

SwissSign CPR S/MIME

Certificate, CRL and OCSP Profiles for S/MIME Certificates

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1. Introduction

This document describes profiles of the S/MIME certificates issued by the SwissSign Issuing CAs as described in the CPS [5] as well as OCSP responses and CRL profiles related to these certificates.

This document complements Certificate Policy [1], [2] and [3] and Certification Practice Statement [5].

SwissSign PKI hierarchy description can be found in chapter 1.1 of CPS [5].

1.1 Terms and abbreviations

Refer to the TSPS [6].



2. General profiles

2.1 Root CA

The Root CA issued <u>after</u> the effective date of this CPR and the corresponding CP and CPS <u>does not</u> include the following certificate extensions:

- Certificate Policies
- Extendend Key Usage
- Name Constraints
- CRL Distrubution Points
- Authority Information Access

The Root CA profile after effective date of this CPR and the corresponding CP and CPS is the following:

Field/Extension	Value(s)	Comment
Version	Version 3	Certificate format version
Serial Number		Unique serial number of the certificate
SignatureAlgorithm		
Issuer Distinguished name		Unique issuer distinguished name of the certificate
Subject Distinguished name		Unique subject distinguished name of the certificate
Valid from		Start of certificate validity.
Valid to		End of certificate validity.
Basic Constraints	CA: TRUE	Critical
Key Usage	Certificate Sign, CRL Sign	Critical
Subject Key Identifier		(mandatory)
Authority Key Identifier		(optional)
Extended Key Usage		Not allowed in the Root CA
Name Constraints		Not allowed in the Root CA
Certificate Policies		Not allowed in the Root CA
CRL Distribution Points		Not allowed in the Root CA
Authority Information Access		Not allowed in the Root CA

2.2 Issuing CA

The Issuing CA issued **before** the effective date of the initial version of this CPR and the corresponding CP and CPS **does not include** the following certificate extensions:

- Extended Key Usage,
- Name Constraints.



Field/Extension	Value(s)	Comment
Version	Version 3	Certificate format version
Serial Number		Unique serial number of the certificate
SignatureAlgorithm		
Issuer Distinguished name		Unique issuer distinguished name of the certificate
Subject Distinguished name		Unique subject distinguished name of the certificate
Valid from		Start of certificate validity.
Valid to		End of certificate validity.
Basic Constraints	CA: TRUE, pathlen:0	Critical
Key Usage	Certificate Sign, CRL Sign	Critical
Subject Key Identifier		(mandatory)
Authority Key Identifier		(mandatory)
Extended Key Usage	id-kp-emailProtection, id-kp-clientAuth or id-kp-emailProtection, id-kp-clientAuth msEFS msSCL DocumentSigning Authentic Documents Trust	(mandatory)
Name Constraints		(optional)
Certificate Policies		(mandatory)
CRL Distribution Points		(mandatory)
Authority Information Access		(mandatory)

The Issuing CA profile <u>after</u> effective date of this CPR and the corresponding CP and CPS is the following:

2.3 Algorithm object identifiers

The algorithms with OIDs supported by this CA and its subsidiaries are:

Algorithm	Object Identifier
SHA1withRSAEncryption	1.2.840.113549.1.1.5 (phase out)
SHA256withRSAEncryption	1.2.840.113549.1.1.11
RSASSA-PSS	1.2.840.113549.1.1.10



Algorithm	Object Identifier
rsaEncryption	1.2.840.113549.1.1.4

2.4 Key Sizes

All certificates contain an RSA public key whose modulus has a length of 2048 bit or higher and is divisible by 8.

2.5 Certificate Serial Numbers

Certificate serial numbers of newly generated certificates

- are greater than zero,
- are less than 2^159,
- are non-sequential and
- contain at least 64 bits of output from a CSPRNG.



3. Certificate Profiles of the SwissSign Gold CA - G2 PKI

The following certificate profiles are compiled in accordance with ITU-T X.509 version 3, IETF RFC 5280 [10], clause 6.6 of ETSI EN 319 411-1 [7], clause 7 of S/MIME BR Guidelines [8] and clause 9 of EVCG [9].

