:B5:2B:33:76: D8:4F:54:EF:FE:79:8F:BD:43: 85:59	19:3A:2A:64:C8:2C:92:0C:BC: 2A:3A:2D:03:2A:A1:F8:E5:F7: F3:48:30:58:71:0F:0B:6A:0F: BB:EB:69:7B:69
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, CN=VeriSign Class 3 Code Signing 2010 CA	5200E5AA2556FC1A86E D96C9D44B33C7	49:58:47:A9:31:87:CF:B8:C7: 1F:84:0C:B7:B4:14:97:AD:95: C6:4F	0C:FC:19:DB:68:1B:01:4B:FE: 3F:23:CB:3A:78:B6:72:08:B4: E3:D8:D7:B6:A7:B1:80:7F:7C: D6:EC:B2:A5:4E
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, CN=VeriSign Class 3 Code Signing 2010 CA	490EA5686468F1C09F0 CFE2FFE300F26	4E:D5:0C:FA:AB:E6:AD:09:F0: CC:6A:F8:7E:07:DC:11:9D:B8: 01:4C	F4:5C:03:B5:68:3E:3E:A8:F0: AB:C5:F1:4E:74:9F:BB:F6:32: 76:65:96:D9:07:4B:00:0D:68: B7:62:26:F7:A3



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, CN=VeriSign Class 3 Code Signing 2010 CA	2753F806FE9137322F5 B409F1C31875C	BD:A4:3A:EB:B5:5D:57:A6:D4 :44:5C:10:B0:53:B8:8F:FB:66 :B6:82	D0:F9:0B:BF:6E:E8:62:9E:4A: 31:CF:DB:AA:22:02:E3:24:AF: 2F:5F:45:69:67:DD:83:CA:5B: 36:84:C3:42:97
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, CN=VeriSign Class 3 Extended Validation CA - T1	33F5AE11193083147E5 B66F31FED1129	09:BA:2F:C6:04:B7:D6:63:24: 24:70:83:A4:B8:44:57:9A:B7: F0:7E	D8:05:64:43:3E:D3:5C:85:0E: 2A:D5:89:B7:71:3A:4D:AC:01: A0:92:92:86:9B:DB:B8:0E:42: E2:3F:93:36:EA
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, CN=VeriSign Class 3 Extended Validation SGC CA - T1	1A4CE18725E5C114B8C 98DE0EBA99AD6	C3:70:A4:69:A4:D2:20:BE:C8: 5C:89:73:BF:C3:E6:BC:3E:09: 46:B5	6E:DA:D2:26:1A:A3:D5:3B:E0 :D6:FF:5F:A7:1C:34:A3:4B:25 :3B:0C:63:7B:35:BF:3E:96:65 :40:F7:8B:63:1B
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, CN=VeriSign Class 3 International Server CA - G3	326AF958B76C7F6F39A 86850D37FC42D	E5:AC:F7:ED:FC:38:30:AC:D1 :0C:EF:76:08:3B:D3:2F:1F:02 :64:DC	33:02:60:A6:9C:08:87:F1:B9: A4:98:30:2A:EC:FD:A1:7D:E8: 9A:81:9C:7E:57:E2:8C:40:A5: 30:80:BE:10:E8
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, CN=VeriSign Class 3 International Server CA - G3	641BE820CE020813F32 D4D2D95D67E67	B1:8D:9D:19:56:69:BA:0F:78: 29:51:75:66:C2:5F:42:2A:27: 71:04	6E:21:87:6C:F1:63:47:20:1F: 63:7A:17:8C:B4:2B:17:1D:52: 37:9A:F7:E5:F5:B6:F6:75:5B: 3E:E9:BB:2E:D4
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, CN=VeriSign Class 3 International Server CA - T1	6A64B0902DCFE7C61B5 51ED4F8D3E829	15:B0:5C:48:65:41:0C:6B:3F: F7:6A:4E:8F:3D:87:27:67:56: BD:0C	F7:4D:A4:D9:A6:87:C5:04:64: 99:AE:FC:9F:A8:67:DE:91:A1: A3:94:1A:09:F2:4C:F9:46:03: B7:AB:78:10:8A
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, CN=VeriSign Class 3 Secure Server CA - G3	2CFEB6090EE2ADE2E9F C223724F1B6BF	12:C9:B2:91:D1:9D:36:32:D4: 4F:10:69:55:1C:46:49:0A:EA: 05:42	5B:9F:35:0C:2A:76:BE:64:BB: 3C:2C:6E:2A:41:4A:ED:DD:0E :F0:A2:6D:7C:97:FA:7A:F5:7D :52:0C:60:B2:E9
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, CN=VeriSign Class 3 Secure Server CA - G3	7916E894B11C76FC5C4 3F5168924261F	91:88:F8:85:10:6E:81:EB:AF: BB:11:83:71:3D:11:43:53:6B: 95:E9	31:DC:82:EA:89:15:E2:7D:03: BB:D0:43:36:58:A3:C2:4C:6D: 3A:CF:F4:8C:4F:AA:C0:2F:E8: 7E:94:C9:9A:3B



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, CN=VeriSign Class 3 Secure Server CA - G3	6ECC7AA5A7032009B8C EBCF4E952D491	5D:EB:8F:33:9E:26:4C:19:F6: 68:6F:5F:8F:32:B5:4A:4C:46: B4:76	64:90:35:46:A5:80:58:D1:E6: F1:BE:AD:11:34:ED:E6:6A:68: 31:D2:31:F0:DF:8D:4E:28:53: 5D:7A:30:04:96
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=Terms of use at https://www.verisign.com/rpa (c)10, CN=VeriSign Class 3 Secure Server CA - T1	4DEEDEC061BDB1054 CD26EAB7F838E8	3C:25:D7:B9:79:97:BE:FB:D5: 3D:D8:AA:8B:36:18:21:EC:F4: A4:75	2C:31:A9:2D:B8:88:91:32:E0: 4A:D5:F4:3D:AF:6D:42:1B:85: 45:10:C6:1E:41:C7:87:CB:5E: 10:E0:96:2D:C7
C=US, O=Wells Fargo & Company, OU=Symantec Trust Network, OU=Organization Validated TLS, CN=Wells Fargo Public Trust Certification Authority 01 G2	3F8B149DCFBE86553F6 D78F4CD24E571	86:14:15:06:B4:C3:61:C9:FC: DF:E5:71:7B:6B:19:76:15:19: 3B:44	8F:FC:B7:E2:35:33:0E:F0:AA: B9:19:DE:AF:C4:F5:E6:21:F6: 6F:AE:DD:A2:D4:C1:25:6D:09 :93:AE:24:EA:21
C=US, O=Wells Fargo & Company, OU=Symantec Trust Network, OU=Organization Validated TLS, CN=Wells Fargo Public Trust Certification Authority 01 G2	464354C0CF3426DEDB7 9BE1E93E888F3	A9:90:E2:A9:C9:82:FF:3D:8C: CF:5D:39:76:CC:A9:6D:29:58: CA:8E	7A:21:E2:C1:5E:14:9F:51:6C: D1:E7:30:2E:AB:50:45:2D:DA: 74:04:C4:9D:BE:A9:C2:8B:24: BC:20:F6:3D:A9
C=US, O=Wells Fargo, OU=Symantec Trust Network, CN=Wells Fargo Certificate Authority WS1	50776F58B196C391691 EE658A90A9D6B	E8:03:9D:FE:57:13:1F:11:D9: D6:77:F7:CF:7C:F5:B6:E8:9D: 98:5D	C2:10:87:41:6B:BF:98:3B:9F: FE:40:F5:D5:6E:E0:FF:D9:4E: B1:E6:66:B0:4A:53:2A:DE:48: 2E:C2:01:D6:7C



REPORT OF THE INDEPENDENT ACCOUNTANT

To the Management of Symantec Corporation:

We have examined for the GeoTrust Certification Authority (CA) operations provided by Symantec Corporation (Symantec) at Mountain View, California, USA; New Castle, Delaware, USA; Melbourne, Australia; Cape Town, South Africa; Dublin, Ireland; Sapporo, Japan; and Kawasaki-shi, Japan and for Verisign, Inc. (Verisign), an independent service organization that provides datacenter hosting services to Symantec for the GeoTrust CA operations at the New Castle, Delaware location:

- a) Symantec's disclosure of its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices and its disclosure of the services and related controls provided by Verisign in [Attachment A](#); and
- b) the effectiveness of Symantec's controls and Verisign's controls, where applicable, over the
 - provision of services in accordance with its GeoTrust Certification Practices Statement and the description of the services and related controls provided by Verisign as enumerated in [Attachment A](#),
 - establishment and protection of the integrity of keys and certificates it manages throughout their lifecycle,
 - authenticity and confidentiality of subscriber and relying party information,
 - continuity of key and certificate lifecycle management operations, and
 - development, maintenance, and operation of CA systems integrity

throughout the period December 1, 2016 to October 31, 2017 for its CAs as enumerated in [Attachment B](#).

