



REPORT OF THE INDEPENDENT ACCOUNTANT

To the management of Viking Cloud, Inc.:

Scope

We have examined Viking Cloud, Inc., a Sysnet North America, Inc. subsidiary (“VikingCloud”), management’s [assertion](#) that for its Certification Authority (“CA”) operations in Chicago, Illinois and Dallas, Texas, in the United States of America, for its CAs as enumerated in [Attachment A](#), VikingCloud has:

- maintained effective controls to provide reasonable assurance that it meets the Network and Certificate System Security Requirements as set forth by the CA/Browser Forum

throughout the period September 1, 2023 to August 31, 2024, based on the [WebTrust Principles and Criteria for Certification Authorities - Network Security v1.7](#).

Certification Authority’s Responsibilities

VikingCloud’s management is responsible for its assertion, including the fairness of its presentation, and the provision of its described services in accordance with the [WebTrust Principles and Criteria for Certification Authorities - Network Security v1.7](#).

Independent Accountant’s Responsibilities

Our responsibility is to express an opinion on management’s assertion based on our examination. Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether management’s assertion is fairly stated, in all material respects. An examination involves performing procedures to obtain evidence about management’s assertion. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material misstatement of management’s assertion, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

We are required to be independent and to meet our other ethical responsibilities in accordance with relevant ethical requirements relating to the engagement.

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

Inherent limitations

BDO USA refers to BDO USA, P.C., a Virginia professional corporation, also doing business in certain jurisdictions with an alternative identifying abbreviation, such as Corp. or P.S.C.

BDO USA, P.C. is the U.S. member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms.

BDO is the brand name for the BDO network and for each of the BDO Member Firms.



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

Independent Accountant’s Opinion

In our opinion management’s assertion, as referred to above, is fairly stated, in all material respects.

This report does not include any representation as to the quality of VikingCloud’s services other than its CA operations in Chicago, Illinois and Dallas, Texas, in the United States of America, nor the suitability of any of VikingCloud’s services for any customer’s intended purpose.

Other Matters

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

Matter Topic		Matter Description
1	Physical Security	VikingCloud disclosed in Mozilla Bug #1902195 that an unplanned access event occurred for a physically secured environment containing CA infrastructure and network equipment. The CA infrastructure and network equipment were not accessed.

While the VikingCloud assertion notes all issues disclosed on Bugzilla from September 1, 2023 through the date of this report, we have only noted those instances relevant to the CAs enumerated in [Attachment A](#) and applicable to the [WebTrust Principles and Criteria for Certification Authorities - Network Security v1.7](#).

Use of the WebTrust Seal

VikingCloud’s use of the WebTrust for Certification Authorities - Network Security 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

November 22, 2024



ATTACHMENT A - IN-SCOPE CAs FOR NETWORK SECURITY REQUIREMENTS

Root CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
CN = XRamp Global Certification Authority O = XRamp Security Services Inc OU = www.xrampsecurity.com C = US	CECDDC905099D8DADFC5B1D209B737CBE2C18CFB2C10C0FF0BCF0D3286FC1AA2	11/1/2004	1/1/2035
CN = SecureTrust CA O = SecureTrust Corporation C = US	F1C1B50AE5A20DD8030EC9F6BC24823DD367B5255759B4E71B61FCE9F7375D73	11/7/2006	12/31/2029
CN = Secure Global CA O = SecureTrust Corporation C = US	4200F5043AC8590EBB527D209ED1503029FBCBD41CA1B506EC27F15ADE7DAC69	11/7/2006	12/31/2029
CN = Trustwave Global Certification Authority O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	97552015F5DDFC3C8788C006944555408894450084F100867086BC1A2BB58DC8	8/23/2017	8/23/2042
CN = Trustwave Global ECC P256 Certification Authority O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	945BBC825EA554F489D1FD51A73DDF2EA624AC7019A05205225C22A78CCFA8B4	8/23/2017	8/23/2042
CN = Trustwave Global ECC P384 Certification Authority O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	55903859C8C0C3EBB8759ECE4E2557225FF5758BBD38EBD48276601E1BD58097	8/23/2017	8/23/2042
C=US O=Viking Cloud, Inc. CN=VikingCloud TLS RSA Root 1	548D27778822346B9EEE3CB4621BDFE2DBDC50588DA68C5E3632301F8E62ECAB	2/5/2024	2/3/2049
C=US O=Viking Cloud, Inc. CN=VikingCloud TLS ECC Root 1	C3C040E805CE774763501CCF47B617275215B7DBF777C58B950FD4650673F3BB	2/5/2024	2/3/2049