3.1 Root CA

3.1.1 SwissSign Gold CA - G2

Field/Extension	Value(s)	Comment
Version	Version 3	Certificate format version
Serial Number	00BB401C43F55E4FB0	Unique serial number of the certificate
SignatureAlgorithm	sha1WithRSAEncryption	
Issuer Distinguished name	CN = SwissSign Gold CA - G2 O = SwissSign AG C = CH	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN = SwissSign Gold CA - G2 O = SwissSign AG C = CH	Unique subject distinguished name of the certificate
Valid from	25 Oct 2006 08:30:35 UTC	Start of certificate validity.
Valid to	25 Oct 2036 08:30:35 UTC	End of certificate validity.
Basic Constraints	CA: TRUE	Critical
Key Usage	Certificate Sign, CRL Sign	Critical
Subject Key Identifier	5B257B96A465517EB839F3C078665EE83AE7F0EE	
Authority Key Identifier	5B257B96A465517EB839F3C078665EE83AE7F0EE	
Extended Key Usage	not included in this Root CA certificate	
Name Constraints	not included in this Root CA certificate	
Certificate Policies	Policy OID: 2.16.756.1.89.1.2.1.1 CPSURI: <u>http://repository.swisssign.com/</u>	
CRL Distribution Points	not included in this Root CA certificate	
Authority Information Access	not included in this Root CA certificate	

SHA1 Fingerprint	D8C5388AB7301B1B6ED47AE645253A6F9F1A2761
SHA256 Fingerprint	62DD0BE9B9F50A163EA0F8E75C053B1ECA57EA55C8688F647C6881F2C8357B95



3.1.2 SwissSign RSA SMIME Root CA 2021 – 1 (Self-signed)

Field/Extension	Value(s)	Comment
Version	Version 3	Certificate format version
Serial Number	746cd5d1943c167daebe03ede56e07	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSAEncryption	
Issuer Distinguished name	CN = SwissSign RSA SMIME Root CA 2021 - 1 O = SwissSign AG C = CH	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN = SwissSign RSA SMIME Root CA 2021 - 1 O = SwissSign AG C = CH	Unique subject distinguished name of the certificate
Valid from	2 Aug 2021 11:20:08 UTC	Start of certificate validity.
Valid to	27 Jul 2046 11:20:08 UTC	End of certificate validity.
Basic Constraints	CA: TRUE	Critical
Key Usage	Certificate Sign, CRL Sign	Critical
Subject Key Identifier	090CBF2AA21D04240CB2F9400A41C2CF5A72AA80	
Authority Key Identifier	090CBF2AA21D04240CB2F9400A41C2CF5A72AA80	
Extended Key Usage	not included in this Root CA certificate	
Name Constraints	not included in this Root CA certificate	
Certificate Policies	not included in this Root CA certificate	
CRL Distribution Points	not included in this Root CA certificate	
Authority Information Access	not included in this Root CA certificate	

SHA1 Fingerprint	078385ff7dd89742c365e2d008172dcc27350afa	
SHA256 Fingerprint	B6D56F3DD26AC844E57C8BFE9054F57061350A90894B99CD9811E9A545FC84C5	