Symantec's management is responsible for these disclosures and for maintaining effective controls based on the WebTrust [Principles and Criteria for Certification Authorities v2.0](#). Our responsibility is to express an opinion based on our examination.

The relative effectiveness and significance of specific controls at Symantec and Verisign and their effect on assessments of control risk for subscribers and relying parties are dependent on their interaction with the controls, and other factors present at individual subscriber and relying party locations. Our examination did not extend to controls at individual subscriber and relying party locations and we have not evaluated the effectiveness of such controls.

Symantec terminated the contracts for each of its four external registration authorities used for specific subscriber registration activities as disclosed in Symantec's business practices. Upon terminating these relationships, Symantec reperformed the validation work originally performed by these external registration authorities for each certificate that was still valid. The dates for termination for CrossCert, CertSuperior, CertiSign, and Certisur were January 19, 2017, April 4, 2017, April 11, 2017, and April 14, 2017, respectively. Our examination did not extend to the controls exercised by these external registration authorities.



Symantec does not escrow its CA keys, does not provide Integrated Circuit Card Lifecycle Management services to subscribers, and does not provide certificate suspension services. Accordingly, our examination did not extend to controls that would address those criteria.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether, throughout the period December 1, 2016 to October 31, 2017, for the CAs enumerated in [Attachment B](#), in all material respects:

- a) Symantec disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices for the services and related controls provided by Verisign in [Attachment A](#); and
- b) Symantec and Verisign, where applicable, maintained effective controls over the:
 - provision of services in accordance with Symantec's GeoTrust Certification Practices Statement and the description of the services and related controls provided by Verisign as enumerated in [Attachment A](#),
 - establishment and protection of the integrity of keys and certificates it manages throughout their lifecycle,
 - authenticity and confidentiality of subscriber and relying party information,
 - continuity of key and certificate lifecycle management operations, and
 - development, maintenance, and operation of CA systems integrity

based on the WebTrust [Principles and Criteria for Certification Authorities v2.0](#).

Because of the nature and inherent limitations of controls, Symantec's ability to meet the aforementioned criteria may be affected. For example, controls may not prevent, or detect and correct, error, fraud, unauthorized access to systems and information, or failure to comply with internal and external policies or requirements. Also, the projection of any conclusions based on our findings to future periods is subject to the risk that changes may alter the validity of such conclusions.

In our opinion, throughout the period December 1, 2016 to October 31, 2017, in all material respects:

- a) Symantec disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in its GeoTrust Certification Practices Statement and the services and related controls provided by Verisign as enumerated in [Attachment A](#);
- b) Symantec and Verisign maintained effective controls to provide reasonable assurance that Symantec and Verisign provide its services in accordance with the GeoTrust Certification Practices Statement and the description of the services and related controls provided by Verisign as enumerated in [Attachment A](#);



- c) Symantec 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 Symantec), and
 - subordinate CA certificate requests are accurate, authenticated, and approved;

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

based on the WebTrust [Principles and Criteria for Certification Authorities v2.0](#).

This report does not include any representation as to the quality of Symantec's services other than its CA operations at Mountain View, California, USA; New Castle, Delaware, USA; Melbourne, Australia; Cape Town, South Africa; Dublin, Ireland; Sapporo, Japan; and Kawasaki-shi, Japan, nor the suitability of any of Symantec's services for any customer's intended purpose.

Effective at the close of business on October 31, 2017, Symantec sold its CA business operations to DigiCert Inc.

Symantec's use of the WebTrust for Certification Authorities Seal constitutes a symbolic representation of the contents of this report and it is not intended, nor should it be construed, to update this report or provide any additional assurance.

BDO USA, LLP

St. Louis, Missouri
January 31, 2018



Attachment A

GeoTrust Certification Practice Statement Versions in Scope

Policy Name	Version	Date
GeoTrust Certification Practice Statement	1.1.21	September 8, 2017
GeoTrust Certification Practice Statement	1.1.20	December 19, 2016
GeoTrust Certification Practice Statement	1.1.19	September 9, 2016

Description of Services Provided for Symantec and Related Controls Exercised by Verisign at the New Castle, Delaware Location

Symantec has entered into an agreement with Verisign Inc. (Verisign), to provide datacenter hosting services at the New Castle, Delaware datacenter (the datacenter). Verisign performs the same physical and environmental security controls as Symantec has disclosed in Section 5 and Section 6 of the GeoTrust Certification Practice Statement; however, Verisign performs UPS maintenance quarterly, rather than semi-annually.

Verisign has implemented the following physical and environmental security controls to protect Symantec assets at the datacenter. Production systems housed in the datacenter are protected by multiple tiers of physical security, with access to the lower tier required before gaining access to the next highest tier. The datacenter enforces individual access control through the use of two-factor authentication, including biometrics. Physical access to the datacenter is automatically logged. Visitors to the datacenter are required to sign a log at the security office, wear a visitor badge, and be escorted while onsite. The datacenter facilities are manned continuously by on-site security personnel and the premises are continuously video monitored and recorded. Multiple generators, UPS, HVAC and fire suppression systems have been implemented at the datacenter.



Attachment B

List of CAs In-scope

Root CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=GeoTrust Inc., CN=GeoTrust Global CA	23456	DE:28:F4:A4:FF:E5:B9:2F:A3: C5:03:D1:A3:49:A7:F9:96:2A: 82:12	FF:85:6A:2D:25:1D:CD:88:D3: 66:56:F4:50:12:67:98:CF:AB: AA:DE:40:79:9C:72:2D:E4:D2: B5:DB:36:A7:3A
C=US, O=GeoTrust Inc., CN=GeoTrust Global CA 2	1	A9:E9:78:08:14:37:58:88:F2: 05:19:B0:6D:2B:0D:2B:60:16: 90:7D	CA:2D:82:A0:86:77:07:2F:8A: B6:76:4F:F0:35:67:6C:FE:3E: 5E:32:5E:01:21:72:DF:3F:92: 09:6D:B7:9B:85
C=US, O=GeoTrust Inc., CN=GeoTrust Primary Certification Authority	18ACB56AFD69B6153A 636CAFDAFAC4A1	32:3C:11:8E:1B:F7:B8:B6:52: 54:E2:E2:10:0D:D6:02:90:37: F0:96	37:D5:10:06:C5:12:EA:AB:62: 64:21:F1:EC:8C:92:01:3F:C5: F8:2A:E9:8E:E5:33:EB:46:19: B8:DE:B4:D0:6C
C=US, O=GeoTrust Inc., CN=GeoTrust Universal CA	1	E6:21:F3:35:43:79:05:9A:4B: 68:30:9D:8A:2F:74:22:15:87: EC:79	A0:45:9B:9F:63:B2:25:59:F5: FA:5D:4C:6D:B3:F9:F7:2F:F1: 93:42:03:35:78:F0:73:BF:1D: 1B:46:CB:B9:12
C=US, O=GeoTrust Inc., CN=GeoTrust Universal CA 2	1	37:9A:19:7B:41:85:45:35:0C: A6:03:69:F3:3C:2E:AF:47:4F: 20:79	A0:23:4F:3B:C8:52:7C:A5:62: 8E:EC:81:AD:5D:69:89:5D:A5: 68:0D:C9:1D:1C:B8:47:7F:33: F8:78:B9:5B:0B
C=US, O=GeoTrust Inc., OU=(c) 2007 GeoTrust Inc. - For authorized use only, CN=GeoTrust Primary Certification Authority - G2	3CB2F4480A00E2FEEB 243B5E603EC36B	8D:17:84:D5:37:F3:03:7D:EC: 70:FE:57:8B:51:9A:99:E6:10: D7:B0	5E:DB:7A:C4:3B:82:A0:6A:87: 61:E8:D7:BE:49:79:EB:F2:61: 1F:7D:D7:9B:F9:1C:1C:6B:56: 6A:21:9E:D7:66
C=US, O=GeoTrust Inc., OU=(c) 2008 GeoTrust Inc. - For authorized use only, CN=GeoTrust Primary Certification Authority - G3	15AC6E9419B2794B41 F627A9C3180F1F	03:9E:ED:B8:0B:E7:A0:3C:69: 53:89:3B:20:D2:D9:32:3A:4C: 2A:FD	B4:78:B8:12:25:0D:F8:78:63: 5C:2A:A7:EC:7D:15:5E:AA:62 :5E:E8:29:16:E2:CD:29:43:61 :88:6C:D1:FB:D4