Root CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US O=Viking Cloud, Inc. CN=VikingCloud SMIME RSA Root 1	7714BED9406C95F02A1C68ED4A07710FA65333E1A4F7CDCBA7ED746FDAA07F40	2/5/2024	2/3/2049
C=US O=Viking Cloud, Inc. CN=VikingCloud SMIME ECC Root 1	70817538CF55A6CC405D506AEF6B50AE6026C90EB6FB076841C4A6B02835183E	2/5/2024	2/3/2049
C=US O=Viking Cloud, Inc. CN=VikingCloud Client RSA Root 1	9DBE6AB710C7F1EAD52867053CE052B8EFCFBC9B2763B8861260D1B336E61C63	2/5/2024	2/3/2049
C=US O=Viking Cloud, Inc. CN=VikingCloud Client ECC Root 1	737F973ACE76DFE14F8AB8FC5C78B4EA8232F38668558AA3DCBF572EA4DA0020	2/5/2024	2/3/2049



SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave Extended Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	EEA36C0FFA3F54FFDB0CF14B3BD34A53EC7B775F54053DD8B07DFD2F8BEC9083	10/13/2014	10/10/2024
E = ca@trustwave.com CN = Trustwave Extended Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	49C58270F70F1BE0B7C19D1BC2C2EBC41E2FDE0D4885D4FA65EF0370ACEC7A00	9/1/2016	9/29/2024
E = ca@trustwave.com CN = Trustwave Secure Global Extended Validation CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	45B2B08E1B58948A028BE13A67C0E20D4B2466AE2B6EC6250EBB10FD6B7F8239	8/12/2015	8/9/2025
E = ca@trustwave.com CN = Trustwave XRamp Global Extended Validation CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	1D0CD7EF3C19265508E20E58B3538964F4A11ADEC8A71D8AB8A8AFF15683C6AE	8/12/2015	8/9/2025
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Extended Validation CA, Level 1	DD23355C61D59970423004729795CAEF77AFDB39767A795740D4E04CB6158A99	1/29/2019	1/29/2029
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Extended Validation CA, Level 1	18626A3B7211128D563469C654557D13C9366D7FCEC8B94DB4F0AA7E05944041	2/6/2018	2/24/2028



SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-256 Extended Validation CA, Level 1	275BF0046E0270178B13B67E4DB150A10197CB71F9A061FAD36B3D76639FE186	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-384 Extended Validation CA, Level 1	29F8E104DF38E612BF4F505365B5D0B0B20DD4E89C908306484EB8374C1E66D8	2/6/2018	2/24/2028
E = ca@trustwave.com CN = Trustwave Organization Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	FF1E0D233196B7EC20BEDFC65988E0AE1985EC6AC332A79ADFFE71B86BC0208A	10/1/2014	9/28/2024
E = ca@trustwave.com CN = Trustwave Organization Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	58EA0688B7909AAA8EAAA2FFF36F3BBE8F4A2AD03BD70243B3903469DB4890F7	9/1/2016	9/29/2024
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Organization Validation CA, Level 1	11D9330D1A2398508DD50D3094EB28B1B44900D9928F8C22B25EF7A781BDB403	1/29/2019	1/29/2029
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Organization Validation CA, Level 1	2E63DC1BECF427F9902B49DE6330FD3E8EEBF88B14E653B3BA2E37D4E4880965	2/6/2018	2/24/2028



SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-256 Organization Validation CA, Level 1	18ABD6E9CA907BB36754D0C046EBB50DD9B95D527824D9581A31B750FCFDBAEF	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-384 Organization Validation CA, Level 1	87D42169B2693551CA205CCF17F06F6E6651F7218CD6D26607BF5BA4DD2F26F2	2/6/2018	2/24/2028
E = ca@trustwave.com CN = Trustwave Domain Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	859968F9278B4DC82EE30FD118A5D297D284B687CB64CF9755AB8A9D38F2B70F	10/1/2014	9/28/2024
E = ca@trustwave.com CN = Trustwave Domain Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	74F56E1AB339D83E80F2F6E264F894775B426C89B44703DF4FA8A3231163A2BD	9/1/2016	9/29/2024
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Domain Validation CA, Level 1	5E60965804461930AC27B6DBE3445679EAE4131C22AFB88AF7ACF6A1917B5ABA	1/29/2019	1/29/2029
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Domain Validation CA, Level 1	6782C6E9ADBF9216E268306D46333FBC674BDEDF86B67BE777079E2C0E36888E	2/6/2018	2/24/2028



SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-256 Domain Validation CA, Level 1	F62E35AAD345FB253863CFC0E65823ACD3E7F0846D19B8326D709C7919A22D7E	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-384 Domain Validation CA, Level 1	C63DF9618FBAF48662BA12ABE87B212CF777C27A446A0FA555D7A9D191148ED7	2/6/2018	2/24/2028
C = US O = Viking Cloud, Inc. CN = Viking Cloud Extended Validation CA, Level 1	10B608E53E0F3F44432A32B906CD753001736AC8BFE90ED3A0847DF285E2D977	6/9/2022	12/15/2029
C = US O = Viking Cloud, Inc. CN = Viking Cloud Organization Validation CA, Level 1	0EEF05BDA7842EA85D1D9812495EFC561283BAA90D1431C579DD61F7ED9269A1	6/9/2022	12/15/2029
C = US O = Viking Cloud, Inc. CN = Viking Cloud Domain Validation CA, Level 1	386AD965DA24812016ED3F011F2112DFD591693DABEB3D0E61B1145F5F9D1217	6/9/2022	12/15/2029
C=US O=Viking Cloud, Inc. CN=VikingCloud T1 Extended Validation RSA, Level 1	88762525867675B0049640C7CA7163A8DBE0DD76AD0B69917D824730C8A900D6	2/7/2024	2/6/2034
C=US O=Viking Cloud, Inc. CN=VikingCloud T1 Extended Validation ECC, Level 1	9C26E5EFF31BB8F735C03CAE901E7282381F34FF7D94248BF43FFFC85DC82840	2/7/2024	2/6/2034
C=US O=Viking Cloud, Inc. CN=VikingCloud TWG TLS DV CA, Level 1	94B949699B74368B27FAD14D1EEF1F2AA2AD6AC24399A24399398B013FFB9601	8/28/2024	8/28/2034



S/MIME CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave S/MIME SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	5C4BC597291AB9C7023FB6445FD60381A65C60DDD404F124E5FA143FE98B05F3	10/1/2014	9/28/2024
C = US O = SecureTrust CN = SecureTrust TWG Secure Email CA, Level 2	ACCCAAF77372FFD2BD7BB21861B224EE1DAE8FE640D03A8FDE7518EC9B32508B	10/8/2020	10/8/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-256 Secure Email CA, Level 2	B36BE2E3F72EC3FA03B2273EFF994F4F6F4F09B2DD7A28AF951BD38EC103F088	10/8/2020	10/8/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-384 Secure Email CA, Level 2	136A05614FDE8F94D8C1209B853F8F7FC487D233A280BD9902335DDB563EFDC5	10/8/2020	10/8/2030
C = US O = SecureTrust CN = SecureTrust Secure Email CA, Level 3	C9B767E33B955785458F569746D489B9A51C72B8160212B5DD5C9978125ED492	10/8/2020	10/8/2030
C = US O = Viking Cloud, Inc. CN = Viking Cloud Secure Email CA, Level 1	84071B259D851367E653E0E477A9ECDCA3F10453E1FE57A1EA5728F7934824C9	6/9/2022	6/9/2032
C=US O=Viking Cloud, Inc. CN=VikingCloud S1 SMIME RSA, Level 1	9A07F95DD4FFC0124D6AEB8D8D97B4DB87C5525903793AA5F736714E716C113C	2/7/2024	2/6/2034
C=US O=Viking Cloud, Inc. CN=VikingCloud S1 SMIME ECC, Level 1	B855F2484501A4A9B82F27C9639353FEC5FE3768448D17826FFF27BD69A62DA7	2/7/2024	2/6/2034
C=US O=Viking Cloud, Inc. CN=VikingCloud XG Secure Email CA, Level 1	434BF66BD4A8E461B810864D82D35C3100BE5D98E63C67C6CA7422FA6F75A1CC	8/28/2024	8/28/2034