3.1.3 SwissSign RSA SMIME Root CA 2021 – 1 (Cross)

Field/Extension	Value(s)	Comment
Version	Version 3	Certificate format version
Serial Number	00de4c5520f6dcf4021b0f1154f78d10	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSAEncryption	
Issuer Distinguished name	CN = SwissSign Gold CA - G2 O = SwissSign AG C = CH	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN = SwissSign RSA SMIME Root CA 2021 – 1 O = SwissSign AG C = CH	Unique subject distinguished name of the certificate
Valid from	3 Aug 2021 13:14:55 UTC	Start of certificate validity.
Valid to	23 Oct 2036 13:14:55 UTC	End of certificate validity.
Basic Constraints	CA: TRUE	Critical
Key Usage	Certificate Sign, CRL Sign	Critical
Subject Key Identifier	090CBF2AA21D04240CB2F9400A41C2CF5A72AA80	
Authority Key Identifier	5B257B96A465517EB839F3C078665EE83AE7F0EE	
Extended Key Usage	not included in this Cross certificate	
Name Constraints	not included in this Cross certificate	
Certificate Policies	not included in this Cross certificate	
CRL Distribution Points	http://crl.swisssign.net/5B257B96A465517EB839F3C078665EE 83AE7F0E Idap://directory.swisssign.net/CN=5B257B96A465517EB839F3 C078665EE83AE7F0EE%2CO=SwissSign%2CC=CH?certificat eRevocationList?base?objectClass=cRLDistributionPoint	
Authority Information Access	not included in this Root CA certificate	

SHA1 Fingerprint	C7724C41CE8F9BAAD3553BCBC0CD0BFCD93E36E2
SHA256 Fingerprint	BC8BBD7D279D2E5F070BCEF6FAF3AAB1BEF30DA3EB2875424295AD147F2AEF07



3.1.4 SwissSign RSA SMIME Root CA 2022 - 1 (Self-signed)

Field/Extension	Value(s)	Comment
Version	Version 3	Certificate format version
Serial Number	460ED4017190A01A832C4A42102815D2611BAD32	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSAEncryption	
Issuer Distinguished name	CN = SwissSign RSA SMIME Root CA 2022 - 1 O = SwissSign AG C = CH	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN = SwissSign RSA SMIME Root CA 2022 - 1 O = SwissSign AG C = CH	Unique subject distinguished name of the certificate
Valid from	08 Jun 2022 10:53:13 UTC	Start of certificate validity.
Valid to	08 Jun 2047 10:53:13 UTC	End of certificate validity.
Basic Constraints	CA: TRUE	Critical
Key Usage	Certificate Sign, CRL Sign	Critical
Subject Key Identifier	CC2EAD898C83E340A32569A5EA927DD2373AC7C6	
Authority Key Identifier	CC2EAD898C83E340A32569A5EA927DD2373AC7C6	
Extended Key Usage	not included in this Root CA certificate	
Name Constraints	not included in this Root CA certificate	
Certificate Policies	not included in this Root CA certificate	
CRL Distribution Points	not included in this Root CA certificate	
Authority Information Access	not included in this Root CA certificate	

SHA1 Fingerprint	14D76562741050479F8B32C6868A18FAE11999B0
SHA256 Fingerprint	9A12C392BFE57891A0C545309D4D9FD567E480CB613D6342278B195C79A7931F



3.1.5 SwissSign RSA SMIME Root CA 2022 - 1 (Cross)

Field/Extension	Value(s)	Comment
Version	Version 3	Certificate format version
Serial Number	00B30511B116B4A056511D7C681F877D	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSAEncryption	
Issuer Distinguished name	CN = SwissSign Gold CA - G2 O = SwissSign AG C = CH	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN = SwissSign RSA SMIME Root CA 2022 - 1 O = SwissSign AG C = CH	Unique subject distinguished name of the certificate
Valid from	28 Jun 2022 11:26:01 UTC	Start of certificate validity.
Valid to	22 Sep 2036 11:26:01 UTC	End of certificate validity.
Basic Constraints	CA: TRUE	Critical
Key Usage	Certificate Sign, CRL Sign	Critical
Subject Key Identifier	CC2EAD898C83E340A32569A5EA927DD2373AC7C6	
Authority Key Identifier	5B257B96A465517EB839F3C078665EE83AE7F0EE	
Extended Key Usage	not included in this Cross certificate	
Name Constraints	not included in this Cross certificate	
Certificate Policies	Policy OID: 2.5.29.32.0	OID 2.5.29.32.0 stands for <i>anyPolicy</i> , see RFC5280, chapter 4.2.1.4.
CRL Distribution Points	http://crl.swisssign.net/5B257B96A465517EB839F3C078665EE 83AE7F0EE	http-URL for CRL-download
Authority Information Access	not included in this Cross certificate	