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=CH, O=Hostpoint AG, OU=Domain Validated SSL, CN=Hostpoint DV SSL CA - G1	5DC83594AA94674AB D0559D00CA943CA	0D:BB:0D:76:FC:68:A0:F7:C9: FF:DD:9F:80:35:12:02:BD:31: 69:15	9F:4E:3C:42:FA:FE:DA:3C:F8: 8C:05:CC:4B:4A:F0:C0:AF:30: 64:15:C3:0D:3D:1E:EB:ED:EB: F7:D1:77:A9:82
C=CH, O=Hostpoint AG, OU=Domain Validated SSL, CN=Hostpoint DV SSL CA - G2	023A8D	51:F5:6D:08:1A:8D:FD:E5:6E: DA:F1:8A:81:EB:2E:6C:A6:8A: E3:AC	AB:D6:D0:53:FD:BE:35:6D:07: :50:50:18:15:86:B0:B9:C2:B8 :C0:32:98:AB:CE:64:CE:25:C4 :04:01:DF:3B:22
C=CH, O=Hostpoint AG, OU=Domain Validated SSL, CN=Hostpoint DV SSL CA - G2	023A8C	E8:69:36:C0:28:9D:99:87:F3: E6:36:98:56:47:B6:7E:79:03: 82:F6	2F:E0:55:9F:55:57:67:0C:F5: C8:AE:01:22:38:73:B8:83:6C: AE:2C:FD:25:96:1C:99:8E:E2: B9:43:A2:D6:5A
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia Technologies, Inc. DV SSL CA - G1	0F7978CB79BC6DA953 6C17E082672514	63:69:87:97:95:C1:2B:A5:F3: F4:4D:1A:AB:E2:92:D3:86:C7: 33:CC	39:97:C7:21:89:3B:39:26:D3: 93:8A:31:1C:A0:7A:26:1B:2A: E2:2E:01:DC:58:7F:18:1D:FF: 15:B9:8B:4E:A6
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia Technologies, Inc. DV SSL CA - G2	023A91	63:53:94:51:40:BF:98:77:9F: 14:9E:C7:D2:89:2F:39:A3:CB: 8F:97	C1:89:49:E3:65:9F:7F:DF:22: B3:0E:C4:DA:6B:43:41:AF:8B: EE:00:E4:17:7A:7F:86:FF:59: BC:46:B6:BA:40
C=DE, O=CertCenter AG, OU=Domain Validated SSL, CN=AlwaysOnSSL CA - G1	10DA57D151DF993CC 13F0D0938320702	C5:19:F8:F5:47:77:A7:74:B0: 4F:31:AC:25:DC:A7:E5:92:8F: 83:21	EF:44:78:EB:09:4C:48:FB:9F: EA:CA:09:73:62:70:49:9C:A5: 2E:B0:4E:3F:8E:E4:C1:B2:ED: C9:96:03:98:FD
C=DE, O=CertCenter AG, OU=Domain Validated SSL, CN=AlwaysOnSSL CA - G2	023A8F	63:62:1C:BF:86:A6:F5:72:A3: 76:58:2F:BA:69:9D:1E:FF:50: 64:C5	7D:89:AE:91:8B:25:AF:DF:91: 03:6E:EE:5C:15:E5:8C:60:0F: 42:26:68:66:A8:DE:01:C7:1D: BC:63:5C:A1:C0
C=DE, O=STRATO AG, OU=Domain Validated SSL, CN=STRATO SSL	023A6E	9C:86:76:86:68:F1:34:80:E3: DF:CC:40:57:CF:52:12:AD:5B: 87:D5	2E:7E:65:BB:1A:01:3D:AF:0B: DF:69:38:50:2E:43:E3:82:17: FE:00:D7:6C:A2:F9:9F:7A:A9: E2:98:F4:85:34
C=DE, O=STRATO AG, OU=Domain Validated SSL, CN=STRATO SSL - G2	023A7C	89:30:C3:1A:0C:BD:AD:55:83: 57:DF:7D:59:A8:CD:58:1C:12: 72:F0	78:DC:9C:A5:F4:C2:91:3F:3F: B7:4A:C5:2D:FF:FC:D2:30:0D :A5:A7:72:FC:2B:84:C5:3A:2E :74:43:7E:DD:20
C=DE, O=STRATO AG, OU=Domain Validated SSL, CN=STRATO SSL - G3	3D3C4BFA06D2878F09 FBCEB846875F93	09:7A:6D:83:23:79:A4:0F:FA: 1B:29:67:DE:CB:B7:BA:ED:EA :E8:04	4F:D7:34:19:04:6F:90:86:88: 26:D5:81:53:69:31:D2:2E:54: 94:3E:BC:D0:59:CB:76:21:39: 4D:74:93:43:C5
C=DE, O=STRATO AG, OU=Domain Validated SSL, CN=STRATO SSL - G4	023A89	5D:80:02:9A:CD:6B:9F:17:6B: 23:7F:4E:21:DC:2C:FF:EF:48: 81:DD	BC:3F:0A:DC:5F:F8:6A:4B:37: 4D:C6:91:F8:FE:27:3B:1B:87: DC:73:E4:38:24:F5:FE:7F:36: C3:E0:00:83:11
C=DE, O=STRATO AG, OU=Domain Validated SSL, CN=STRATO SSL - G5	6989E500A92B4D3D06 D47EB455D1CDE5	6F:EE:BF:0B:30:E9:DE:52:47: 6D:57:77:22:B2:A5:A8:51:10: A5:FF	8C:88:BA:51:05:29:B6:42:63: CC:B2:1A:73:D8:2B:A5:72:5A :55:C1:44:6F:25:47:BC:E3:01 :FC:DC:43:14:DB
C=DE, O=STRATO AG, OU=Domain Validated SSL, CN=STRATO SSL CA - G4	023A88	7E:D0:83:AE:25:C7:00:88:68: BF:BE:A7:C1:06:0B:E6:DF:50: 8F:8C	51:39:62:DB:15:55:DE:38:59: 28:3A:81:B3:F7:02:DC:25:A5: 44:E6:D1:A7:17:F6:05:39:7B: D7:EA:91:3B:76
C=JP, O=NTT DOCOMO, INC., OU=GeoRoot Certification Authority, CN=DKHS Device CA	0236CD	68:1B:7A:CE:23:28:00:F1:67: 08:D4:2E:8A:A4:12:4A:F5:33: F8:75	12:34:65:EE:C4:09:2F:8C:F7: AB:FE:92:B8:C7:01:AC:09:EA: 79:A4:98:F1:D3:F6:A0:2C:17: 14:F3:9A:84:23
C=JP, O=NTT DOCOMO, INC., OU=GeoRoot Certification Authority, CN=DKHS Device CA	0236CC	A0:2B:D3:AE:51:5C:AD:6A:93 :49:92:11:62:37:BC:3E:25:B6 :50:8E	32:25:1B:9B:B3:D7:64:21:D3: B3:00:FC:ED:47:57:EE:E0:41: 67:A7:27:90:4A:C1:88:B3:51: 11:1D:26:1F:56