Client Authentication CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave Client Authentication SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	7FE20CEEE2B6972D862542060AE9A88FEA5E43A977A7FB25C95246F7F76C0668	10/1/2014	9/28/2024
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Client Authentication CA, Level 1	2F50860F968053A7DBA17851341759B0D5C0412F857A2CD19F3731DD3BED1B6B	1/29/2019	1/29/2029
C = US O = SecureTrust CN = SecureTrust TWG Client CA, Level 3	5B78E6B05F0739429C50CDDEF3DBDC8813A456AB9619E82CF591392A9D0D3B26	10/8/2020	10/8/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-256 Client CA, Level 3	E92BE3F7D2A0FF65927B92EFB65B31BDDADB070999F8D6AA81273D9F90695C7B	10/8/2020	10/8/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-384 Client CA, Level 3	96CC051C0841630A05FD7F274F6EFB723F857B8B8CFFC0676765C1013100D22D	10/8/2020	10/8/2030
C = US O = Viking Cloud, Inc. CN = Viking Cloud Client Authentication CA, Level 1	115B4CCB4B7A8D2733085363311A3EE5A2603A4198483814E727181F0D45BB89	6/9/2022	12/15/2029
C=US O=Viking Cloud, Inc. CN=VikingCloud C1 Client RSA, Level 1	D44EA526E5B414B254A0C7CAB0A08F2A7AF34B7893DC6EF22F462DBA47C7F28F	2/7/2024	2/6/2034
C=US O=Viking Cloud, Inc. CN=VikingCloud C1 Client ECC, Level 1	1DCDF0D947E4884DA93FAB6DD1C108E381E9B8586F6342F1385001146E6E09BC	2/7/2024	2/6/2034



VIKING CLOUD, INC. MANAGEMENT’S ASSERTION

Viking Cloud, Inc., a Sysnet North America, Inc. subsidiary (“VikingCloud”), operates the Certification Authority (“CA”) services for the CAs enumerated in [Attachment A](#) in scope for Network Security Requirements and provides CA services.

The management of VikingCloud is responsible for establishing and maintaining effective controls over CA operations, including its network and certificate security system controls. These controls contain monitoring mechanisms, and actions are taken to correct deficiencies identified.

There are inherent limitations in any controls, including the possibility of human error, and the circumvention or overriding of controls. Accordingly, even effective controls can only provide reasonable assurance with respect to VikingCloud’s CA operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.


VikingCloud management has assessed its disclosures of its certificate practices and controls over its CA services. Based on that assessment, in VikingCloud management’s opinion, in providing its CA services in Chicago, Illinois and Dallas, Texas, in the United States of America, VikingCloud has:

- maintained effective controls to provide reasonable assurance that it meets the Network and Certificate System Security Requirements as set forth by the CA/Browser Forum

throughout the period September 1, 2023 to August 31, 2024, based on the [WebTrust Principles and Criteria for Certification Authorities - Network Security v1.7](#).

VikingCloud has disclosed the following matters publicly on Mozilla’s Bugzilla platform. These matters were included below due to being open during the period September 1, 2023 through the date of this report:

Bug ID	Summary	Opened	Closed	Resolution
1902195	VikingCloud: Unplanned Access Event	06/12/2024	-	OPEN

Signed by:

 878AB99307394F5...