SHA1 Fingerprint	D5374C8C93CEC79335B9C66F4A22BE33A07D0AEA
SHA256 Fingerprint	5A84C94054D340D650A29985EF97BB396352E215AED6C0B33CA7FFDD3BD5D2A2



3.2 Issuing CAs

3.2.1 SwissSign Personal Gold CA 2014 – G22 (CRL & OCSP only)

Field/Extension	Value(s)		Comment
Version	Version 3		Certificate format version
Serial Number	191795DC22741	B121DDB544C5CCBDC	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSA	Encryption	
Issuer Distinguished name	CN = SwissSign O = SwissSign A C = CH		Unique issuer distinguished name of the certificate
Subject Distinguished name	CN = SwissSign O = SwissSign A C = CH	Personal Gold CA 2014 – G22 G	Unique subject distinguished name of the certificate
Valid from	19 Sep 2014 14:	10:25 UTC	Start of certificate validity.
Valid to	15 Sep 2029 14:	10:25 UTC	End of certificate validity.
Basic Constraints	CA:TRUE, pathle	en:0	Critical
Key Usage	Certificate Sign,	CRL Sign	Critical
Subject Key Identifier	DA32F949F8510	CC9871660CD9CEB6DB923F094BEF	
Authority Key Identifier	5B257B96A4655	17EB839F3C078665EE83AE7F0EE	
Extended Key Usage	not included in th	is Issuing CA certificate	
Name Constraints	not included in th	is Issuing CA certificate	
Certificate Policies	Policy OID: 2.16. CPSURI: <u>http://re</u> <u>CPS.pdf</u>	756.1.89.1.2.1.6 epository.swisssign.com/SwissSign-Gold-CP-	
CRL Distribution Points	http://crl.swisssign.net/5B257B96A465517EB839F3C078665EE 83AE7F0EE Idap://directory.swisssign.net/CN=5B257B96A465517EB839F3 C078665EE83AE7F0EE%2CO=SwissSign%2CC=CH?certificat eRevocationList?base?objectClass=cRLDistributionPoint		
Authority Information Access	calssuers <u>http://swisssign.net/cgi-bin/authority/download/5B257B96A465517EB</u> 839F3C078665EE83AE7F0EE		
	OCSP	http://ocsp.swisssign.net/5B257B96A465517E B839F3C078665EE83AE7F0EE	

SHA1 Fingerprint	184B85D90DB4F4BCB53AC8F3DCDF42B4A4527889
SHA256 Fingerprint	77D6C2AF5A7B86F63D9918C87533779F2AF08D35CFA14DA4938C803F53DE18A1



3.2.2 SwissSign RSA SMIME LCP ICA 2021 – 2 (CRL & OCSP only)

Field/Extension	Value(s)		Comment
Version	Version 3		Certificate format version
Serial Number	2C5AA9D954FD	B2AB96AD17B65F8CF4	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSA	Encryption	
Issuer Distinguished name	CN=SwissSign R O = SwissSign A C = CH	ISA SMIME Root CA 2021 – 1 G	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN=SwissSign R O = SwissSign A C = CH	ISA SMIME LCP ICA 2021 – 2 G	Unique subject distinguished name of the certificate
Valid from	04 Aug 2021 12:	12:59 UTC	Start of certificate validity.
Valid to	31. Jul 2036 12:1	2:59 UTC	End of certificate validity.
Basic Constraints	CA:TRUE, pathle	en:0	Critical
Key Usage	Certificate Sign,	CRL Sign	Critical
Subject Key Identifier	FA54C082A6FE96BD04C75F9F5F820C3DC3954F47		
Authority Key Identifier	090CBF2AA21D04240CB2F9400A41C2CF5A72AA80		
Extended Key Usage	id-kp-emailProtec	ction	
Name Constraints	not included in th	is Issuing CA certificate	
Certificate Policies		756.1.89.2.1.11 (SwissSign LCP CP) .2042.1.3 (ETSI LCP)	
CRL Distribution Points	http://crl.swisssign.net/090CBF2AA21D04240CB2F9400A41C2 CF5A72AA80, Idap://directory.swisssign.net/CN=090CBF2AA21D04240CB2F9 400A41C2CF5A72AA80%2CO=SwissSign%2CC=CH?certificat eRevocationList?base?objectClass=cRLDistributionPoint		
Authority Information Access	calssuers	http://swisssign.net/cgi- bin/authority/download/090CBF2AA21D04240 CB2F9400A41C2CF5A72AA80	
	OCSP	not included in this Issuing CA certificate	