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=JP, O=NTT DOCOMO, INC., OU=GeoRoot Certification Authority, CN=DKHS Device CA - G2	023A80	1C:F9:42:06:E4:A8:00:BC:96: CF:CB:F1:44:F2:87:38:27:A8: 8E:17	F7:AE:9B:58:70:DC:DA:43:19: 05:AE:A0:3B:39:93:A3:4E:87: 7B:87:6B:78:41:52:81:7F:1C: 58:65:7E:37:C4
C=JP, O=NTT DOCOMO, INC., OU=GeoRoot Certification Authority, CN=DKHS Device CA - G2	023A81	C0:EC:D0:61:AC:BA:34:35:7A :EA:F6:07:79:8B:03:4A:59:29 :42:2B	56:CB:B0:FF:C4:14:E8:88:22: A5:0E:9F:42:D4:68:20:38:1D: 8C:2A:AE:EF:56:E0:56:68:17: ED:30:F2:7A:27
C=NL, O=Intermediate Certificate, OU=Domain Validated SSL, CN=Intermediate Certificate DV SSL CA	023A60	B8:8B:12:4D:AF:3C:56:5B:49: 3A:C9:31:B5:DB:AC:29:4F:12: 97:1B	8C:27:45:35:22:89:E9:94:B3: EA:34:94:45:B1:CF:64:18:E5: 17:40:E1:61:4F:8B:56:67:DA: D2:99:0A:AE:FB
C=NL, O=Intermediate Certificate, OU=Domain Validated SSL, CN=Intermediate Certificate DV SSL CA - G2	023A7B	7A:D6:B0:09:15:1B:F9:55:CA: CB:BF:A0:14:A0:8B:7E:BA:4F: D3:91	D8:76:A0:81:FB:38:27:BA:22: A4:08:7D:F6:75:12:6F:F8:A9: 6A:AB:90:36:4B:C6:1F:62:CE: 8E:95:07:AA:93
C=NL, O=Intermediate Certificate, OU=Domain Validated SSL, CN=Intermediate Certificate DV SSL CA - G3	48311FB72B93A88919 860E2F9A2387E3	B9:C6:48:4C:97:E0:26:66:3E: BA:54:12:38:79:0E:6B:11:6C: 69:8D	E8:6B:C1:6C:C6:49:1E:5F:4B: 99:76:31:38:42:B3:D0:2C:99: EA:26:3A:EB:1D:C2:23:D8:98: FA:87:C8:48:45
C=NL, O=Trust Provider B.V., OU=Domain Validated SSL, CN=Trust Provider B.V. DV SSL CA - G1	7F2CF12628D31B3278 2845B40F560CAE	E5:01:A0:64:1A:31:08:21:FC: B2:A0:67:7E:C5:9E:82:B1:F8: 59:D6	D6:EA:10:61:C2:8B:3D:B9:6F: F5:BA:A1:40:AB:57:14:E6:B0: B4:F5:D7:1A:BC:CD:24:2A:49 :B9:B9:F4:DC:27
C=NL, O=Trust Provider B.V., OU=Domain Validated SSL, CN=Trust Provider B.V. DV SSL CA - G2	023A8E	C2:86:BC:CD:A5:70:09:28:1B: 21:0B:CC:4A:E1:83:FF:D0:9F: 11:D7	81:05:1C:35:5E:C9:F5:A8:9F: BA:91:D1:A5:BD:3F:05:01:EA: CD:80:EF:93:B2:18:00:3D:95: CF:25:1A:76:70
C=US, O=Aetna Inc., OU=GeoRoot Certification Authority, CN=Aetna Inc. Certificate Authority	023A56	23:8C:8E:2C:D1:96:75:6B:28: 67:48:9A:2E:1E:4B:1A:68:44: 2C:61	D6:E4:E7:B9:AF:3B:D5:A8:F2: D6:32:1C:DE:26:63:9C:25:64: 4F:73:07:CE:16:AA:D3:47:D9: AD:53:D3:CE:13
C=US, O=GeoTrust Inc, OU=GeoTrust TimeStamping CA, CN=GeoTrust TimeStamping CA I	02359E	1D:70:68:AB:BE:A7:6B:0E:E2: 2E:11:36:B2:65:01:FD:4F:0D: FB:B3	D3:60:27:A8:5F:E1:ED:CB:A4: F1:BA:92:C3:C8:B3:78:64:E8: 62:D2:B4:A0:2B:8F:F6:43:F5: 82:60:9F:6A:08
C=US, O=GeoTrust Inc, OU=GeoTrust TimeStamping CA, CN=GeoTrust TimeStamping CA I	02359D	3F:B8:EF:A7:CD:57:C7:8E:64: 1D:E4:CA:B1:54:A0:D1:94:B8: F4:87	32:1D:F6:81:FB:13:68:22:59: A5:72:BE:65:FD:DB:8E:6C:9A: 2C:B2:1F:94:56:83:D3:B7:04: 51:7B:C1:92:E4
C=US, O=GeoTrust Inc., CN=GeoTrust EV SSL CA - G4	6E8A90EBCFF0448A72 0D0805D082A544	30:56:B3:43:48:5B:9D:55:F3: E2:B1:77:A8:95:BB:04:63:EE: 3E:FD	95:B0:9D:02:12:2F:A8:AE:62: 35:78:0F:6E:A6:50:3E:76:7A: C0:21:A0:87:4F:E8:31:CE:80: 3A:50:EA:8F:D7
C=US, O=GeoTrust Inc., CN=GeoTrust EV SSL CA - G5	3CB6BC2996B37A14A7 92D1E5D8EC335A	71:71:C0:5A:62:7D:7C:63:5F: 8A:4D:F4:0F:7A:F5:B8:1B:DE: B7:6D	5B:2A:E8:AB:F5:E7:E5:63:BB: C3:4C:97:A2:25:54:E8:23:93: D7:AC:C0:9C:17:65:E5:04:AE: 08:C1:57:B5:AC
C=US, O=GeoTrust Inc., CN=GeoTrust EV SSL CA - G6	010019F5AA7269F88C 1E1C1211EC8D4F	B7:20:88:E6:F1:87:89:06:8F: 01:B2:5B:13:1A:7E:64:AA:A9: 5E:59	41:9B:0C:9A:D6:B8:72:A8:B1: BB:87:34:1A:F6:3E:E9:2E:69: B2:7B:99:66:62:E7:33:03:2F: 12:88:10:8D:FB
C=US, O=GeoTrust Inc., CN=GeoTrust EV SSL CA - G7	0100200B7C009A10A6 DC0BE9EFA8FEF8	6B:F6:9B:90:22:C0:89:DF:4B: 49:BA:21:2B:8A:92:66:D7:5A: 44:66	54:6C:AF:F9:06:0E:EF:30:F4: F3:E0:22:55:FB:F5:13:1E:65: 7C:17:10:C9:A6:50:02:01:33: A8:18:BE:C1:C8
C=US, O=GeoTrust Inc., CN=GeoTrust Extended Validation SHA256 SSL CA	5418A02AD0BF5719DD F72336B147F0BA	E2:8A:01:56:B0:3C:75:E0:5F: 81:97:96:FF:E9:F9:8B:BA:B6: F1:E3	BC:9E:22:3C:C4:22:75:CC:03: 41:90:DF:2D:01:79:B5:5B:73: 2D:5A:C5:31:13:7A:7B:52:2D: CF:E0:4A:05:92