11/22/2024

Mark Brady
 President and Chief Operating Officer, Viking Cloud, Inc



ATTACHMENT A - IN-SCOPE CAs FOR NETWORK SECURITY REQUIREMENTS

Root CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
CN = XRamp Global Certification Authority O = XRamp Security Services Inc OU = www.xrampsecurity.com C = US	CECDDC905099D8DADF5B1D209B737CBE2C18CFB2C10C0FF0BCF0D3286FC1AA2	11/1/2004	1/1/2035
CN = SecureTrust CA O = SecureTrust Corporation C = US	F1C1B50AE5A20DD8030EC9F6BC24823DD367B5255759B4E71B61FCE9F7375D73	11/7/2006	12/31/2029
CN = Secure Global CA O = SecureTrust Corporation C = US	4200F5043AC8590EBB527D209ED1503029FBCBD41CA1B506EC27F15ADE7DAC69	11/7/2006	12/31/2029
CN = Trustwave Global Certification Authority O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	97552015F5DDFC3C8788C006944555408894450084F100867086BC1A2BB58DC8	8/23/2017	8/23/2042
CN = Trustwave Global ECC P256 Certification Authority O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	945BBC825EA554F489D1FD51A73DDF2EA624AC7019A05205225C22A78CCFA8B4	8/23/2017	8/23/2042
CN = Trustwave Global ECC P384 Certification Authority O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	55903859C8C0C3EBB8759ECE4E2557225FF5758BBD38EBD48276601E1BD58097	8/23/2017	8/23/2042
C=US O=Viking Cloud, Inc. CN=VikingCloud TLS RSA Root 1	548D27778822346B9EEE3CB4621BDFE2DBDC50588DA68C5E3632301F8E62ECAB	2/5/2024	2/3/2049
C=US O=Viking Cloud, Inc. CN=VikingCloud TLS ECC Root 1	C3C040E805CE774763501CCF47B617275215B7DBF777C58B950FD4650673F3BB	2/5/2024	2/3/2049



Root CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US O=Viking Cloud, Inc. CN=VikingCloud SMIME RSA Root 1	7714BED9406C95F02A1C68ED4A07710FA65333E1A4F7CDCBA7ED746FDAA07F40	2/5/2024	2/3/2049
C=US O=Viking Cloud, Inc. CN=VikingCloud SMIME ECC Root 1	70817538CF55A6CC405D506AEF6B50AE6026C90EB6FB076841C4A6B02835183E	2/5/2024	2/3/2049
C=US O=Viking Cloud, Inc. CN=VikingCloud Client RSA Root 1	9DBE6AB710C7F1EAD52867053CE052B8EFCFBC9B2763B8861260D1B336E61C63	2/5/2024	2/3/2049
C=US O=Viking Cloud, Inc. CN=VikingCloud Client ECC Root 1	737F973ACE76DFE14F8AB8FC5C78B4EA8232F38668558AA3DCBF572EA4DA0020	2/5/2024	2/3/2049



SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave Extended Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	EEA36C0FFA3F54FFDB0CF14B3BD34A53EC7B775F54053DD8B07DFD2F8BEC9083	10/13/2014	10/10/2024
E = ca@trustwave.com CN = Trustwave Extended Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	49C58270F70F1BE0B7C19D1BC2C2EBC41E2FDE0D4885D4FA65EF0370ACEC7A00	9/1/2016	9/29/2024
E = ca@trustwave.com CN = Trustwave Secure Global Extended Validation CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	45B2B08E1B58948A028BE13A67C0E20D4B2466AE2B6EC6250EBB10FD6B7F8239	8/12/2015	8/9/2025
E = ca@trustwave.com CN = Trustwave XRamp Global Extended Validation CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	1D0CD7EF3C19265508E20E58B3538964F4A11ADECA8A71D8AB8A8AFF15683C6AE	8/12/2015	8/9/2025
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Extended Validation CA, Level 1	DD23355C61D59970423004729795CAEF77AFDB39767A795740D4E04CB6158A99	1/29/2019	1/29/2029
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Extended Validation CA, Level 1	18626A3B7211128D563469C654557D13C9366D7FCEC8B94DB4F0AA7E05944041	2/6/2018	2/24/2028



SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-256 Extended Validation CA, Level 1	275BF0046E0270178B13B67E4DB150A10197CB71F9A061FAD36B3D76639FE186	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-384 Extended Validation CA, Level 1	29F8E104DF38E612BF4F505365B5D0B0B20DD4E89C908306484EB8374C1E66D8	2/6/2018	2/24/2028
E = ca@trustwave.com CN = Trustwave Organization Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	FF1E0D233196B7EC20BEDFC65988E0AE1985EC6AC332A79ADFFE71B86BC0208A	10/1/2014	9/28/2024
E = ca@trustwave.com CN = Trustwave Organization Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	58EA0688B7909AAA8EAAA2FFF36F3BBE8F4A2AD03BD70243B3903469DB4890F7	9/1/2016	9/29/2024
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Organization Validation CA, Level 1	11D9330D1A2398508DD50D3094EB28B1B44900D9928F8C22B25EF7A781BDB403	1/29/2019	1/29/2029



SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Organization Validation CA, Level 1	2E63DC1BECF427F9902B49DE6330FD3E8EEBF88B14E653B3BA2E37D4E4880965	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-256 Organization Validation CA, Level 1	18ABD6E9CA907BB36754D0C046EBB50DD9B95D527824D9581A31B750FCFDBAEF	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-384 Organization Validation CA, Level 1	87D42169B2693551CA205CCF17F06F6E6651F7218CD6D26607BF5BA4DD2F26F2	2/6/2018	2/24/2028
E = ca@trustwave.com CN = Trustwave Domain Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	859968F9278B4DC82EE30FD118A5D297D284B687CB64CF9755AB8A9D38F2B70F	10/1/2014	9/28/2024
E = ca@trustwave.com CN = Trustwave Domain Validation SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	74F56E1AB339D83E80F2F6E264F894775B426C89B44703DF4FA8A3231163A2BD	9/1/2016	9/29/2024



SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Domain Validation CA, Level 1	5E60965804461930AC27B6DBE3445679EAE4131C22AFB88AF7ACF6A1917B5ABA	1/29/2019	1/29/2029
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global Domain Validation CA, Level 1	6782C6E9ADBF9216E268306D46333FBC674BDEDF86B67BE777079E2C0E36888E	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-256 Domain Validation CA, Level 1	F62E35AAD345FB253863CFC0E65823ACD3E7F0846D19B8326D709C7919A22D7E	2/6/2018	2/24/2028
C = US S = Illinois L = Chicago O = Trustwave Holdings, Inc. CN = Trustwave Global ECDSA P-384 Domain Validation CA, Level 1	C63DF9618FBAF48662BA12ABE87B212CF777C27A446A0FA555D7A9D191148ED7	2/6/2018	2/24/2028
C = US O = Viking Cloud, Inc. CN = Viking Cloud Extended Validation CA, Level 1	10B608E53E0F3F44432A32B906CD753001736AC8BFE90ED3A0847DF285E2D977	6/9/2022	12/15/2029
C = US O = Viking Cloud, Inc. CN = Viking Cloud Organization Validation CA, Level 1	0EEF05BDA7842EA85D1D9812495EFC561283BAA90D1431C579DD61F7ED9269A1	6/9/2022	12/15/2029
C = US O = Viking Cloud, Inc. CN = Viking Cloud Domain Validation CA, Level 1	386AD965DA24812016ED3F011F2112DFD591693DABEB3D0E61B1145F5F9D1217	6/9/2022	12/15/2029



SSL Issuing CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US O=Viking Cloud, Inc. CN=VikingCloud T1 Extended Validation RSA, Level 1	88762525867675B0049640C7CA7163A8DBE0DD76AD0B69917D824730C8A900D6	2/7/2024	2/6/2034
C=US O=Viking Cloud, Inc. CN=VikingCloud T1 Extended Validation ECC, Level 1	9C26E5EFF31BB8F735C03CAE901E7282381F34FF7D94248BF43FFFC85DC82840	2/7/2024	2/6/2034
C=US O=Viking Cloud, Inc. CN=VikingCloud TWG TLS DV CA, Level 1	94B949699B74368B27FAD14D1EEF1F2AA2AD6AC24399A24399398B013FFB9601	8/28/2024	8/28/2034