SHA1 Fingerprint	5342BB246ABFD5B0E8AE2F8DB561B8CB790A896E
SHA256 Fingerprint	5CFFA8DB135F913363ACEB7CE362D098F3C1EBD26C63C560C095381E896504FA



3.2.4 SwissSign RSA SMIME LCP ICA 2022-1 (OCSP & CRL only)

Field/Extension	Value(s)		Comment
Version	Version 3		Certificate format version
Serial Number	5530D33DD130E	046B1E9D76E8DA0C0A128C6E7F76	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSA	Encryption	
Issuer Distinguished name	CN=SwissSign R O = SwissSign A C = CH	SA SMIME Root CA 2022 – 1 G	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN=SwissSign R O = SwissSign A C = CH	SA SMIME LCP ICA 2022 – 1 G	Unique subject distinguished name of the certificate
Valid from	29 June 2022 09	10:52 UTC	Start of certificate validity.
Valid to	29 June 2036 09	10:52 UTC	End of certificate validity.
Basic Constraints	CA:TRUE, pathlen:0		Critical
Key Usage	Certificate Sign, CRL Sign		Critical
Subject Key Identifier	0B83D4722086C	CE13AEF99B677CD51A6A3728F5C	
Authority Key Identifier	CC2EAD898C83	E340A32569A5EA927DD2373AC7C6	
Extended Key Usage	id-kp-emailProtec	ction	
Name Constraints	not included in th	is Issuing CA certificate	
Certificate Policies	0.4.0.2042.1.3 (E 2.16.756.1.89.2.1	TSI LCP) I.11 (SwissSign LCP CP)	
CRL Distribution Points	http://crl.swisssig 3223acef5c23	n.ch/cdp-3ee55fd4-5938-41ee-82db-	
Authority Information Access	calssuers	http://aia.swisssign.ch/air-4a7f1788-26b5- 48ec-a547-c1cd0bf17c3d	
	OCSP	not included in this Issuing CA certificate	

SHA1 Fingerprint	C35C18E7AF0069B2830B423BB7CF30D9F0E3900B
SHA256 Fingerprint	D7F41FABE5A459BAC6882465C75CCFF2BAA52487AABC34706CAF2A18AC53A5C2



3.2.5 SwissSign RSA SMIME NCP ICA 2021 -1 (OCSP & CRL only)

Field/Extension	Value(s)		Comment
Version	Version 3		Certificate format version
Serial Number	68D130DD0887	4B1E60622EA5E26304	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSA	Encryption	
Issuer Distinguished name	CN=SwissSign I O = SwissSign A C = CH	RSA SMIME Root CA 2021 – 1 AG	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN=SwissSign I O = SwissSign A C = CH	RSA SMIME NCP ICA 2021 – 1 AG	Unique subject distinguished name of the certificate
Valid from	03 Aug 2021 19	:09:30 UTC	Start of certificate validity.
Valid to	30 Jul 2036 19:0	09:30 UTC	End of certificate validity.
Basic Constraints	CA:TRUE, pathl	en:0	Critical
Key Usage	Certificate Sign,	CRL Sign	Critical
Subject Key Identifier	E1644D6ECA9E	EC75DC97ECD4FDC3B53F45D0F18D3	
Authority Key Identifier	090CBF2AA21E	004240CB2F9400A41C2CF5A72AA80	
Extended Key Usage	id-kp-clientAuth id-kp-emailProte	ection	
Name Constraints	not included in t	his Issuing CA certificate	
Certificate Policies	2.16.756.1.89.2 0.4.0.2042.1.1 (1.12 (SwissSign NCP CP) ETSI NCP)	
CRL Distribution Points	http://crl.swisssign.net/090CBF2AA21D04240CB2F9400A41C2 CF5A72AA80, Idap://directory.swisssign.net/CN=090CBF2AA21D04240CB2F9 400A41C2CF5A72AA80%2CO=SwissSign%2CC=CH?certificat eRevocationList?base?objectClass=cRLDistributionPoint		
Authority Information Access	calssuers	http://swisssign.net/cgi- bin/authority/download/090CBF2AA21D04240 CB2F9400A41C2CF5A72AA80	
	OCSP	not included in this Issuing CA certificate	