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=GeoTrust Inc., CN=GeoTrust Extended Validation SSL CA - G2	0B1DB1A919F24C3C4E FCB57A6A4E6CBF	C4:FA:37:41:B7:A7:F1:F6:C2: 3D:24:F4:20:9F:5A:49:CD:5E: 55:C6	C7:B5:7A:02:F9:37:AE:0B:E3: E2:10:27:03:05:92:C9:D4:7A: 70:D7:01:3E:B3:AA:94:DB:C3: B7:B5:AB:06:62
C=US, O=GeoTrust Inc., CN=GeoTrust SHA256 SSL CA	4182127D12D9C6B321 394312566400B8	2C:9A:FC:A5:55:8A:C6:A3:25: C4:D0:27:63:16:D4:5F:06:B4: DD:37	D9:E0:C6:4A:B2:7A:64:D7:9C :CC:F4:2A:34:EC:75:A2:51:A7 :E5:43:35:3C:19:E9:84:A7:0E :B2:F5:46:CD:FF
C=US, O=GeoTrust Inc., CN=GeoTrust SSL CA - G2	023A63	4F:56:64:48:58:82:9F:FB:85: A7:70:17:1A:CC:F9:F8:40:7A: 13:7B	90:AF:11:E5:77:C7:2C:94:0B: 40:EC:2F:3D:50:50:73:10:09: 1E:E6:19:6C:9C:16:B2:28:88: 22:64:A4:D8:08
C=US, O=GeoTrust Inc., CN=GeoTrust SSL CA - G2	023A62	95:6B:79:1B:2C:DD:61:FD:26: 65:4B:37:58:57:0E:4A:EF:DD: 23:1F	5F:7C:89:EB:86:98:C2:0E:5B: A9:EA:23:F0:D1:2E:DB:C8:DB :1E:1D:27:62:64:B0:D4:D1:59 :A0:DE:DF:BD:8F
C=US, O=GeoTrust Inc., CN=GeoTrust SSL CA - G3	023A6F	5A:EA:EE:3F:7F:2A:94:49:CE: BA:FE:EC:68:FD:D1:84:F2:01: 24:A7	07:45:41:EC:DF:88:ED:99:2E: D5:AD:E3:EC:DD:EF:27:A2:6B :A1:B4:44:80:A1:95:C0:A8:DA :DA:E2:52:1D:8E
C=US, O=GeoTrust Inc., CN=GeoTrust SSL CA - G4	023A79	AC:8F:7C:5B:C8:6E:F1:89:6F: 2D:16:1C:32:A5:7A:AB:37:D3: 64:DA	21:1D:DF:50:59:22:9B:35:77: 76:0D:62:3D:51:48:DB:92:F2: D0:52:6E:A5:30:3E:7E:EA:03: 00:D9:FA:FF:3F
C=US, O=GeoTrust Inc., CN=RapidSSL CA - G2	023A6C	A1:89:08:F0:9A:C3:9F:2C:97: EA:F2:57:72:B2:BA:19:5E:AE: DD:E7	0D:CD:C0:7E:CA:BB:BF:E3:8A :46:06:BA:66:39:87:CD:B3:BD :98:17:FC:67:D1:DD:0C:F0:94 :AC:8C:A2:78:7D
C=US, O=GeoTrust Inc., CN=RapidSSL SHA256 CA	023A71	C8:6E:DB:C7:1A:B0:50:78:F6: 1A:CD:F3:D8:DC:5D:B6:1E:B7 :5F:B6	E6:68:3E:88:31:5C:D1:CB:40: 3C:0C:EA:49:0F:7C:4B:4C:82: C9:1C:D4:85:03:74:89:AA:DB: AA:90:83:9F:61
C=US, O=GeoTrust Inc., CN=RapidSSL SHA256 CA - G2	48E99440D436491CB8 B8823D09439AC7	2E:49:16:B0:7F:3D:E9:0C:8D: DE:25:66:FD:9B:9B:40:0D:89: BB:BA	92:EF:2F:5B:55:35:70:60:7D: C2:9C:80:10:E7:AB:C1:62:83: FE:35:5F:95:5A:24:82:54:29: 0A:26:0A:9E:BB
C=US, O=GeoTrust Inc., CN=RapidSSL SHA256 CA - G3	023A77	0E:34:14:18:46:E7:42:3D:37: F2:0D:C0:AB:06:C9:BB:D8:43: DC:24	BC:3F:03:A4:36:24:0E:DB:A5: F8:37:14:F6:F6:77:E3:4B:37: F9:B1:F0:C0:8C:1E:55:8D:98: 1E:27:9E:82:09
C=US, O=GeoTrust Inc., CN=RapidSSL SHA256 CA - G4	281C89296614438042 63553A3240AEB3	DC:07:7C:4A:B3:42:2F:60:8C: EE:83:D9:09:8B:FC:3A:72:26: D6:A7	5B:87:E2:22:F2:03:46:FA:36: 28:81:6E:D6:CE:71:FA:AB:A0: 85:7F:B8:BC:BA:73:77:6E:A1: FA:56:CD:00:57
C=US, O=GeoTrust Inc., OU=Domain Validated SSL, CN=GeoTrust DV SSL CA	0236D2	BA:E3:0B:15:DB:B1:54:4C:F1: 94:D0:76:B7:5B:7B:B9:E3:D6: B7:60	C2:7F:D4:B8:5E:96:D3:77:7C: 68:AB:7D:F6:AA:4E:62:6B:F3: FF:8C:72:B1:CE:81:D1:EB:78: BA:BE:B1:A0:74
C=US, O=GeoTrust Inc., OU=Domain Validated SSL, CN=GeoTrust DV SSL CA - G2	023A6B	E0:8B:1B:52:E7:8C:97:57:02: 08:17:60:F2:16:D3:72:E1:83: EC:5C	DE:DB:31:CB:CE:C5:F9:9D:38 :E8:6E:CC:4D:76:94:5D:F4:0F :2E:54:7C:94:E4:B0:12:40:94 :87:5A:F6:A5:58
C=US, O=GeoTrust Inc., OU=Domain Validated SSL, CN=GeoTrust DV SSL CA - G3	023A73	55:83:E3:E1:A7:51:17:21:1E: AF:C8:5E:D1:15:BB:C1:AC:96 :9D:B5	51:CF:0F:FF:C3:25:3F:C0:13: AF:78:6F:95:B1:90:10:9F:8C: 87:F3:4D:FD:1C:EC:44:C4:58: 88:78:9F:53:55
C=US, O=GeoTrust Inc., OU=Domain Validated SSL, CN=GeoTrust DV SSL CA - G4	023A78	35:E5:40:F4:D3:6E:94:D9:00: 5B:18:DC:E2:7C:A2:AE:8C:A0 :02:0D	8B:C1:B9:D7:DE:FC:CA:1C:CD :09:BA:CD:A8:8F:27:76:20:92 :F1:ED:4A:34:AE:5E:46:02:BB :9C:C9:15:C5:06