S/MIME CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave S/MIME SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	5C4BC597291AB9C7023FB6445FD60381A65C60DDD404F124E5FA143FE98B05F3	10/1/2014	9/28/2024
C = US O = SecureTrust CN = SecureTrust TWG Secure Email CA, Level 2	ACCCAAF77372FFD2BD7BB21861B224EE1DAE8FE640D03A8FDE7518EC9B32508B	10/8/2020	10/8/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-256 Secure Email CA, Level 2	B36BE2E3F72EC3FA03B2273EFF994F4F6F4F09B2DD7A28AF951BD38EC103F088	10/8/2020	10/8/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-384 Secure Email CA, Level 2	136A05614FDE8F94D8C1209B853F8F7FC487D233A280BD9902335DDB563EFDC5	10/8/2020	10/8/2030
C = US O = SecureTrust CN = SecureTrust Secure Email CA, Level 3	C9B767E33B955785458F569746D489B9A51C72B8160212B5DD5C9978125ED492	10/8/2020	10/8/2030
C = US O = Viking Cloud, Inc. CN = Viking Cloud Secure Email CA, Level 1	84071B259D851367E653E0E477A9ECDCA3F10453E1FE57A1EA5728F7934824C9	6/9/2022	6/9/2032
C=US O=Viking Cloud, Inc. CN=VikingCloud S1 SMIME RSA, Level 1	9A07F95DD4FFC0124D6AEB8D8D97B4DB87C5525903793AA5F736714E716C113C	2/7/2024	2/6/2034
C=US O=Viking Cloud, Inc. CN=VikingCloud S1 SMIME ECC, Level 1	B855F2484501A4A9B82F27C9639353FEC5FE3768448D17826FFF27BD69A62DA7	2/7/2024	2/6/2034
C=US O=Viking Cloud, Inc. CN=VikingCloud XG Secure Email CA, Level 1	434BF66BD4A8E461B810864D82D35C3100BE5D98E63C67C6CA7422FA6F75A1CC	8/28/2024	8/28/2034



Client Authentication CAs			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
E = ca@trustwave.com CN = Trustwave Client Authentication SHA256 CA, Level 1 O = Trustwave Holdings, Inc. L = Chicago S = Illinois C = US	7FE20CEEE2B6972D862542060AE9A88FEA5E43A977A7FB25C95246F7F76C0668	10/1/2014	9/28/2024
C = US S = Illinois L = Chicago O = SecureTrust CN = SecureTrust Client Authentication CA, Level 1	2F50860F968053A7DBA17851341759B0D5C0412F857A2CD19F3731DD3BED1B6B	1/29/2019	1/29/2029
C = US O = SecureTrust CN = SecureTrust TWG Client CA, Level 3	5B78E6B05F0739429C50CDDEF3DBDC8813A456AB9619E82CF591392A9D0D3B26	10/8/2020	10/8/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-256 Client CA, Level 3	E92BE3F7D2A0FF65927B92EFB65B31BDDADB070999F8D6AA81273D9F90695C7B	10/8/2020	10/8/2030
C = US O = SecureTrust CN = SecureTrust TWG ECDSA P-384 Client CA, Level 3	96CC051C0841630A05FD7F274F6EFB723F857B8B8CFFC0676765C1013100D22D	10/8/2020	10/8/2030
C = US O = Viking Cloud, Inc. CN = Viking Cloud Client Authentication CA, Level 1	115B4CCB4B7A8D2733085363311A3EE5A2603A4198483814E727181F0D45BB89	6/9/2022	12/15/2029
C=US O=Viking Cloud, Inc. CN=VikingCloud C1 Client RSA, Level 1	D44EA526E5B414B254A0C7CAB0A08F2A7AF34B7893DC6EF22F462DBA47C7F28F	2/7/2024	2/6/2034
C=US O=Viking Cloud, Inc. CN=VikingCloud C1 Client ECC, Level 1	1DCDF0D947E4884DA93FAB6DD1C108E381E9B8586F6342F1385001146E6E09BC	2/7/2024	2/6/2034