SHA1 Fingerprint	E8A744F44591DD7539FB20CE3F8CF988EA915346
SHA256 Fingerprint	1935AA544A73D755E913357FCE0E44AFC90E0809AC97A89964F0A90A59C376B6



3.2.6 SwissSign RSA SMIME NCP ICA 2022 - 1 (OCSP & CRL only)

Field/Extension	Value(s)		Comment
Version	Version 3		Certificate format version
Serial Number	796C0FD9724F3	3291C0083A1A6DEEC2670EB6DCA0	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSA	Encryption	
Issuer Distinguished name	CN=SwissSign F O = SwissSign A C = CH	RSA SMIME Root CA 2022 - 1 G	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN=SwissSign F O = SwissSign A C = CH	RSA SMIME NCP ICA 2022 - 1 G	Unique subject distinguished name of the certificate
Valid from	29 June 2022 09	:17:39 UTC	Start of certificate validity.
Valid to	29 June 2036 09	:17:39 UTC	End of certificate validity.
Basic Constraints	CA:TRUE, pathle	en:0	Critical
Key Usage	Certificate Sign, CRL Sign		Critical
Subject Key Identifier	E4BEC760A782A318E864FCE216530587D46AE98E		
Authority Key Identifier	CC2EAD898C83	BE340A32569A5EA927DD2373AC7C6	
Extended Key Usage	id-kp-clientAuth id-kp-emailProte	ction	
Name Constraints	not included in th	is Issuing CA certificate	
Certificate Policies	0.4.0.2042.1.1 (E 2.16.756.1.89.2.	ETSI NCP) 1.12 (SwissSign NCP CP)	
CRL Distribution Points	http://crl.swisssig 3223acef5c23	n.ch/cdp-3ee55fd4-5938-41ee-82db-	
Authority Information Access	calssuers http://aia.swisssign.ch/air-4a7f1788-26b5- 48ec-a547-c1cd0bf17c3d		
	OCSP	not included in this Issuing CA certificate	

SHA1 Fingerprint	1CE92DDA2FEB1DD9CFE39A4E51BEF7C2D311F607
SHA256 Fingerprint	99A56DD8DACA399FCA2E3834ED75760E96C133564062F8B530B355BED99A409D



Field/Extension	Value(s)		Comment
Version	Version 3		Certificate format version
Serial Number	45738B321942F	875317A4806EB0A95	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSA	Encryption	
Issuer Distinguished name	CN=SwissSign F O = SwissSign A C = CH	RSA SMIME Root CA 2021 - 1 G	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN=SwissSign F O = SwissSign A C = CH	RSA SMIME NCP extended ICA 2021 - 1 G	Unique subject distinguished name of the certificate
Valid from	03 Aug 2021 19:	16:28 UTC	Start of certificate validity.
Valid to	30 Jul 2036 19:1	6:28 UTC	End of certificate validity.
Basic Constraints	CA:TRUE, pathle	en:0	Critical
Key Usage	Certificate Sign,	CRL Sign	Critical
Subject Key Identifier	2B661A6304190	3A719FC35E7C3B8D1368F4E9A41	
Authority Key Identifier	090CBF2AA21D	04240CB2F9400A41C2CF5A72AA80	
Extended Key Usage	id-kp-clientAuth id-kp-emailProte msEFS msSCL	ction	
Name Constraints	not included in th	is Issuing CA certificate	
Certificate Policies	2.16.756.1.89.2. 0.4.0.2042.1.1 (E	1.13 (SwissSign NCP extended) TSI NCP)	
CRL Distribution Points	CF5A72AA80, Idap://directory.sr 400A41C2CF5A	n.net/090CBF2AA21D04240CB2F9400A41C2 wisssign.net/CN=090CBF2AA21D04240CB2F9 72AA80%2CO=SwissSign%2CC=CH?certificat ?base?objectClass=cRLDistributionPoint	
Authority Information Access	calssuers	http://swisssign.net/cgi- bin/authority/download/090CBF2AA21D04240 CB2F9400A41C2CF5A72AA80	
	OCSP	not included in this Issuing CA certificate	