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=GeoTrust Inc., OU=Domain Validated SSL, CN=GeoTrust DV SSL SHA256 CA	5E631640DD196632B4 93A3300790D756	86:8E:B3:38:C9:C0:D3:72:71: D1:D3:79:27:16:07:97:04:10: 7A:85	78:4A:CA:10:63:BE:47:00:B3: A6:2F:45:C2:F9:3B:7E:EF:8B: F2:30:FB:86:96:10:E8:64:FC: 4B:3A:23:D0:9F
C=US, O=GeoTrust Inc., OU=Domain Validated SSL, CN=GeoTrust DV SSL SHA256 CA - G2	1127EA3641C6362332 4773D52372B202	A9:F3:F9:E7:06:F2:63:FC:AF: 80:A2:90:C3:98:69:A2:C4:91: CE:56	3F:DF:78:8A:5A:65:E6:A2:9D: 8C:15:50:D8:24:49:06:A3:B8: A7:B7:D3:DA:9B:DE:DD:74:8E :41:83:A7:63:C9
C=US, O=GeoTrust Inc., OU=GeoTrust Authentication Services, CN=GeoTrust True Identity CA 2	023A58	A4:C7:79:FC:07:94:BB:BA:A6: E7:14:DE:C3:1D:46:AB:CE:5D :B9:70	FF:1D:35:ED:46:40:63:D6:03: 1C:71:E4:14:26:2C:C2:31:0E: 8C:54:7A:B7:F7:CF:29:55:C9: E0:34:9E:53:3F
C=US, O=GeoTrust, Inc., CN=GeoTrust ECC EV SSL CA	0F0C3729FDF4955BF8 65EBC5EEF432FC	FF:7D:03:52:18:E8:46:DC:A8: D9:04:BE:24:39:C5:3D:B5:F7: D8:AC	C1:31:49:9F:D8:6B:21:3D:B5: DE:FA:AF:D5:31:11:C2:8A:2D :DA:F4:BA:46:5C:82:65:A7:2D :6C:F7:39:B6:68
C=US, O=GeoTrust, Inc., CN=GeoTrust SSL CA	0236D0	78:0A:06:F6:E9:B4:06:1C:AD: 0C:65:02:71:06:06:EB:53:5F: 1C:26	D4:C4:C9:98:19:F3:A5:F2:C6: 26:1C:94:44:C6:2A:8B:26:3B: 39:BC:6A:CC:E3:5C:DC:AB:E2 :72:D5:03:7F:B2
C=US, O=GeoTrust, Inc., CN=GeoTrust True Credentials CA 3	023A61	3C:24:FD:4E:7F:02:55:D7:ED: A2:3D:96:75:54:97:C6:52:A4: D9:60	5D:74:ED:61:D0:B3:11:E9:81: BB:CF:0F:41:9A:35:FA:9F:A1: EC:70:FF:1A:EB:74:2D:73:BC: FE:BA:06:CF:FF
C=US, O=GeoTrust, Inc., CN=RapidSSL CA	0236D1	C0:39:A3:26:9E:E4:B8:E8:2D: 00:C5:3F:A7:97:B5:A1:9E:83: 6F:47	6D:5B:C9:79:46:1C:72:64:E1: 71:00:10:CD:7D:4E:A3:EC:57: FA:11:21:5F:04:FF:A5:16:AE: 61:95:9A:B2:B2
C=US, O=GeoTrust, Inc., OU=Domain Validated SSL, CN=GeoTrust Secure Site Starter DV SSL CA - G1	4DC436F724F684DB8C 79499993F0994E	84:7E:D8:BD:0A:46:F1:0A:89: B1:3D:C3:A1:1F:95:B3:22:D3: F1:3C	62:FB:9B:6C:D2:63:3B:92:D9: 1D:B2:64:CE:67:8A:9B:19:C5: 75:41:4A:B1:0A:D4:6D:15:7F: 07:BB:A2:6E:FF
C=US, O=GeoTrust, Inc., OU=Domain Validated SSL, CN=Secure Site Starter DV SSL CA - G2	42C7E6E9845223DD10 1F3631D58708AD	99:16:1F:DB:4C:5A:40:88:75: 7F:42:E0:D1:15:7B:38:1D:5E: E1:71	64:85:36:13:C2:43:63:99:60: 3D:0D:56:0B:52:F0:4B:B8:F8: 1A:81:74:6E:42:38:98:83:A4: F5:9A:45:64:D5
C=US, O=GeoTrust, Inc., OU=Domain Validated SSL, CN=Secure Site Starter DV SSL CA - G3	023A85	F0:02:9E:79:4D:51:80:63:4B: 34:AE:E2:9F:29:13:58:23:2F: AA:04	2F:CC:00:9A:AF:DB:28:E9:25: 64:30:41:0A:6F:A6:E7:6A:F0: 93:01:B1:04:4F:EA:AA:CA:BO: 02:15:AA:39:E1
C=US, O=GeoTrust, Inc., OU=For Internal Use Only, CN=RapidSSL Enterprise CA	023A5A	49:EA:7A:73:31:F1:31:2E:5C: 58:B7:C3:07:32:53:FC:46:16: E4:D3	2A:40:0E:47:8B:9F:56:C1:37: 62:A4:97:54:14:4B:6B:8C:4A: 5A:1D:C8:E7:B3:1E:44:1D:0D: BD:1A:6A:4B:E4
C=US, O=GeoTrust, Inc., OU=For Internal Use Only, CN=RapidSSL Enterprise CA	023A5B	B5:DA:CA:45:79:09:34:37:CE: 0F:DD:C6:33:D2:DD:B1:ED:0E :7C:72	87:AA:71:AF:03:2E:36:BD:69: DA:F4:01:4F:CA:D8:F2:73:3A: A0:0D:EA:B9:59:33:5A:E3:86: 6E:4B:6D:3A:1D
C=US, O=Symantec Corporation, CN=Symantec SAS Code Signing CA	023A72	49:7D:69:1C:07:70:8A:FD:F2: BA:1B:05:99:0B:FF:89:50:4F: BC:DE	27:9A:05:5E:2C:41:A9:10:5F: DF:D2:63:43:22:9D:0D:38:12: 58:72:45:5C:43:34:4D:DE:BC: AE:5A:0B:F7:36
C=US, O=Symantec Corporation, CN=Symantec SAS EV Code Signing CA	5D74EC40C72FA11E6B 91C2E5BAC472FF	8E:F6:55:31:C8:88:7C:73:9E: 2B:BD:51:8A:37:FA:C2:CD:69 :0D:53	E8:65:F5:83:A9:28:CC:B6:A7: 28:6B:94:E7:92:0E:E1:F4:99: 8C:03:0B:43:86:89:E9:58:3B: CC:D6:AC:52:61
C=US, O=Symantec Corporation, CN=Symantec SHA1 SAS Code Signing CA	023A84	2B:35:08:C4:C2:EE:D9:32:F2: D8:29:22:9F:E4:05:0F:A4:AF: 12:1E	F8:2C:F9:00:3A:28:69:3F:43: 0C:7E:93:95:81:09:7B:A0:97: C9:3A:EE:51:0A:10:5D:78:22: 32:4F:36:4C:9A



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Symantec Corporation, CN=Symantec Time Stamping Services CA - G2	023A64	44:D7:BC:27:88:29:17:14:72:CA:B5:41:9C:4A:BD:F1:AC:60:EA:C9	83:C1:EA:9E:9E:FC:A2:83:B8:40:E1:67:F9:EA:79:C4:E3:2A:CD:33:83:4F:59:D1:38:FC:DA:B9:D8:80:6B:20
C=US, O=Volusion, Inc., OU=Domain Validated SSL, CN=Volusion, Inc. DV SSL CA	023A5C	AF:83:5B:6C:3F:58:DF:1F:CF:E5:3C:DC:57:51:53:2C:F0:F0:78:2D	8F:DA:7A:88:13:54:6F:9A:7C:B0:65:CD:32:D3:65:0D:5B:56:A2:B7:F9:42:B9:49:9A:EB:42:A8:6A:3E:9D:56
C=US, O=Volusion, Inc., OU=Domain Validated SSL, CN=Volusion, Inc. DV SSL CA - G2	023A7A	2B:1E:D6:E9:4F:6C:88:F4:A7:AF:7C:A9:5F:FC:EF:30:A2:B5:0D:50	6F:F6:F6:3F:6A:0D:3D:63:44:6C:DA:A5:23:D2:62:73:B1:26:C0:2F:92:2E:05:D7:3C:47:48:EB:89:B8:63:93
C=US, O=Volusion, Inc., OU=Domain Validated SSL, CN=Volusion, Inc. DV SSL CA - G3	6525B603299E50D5FB1D92120F7E0622	EF:20:DE:67:87:91:5C:1E:74:69:2E:5C:8A:52:6F:70:37:EA:54:60	80:D9:ED:B4:5B:7F:59:2C:D3:02:54:E5:5B:C3:16:BB:F4:4E:47:DF:C0:C0:04:A3:83:28:1C:03:F3:45:BA:39
C=US, O=Volusion, Inc., OU=Domain Validated SSL, CN=Volusion, Inc. DV SSL CA - G4	023A87	C4:E3:1F:D9:A1:30:9C:0C:F8:C9:27:4D:2A:32:26:CB:5C:6B:D2:6B	ED:67:93:70:83:B0:73:9F:30:23:96:F9:74:AF:B4:1B:FB:A6:48:47:39:67:78:0B:2C:59:B8:8A:C4:12:1A:D4
C=US, O=Volusion, Inc., OU=Domain Validated SSL, CN=Volusion, Inc. DV SSL CA - G5	0CBEE62D6194EB94B579926557FB3011	A1:32:4C:43:09:CB:02:02:23:A0:06:C1:E0:78:F8:10:0C:68:BE:7F	9F:E3:06:E6:63:E4:59:64:46:44:F6:0A:71:53:A2:21:43:6F:B9:70:1A:0E:BD:91:24:EE:F8:15:9D:15:CB:43



REPORT OF THE INDEPENDENT ACCOUNTANT

To the Management of Symantec Corporation:

We have examined for the Thawte Certification Authority (CA) operations provided by Symantec Corporation (Symantec) at Mountain View, California, USA; New Castle, Delaware, USA; Melbourne, Australia; Cape Town, South Africa; and Dublin, Ireland and for Verisign, Inc. (Verisign), an independent service organization that provides datacenter hosting services to Symantec for the Thawte Certification Authority operations at the New Castle, Delaware location:

- a) Symantec's disclosure of its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices and its disclosure of the services and related controls provided by Verisign in [Attachment A](#); and
- b) the effectiveness of Symantec's controls and Verisign's controls, where applicable, over the:
 - provision of services in accordance with its Thawte Certification Practices Statement and the description of the services and related controls provided by Verisign as enumerated in [Attachment A](#),
 - establishment and protection of the integrity of keys and certificates it manages throughout their lifecycle,
 - authenticity and confidentiality of subscriber and relying party information,
 - continuity of key and certificate lifecycle management operations, and
 - development, maintenance, and operation of CA systems integrity

throughout the period December 1, 2016 to October 31, 2017 for its CAs as enumerated in [Attachment B](#).

Syantec's management is responsible for these disclosures and for maintaining effective controls based on the WebTrust [Principles and Criteria for Certification Authorities v2.0](#). Our responsibility is to express an opinion based on our examination.

The relative effectiveness and significance of specific controls at Symantec and Verisign and their effect on assessments of control risk for subscribers and relying parties are dependent on their interaction with the controls, and other factors present at individual subscriber and relying party locations. Our examination did not extend to controls at individual subscriber and relying party locations and we have not evaluated the effectiveness of such controls.

Syantec terminated the contracts for each of its three external registration authorities used for specific subscriber registration activities as disclosed in Syantec's business practices. Upon terminating these relationships, Syantec reperformed the validation work originally performed by these external registration authorities for each certificate that was still valid. The dates for termination for CrossCert, CertSuperior, and Certisur were January 19, 2017, April 4, 2017, and April 14, 2017, respectively. Our examination did not extend to the controls exercised by these external registration authorities.



Symantec does not escrow its CA keys, does not provide Integrated Circuit Card Lifecycle Management services to subscribers, and does not provide certificate suspension services. Accordingly, our examination did not extend to controls that would address those criteria. Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether, throughout the period December 1, 2016 to October 31, 2017, for the CAs enumerated in [Attachment B](#), in all material respects:

- a) Symantec disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices for the services and related controls provided by Verisign in [Attachment A](#); and
- b) Symantec and Verisign, where applicable, maintained effective controls over the
 - provision of services in accordance with Symantec's thawte Certification Practices Statement and the description of the services and related controls provided by Verisign as enumerated in [Attachment A](#),
 - establishment and protection of the integrity of keys and certificates it manages throughout their lifecycle,
 - authenticity and confidentiality of subscriber and relying party information,
 - continuity of key and certificate lifecycle management operations, and
 - development, maintenance, and operation of CA systems integrity

based on the WebTrust [Principles and Criteria for Certification Authorities v2.0](#).

Because of the nature and inherent limitations of controls, Symantec's ability to meet the aforementioned criteria may be affected. For example, controls may not prevent, or detect and correct, error, fraud, unauthorized access to systems and information, or failure to comply with internal and external policies or requirements. Also, the projection of any conclusions based on our findings to future periods is subject to the risk that changes may alter the validity of such conclusions.

In our opinion, throughout the period December 1, 2016 to October 31, 2017, in all material respects:

- a) Symantec disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in its thawte Certification Practices Statement and the services and related controls provided by Verisign as enumerated in [Attachment A](#);
- b) Symantec and Verisign maintained effective controls to provide reasonable assurance that Symantec and Verisign provide its services in accordance with the thawte Certification Practices Statements and the description of the services and related controls provided by Verisign as enumerated in [Attachment A](#);



- c) Symantec 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 Symantec), and
 - subordinate CA certificate requests are accurate, authenticated, and approved;
- d) Symantec and Verisign, where applicable, maintained effective controls to provide reasonable assurance that:
- logical and physical access to CA systems and data is restricted to authorized individuals,
 - the continuity of key and certificate management operations is maintained, and
 - CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

based on the WebTrust [Principles and Criteria for Certification Authorities v2.0](#).

This report does not include any representation as to the quality of Symantec's services other than its CA operations at Mountain View, California, USA; New Castle, Delaware, USA; Melbourne, Australia; Cape Town, South Africa; and Dublin, Ireland, nor the suitability of any of Symantec's services for any customer's intended purpose.

Effective at the close of business on October 31, 2017, Symantec sold its CA business operations to DigiCert Inc.

Symantec's use of the WebTrust for Certification Authorities Seal constitutes a symbolic representation of the contents of this report and it is not intended, nor should it be construed, to update this report or provide any additional assurance.

BDO USA, LLP

St. Louis, Missouri
January 31, 2018



Attachment A

Thawte Certification Practice Statement Versions in Scope

Policy Name	Version	Date
thawte Certification Practice Statement	3.7.18	September 8, 2017
thawte Certification Practice Statement	3.7.17	December 19, 2016
thawte Certification Practice Statement	3.7.16	September 9, 2016

Description of Services Provided for Symantec and Related Controls Exercised by Verisign at New Castle Delaware Location

Symantec has entered into an agreement with Verisign Inc. (Verisign), to provide datacenter hosting services at the New Castle, Delaware datacenter (the datacenter). Verisign performs the same physical and environmental security controls as Symantec has disclosed in Section 5 and Section 6 of the thawte Certification Practice Statement; however, Verisign performs UPS maintenance quarterly, rather than semi-annually.

Verisign has implemented the following physical and environmental security controls to protect Symantec assets at the datacenter. Production systems housed in the datacenter are protected by multiple tiers of physical security, with access to the lower tier required before gaining access to the next highest tier. The datacenter enforces individual access control through the use of two-factor authentication, including biometrics. Physical access to the datacenter is automatically logged. Visitors to the datacenter are required to sign a log at the security office, wear a visitor badge, and be escorted while onsite. The datacenter facilities are manned continuously by on-site security personnel and the premises are continuously video monitored and recorded. Multiple generators, UPS, HVAC and fire suppression systems have been implemented at the datacenter.



Attachment B

List of CAs in Scope

Root CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=thawte, Inc., OU=(c) 2007 thawte, Inc. - For authorized use only, CN=thawte Primary Root CA - G2	35FC265CD9844FC93D263D579BAED756	AA:DB:BC:22:23:8F:C4:01:A1:27:BB:38:DD:F4:1D:DB:08:9E:F0:12	A4:31:0D:50:AF:18:A6:44:71:90:37:2A:86:AF:AF:8B:95:1F:FB:43:1D:83:7F:1E:56:88:B4:59:71:ED:15:57
C=US, O=thawte, Inc., OU=Certification Services Division, OU=(c) 2006 thawte, Inc. - For authorized use only, CN=thawte Primary Root CA	344ED55720D5EDEC49F42FCE37DB2B6D	91:C6:D6:EE:3E:8A:C8:63:84:E5:48:C2:99:29:5C:75:6C:81:7B:81	8D:72:2F:81:A9:C1:13:C0:79:1D:F1:36:A2:96:6D:B2:6C:95:0A:97:1D:B4:6B:41:99:F4:EA:54:B7:8B:FB:9F
C=US, O=thawte, Inc., OU=Certification Services Division, OU=(c) 2008 thawte, Inc. - For authorized use only, CN=thawte Primary Root CA - G3	600197B746A7EAB4B49AD64B2FF790FB	F1:8B:53:8D:1B:E9:03:B6:A6:F0:56:43:5B:17:15:89:CA:F3:6B:F2	4B:03:F4:58:07:AD:70:F2:1B:FC:2C:AE:71:C9:FD:E4:60:4C:06:4C:F5:FF:B6:86:BA:E5:DB:AA:D7:FD:D3:4C
C=ZA, ST=Western Cape, L=Durbanville, O=Thawte, OU=Thawte Certification, CN=Thawte Timestamping CA	0	BE:36:A4:56:2F:B2:EE:05:DB:B3:D3:23:23:AD:F4:45:08:4E:D6:56	6B:6C:1E:01:F5:90:F5:AF:C5:FC:F8:5C:D0:B9:39:68:84:04:86:59:FC:2C:6D:11:70:D6:8B:04:52:16:C3:FD



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Symantec Corporation, CN=Symantec Time Stamping Services CA - G2	7E93EBFB7CC64E59EA4B9A77D406FC3B	6C:07:45:3F:FD:DA:08:B8:37:07:C0:9B:82:FB:3D:15:F3:53:36:B1	06:25:FE:E1:A8:0D:7B:89:7A:97:12:24:9C:2F:55:FF:39:1D:66:61:DB:D8:B8:7F:9B:E6:F2:52:D8:8C:ED:95
C=US, O=Thawte, Inc., CN=Thawte Code Signing CA - G2	47974D7873A5BCAB0D2FB370192FCE5E	80:8D:62:64:2B:7D:1C:4A:9A:83:FD:66:7F:7A:2A:9D:24:3F:B1:C7	AF:84:0C:A2:B9:DF:B7:76:BF:81:AA:94:C4:01:BC:44:0C:52:E5:C5:90:C4:36:07:A1:3D:66:80:D8:3E:33:49
C=US, O=thawte, Inc., CN=thawte ECC EV SSL CA	1FF2FCBC6326AABD286693991F43EC21	E9:2B:D8:99:36:8C:0F:41:67:82:A5:BE:8D:F2:B9:75:66:A8:3F:6B	EA:D6:2F:42:BB:36:9D:D4:3C:F6:13:1A:C2:D8:D7:2E:4F:9F:EE:85:E6:9D:45:DA:AF:FE:32:6A:AC:2A:46:F1
C=US, O=thawte, Inc., CN=thawte EV Code Signing CA	779A2BE6DEEDA2BFB902CA8E3668B9AF	B1:7E:FE:36:89:24:DF:F5:0A:91:9C:58:A6:A8:6E:F1:81:FA:C5:6E	F3:76:F6:E5:BF:66:0F:6B:ED:B7:68:DC:D1:30:3E:AD:D4:A9:6F:2E:D7:A9:77:17:E8:78:FA:E6:BB:59:59:FA
C=US, O=thawte, Inc., CN=thawte EV SSL CA - G2	05237150E67BDD38F33EF53CD211313F	19:73:F3:07:35:9B:C9:61:03:03:57:90:BF:75:DD:91:51:E8:3F:99	37:F6:BD:9B:EE:0C:74:F6:08:DD:47:4B:56:A7:2F:81:83:07:7D:FC:26:62:AF:79:BF:E3:D4:FA:BC:F0:B1:C4
C=US, O=thawte, Inc., CN=thawte EV SSL CA - G3	5D72FB337620F64C7280DBE91281FF6A	68:06:0C:A0:74:FF:36:C7:E8:1B:0B:33:8D:7E:83:76:79:0E:D0:20	1A:99:01:9F:9D:41:2A:64:45:47:49:ED:AA:8E:7D:C4:66:73:D6:44:DF:3C:E1:5C:C6:55:73:5E:A0:DF:86:FE
C=US, O=thawte, Inc., CN=thawte Extended Validation SHA256 SSL CA	0A489E88537E8AA6454D6E2C4B2AEB20	14:B4:AC:F9:44:34:F7:D0:76:8D:3E:E4:8D:18:8E:FD:0C:29:13:7A	79:20:B8:E1:8D:2F:C1:2D:81:C2:FA:B9:0A:63:B1:B5:2A:B3:29:CE:7C:D1:CB:7C:A0:94:CD:F9:D6:00:F4:92
C=US, O=thawte, Inc., CN=thawte SHA256 Code Signing CA	71A0B73695DDB1AFC23B2B9A18EE54CB	D0:0C:FD:BF:46:C9:8A:83:8B:C1:0D:C4:E0:97:AE:01:52:C4:61:BC	C4:D1:8E:0A:58:E4:EF:FD:17:ED:77:C8:40:B6:13:EF:15:F5:51:07:6E:A9:2C:2B:77:F6:60:9A:6C:25:57:C7
C=US, O=thawte, Inc., CN=thawte SHA256 Code Signing CA - G2	0BF3CC63CF04304D47C3B587049FA807	F3:75:9A:4E:54:48:BA:CD:B7:85:62:32:84:61:04:58:44:21:6E:B7	F7:6F:0D:8A:D3:30:AC:FD:4C:5B:D0:5A:58:A1:CF:15:5D:E0:0B:E2:C9:8F:4E:78:99:BE:24:E8:0A:2A:BC:BF
C=US, O=thawte, Inc., CN=thawte SHA256 SSL CA	36349E18C99C2669B6562E6CE5AD7132	67:D1:47:D5:DA:B7:F2:8D:66:3C:A5:B7:A9:56:8F:08:74:27:B9:F7	3F:3A:F9:C9:CC:2C:75:99:EF:8F:6D:D7:CA:51:6C:FC:17:97:D7:D1:20:02:25:4F:3B:FD:0D:4D:0F:E9:DE:86
C=US, O=Thawte, Inc., CN=Thawte SSL CA	4D5F2C3408B24C20CD6D507E244DC9EC	73:E4:26:86:65:7A:EC:E3:54:FB:F6:85:71:23:61:65:8F:2F:43:57	08:55:41:4A:F5:F5:FD:7E:26:4F:8B:00:2A:39:CC:ED:67:E5:95:2E:89:B6:1B:68:0C:C8:47:BA:A3:49:44:DE
C=US, O=thawte, Inc., CN=thawte SSL CA - G2	1687D6886DE2300685233DBF11BF6597	2E:A7:1C:36:7D:17:8C:84:3F:D2:1D:B4:FD:B6:30:BA:54:A2:0D:C5	B7:A8:AF:2A:4A:43:F0:A8:6B:15:60:4D:E6:46:12:09:C9:CD:76:89:4D:8B:07:48:BC:99:D9:A7:97:01:3B:B0
C=US, O=Thawte, Inc., OU=Domain Validated SSL, CN=Thawte DV SSL CA	7610128A17B682BB3A1F9D1A9A35C092	3C:A9:58:F3:E7:D6:83:7E:1C:1A:CF:8B:0F:6A:2E:6D:48:7D:67:62	D2:57:38:31:FA:53:76:B1:C7:DC:0D:BB:0E:F5:88:13:E9:07:06:18:FA:5A:21:E1:3F:5E:9F:2B:65:E0:A3:20



Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=thawte, Inc., OU=Domain Validated SSL, CN=thawte DV SSL CA - G2	2C69E12F6A670BD99D D20F919EF09E51	4C:03:68:21:E4:34:13:B6:63: B0:6D:CF:01:4C:E9:0D:50:34: 7F:99	9F:25:11:A2:3E:70:D9:5F:B6: 27:98:50:8A:67:6C:C3:89:64: 10:09:36:A6:E6:D3:CA:E7:71: 54:C0:29:0F:02
C=US, O=thawte, Inc., OU=Domain Validated SSL, CN=thawte DV SSL SHA256 CA	3E23345AED2C0A517B 26DED4801D10AA	50:F1:25:EF:CA:24:28:FF:17: D2:04:B8:9E:52:64:50:9A:28: 3D:A7	53:7C:5C:80:72:36:3E:14:7C: 84:D2:1D:0D:22:48:B6:B9:9A: 9A:8A:43:31:16:59:83:5E:C3: 39:26:DA:28:60