3.2.7 SwissSign RSA SMIME NCP extended ICA 2021 - 1 (OCSP & CRL only)

SHA1 Fingerprint	D0FE06298701709267D1F105692552C01E394C33	
SHA256 Fingerprint	0A6EEB87C2B4AC4A0DF4A68CA7E5244408E06A0CF3BE973156A52AAD835D7466	



Field/Extension	Value(s)		Comment
Version	Version 3		Certificate format version
Serial Number	4653D903D9A	E555F0BB20F3EC8B2B50D83D7CA34	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRS	AEncryption	
Issuer Distinguished name	CN=SwissSign O = SwissSign C = CH	RSA SMIME Root CA 2022 - 1 AG	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN=SwissSign O = SwissSign C = CH	RSA SMIME NCP extended ICA 2022 - 1 AG	Unique subject distinguished name of the certificate
Valid from	29 June 2022 (9:21:13 UTC	Start of certificate validity.
Valid to	29 June 2036 (9:21:13 UTC	End of certificate validity.
Basic Constraints	CA:TRUE, path	len:0	Critical
Key Usage	Certificate Sigr	, CRL Sign	Critical
Subject Key Identifier	56A2DFF3E1841D1BA0FF7F3FF071188528F83DCD		
Authority Key Identifier	CC2EAD898C83E340A32569A5EA927DD2373AC7C6		
Extended Key Usage	id-kp-emailProt id-kp-clientAuth msEFS msSCL		
Name Constraints	not included in	this Issuing CA certificate	
Certificate Policies	0.4.0.2042.1.1 (ETSI NCP) 2.16.756.1.89.2.1.13 (SwissSign NCP extended)		
CRL Distribution Points	http://crl.swisss 3223acef5c23	ign.ch/cdp-3ee55fd4-5938-41ee-82db-	
Authority Information Access	calssuers	http://aia.swisssign.ch/air-4a7f1788-26b5- 48ec-a547-c1cd0bf17c3d	
	OCSP	not included in this Issuing CA certificate	

3.2.8 SwissSign RSA SMIME NCP extended ICA 2022 - 1 (OCSP & CRL only)

SHA1 Fingerprint	F4C4C1703ABA2EAC24EE315F40E1A8B6CB3E76FD
SHA256 Fingerprint	7196E86DCFDB92B0509213D806DCA2465FC41415A0B4069D35F946DE6813CF79



3.2.9 SwissSign RSA SMIME MV ICA 2024 - 1

Field/Extension	Value(s)		Comment
Version	Version 3		Certificate format version
Serial Number	3ec79e13da89fa	1849d6e7cb92ef1074e9cd40802	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSA	Encryption	
Issuer Distinguished name	CN=SwissSign F O = SwissSign A C = CH	RSA SMIME Root CA 2022 - 1 IG	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN=SwissSign F O = SwissSign A C = CH	RSA SMIME MV ICA 2024 - 1 IG	Unique subject distinguished name of the certificate
Valid from	2024-05-28 08:4	1:10 UTC	Start of certificate validity.
Valid to	2036-05-28 08:4	1:10 UTC	End of certificate validity.
Basic Constraints	CA:TRUE, pathle	en:0	Critical
Key Usage	Certificate Sign,	CRL Sign	Critical
Subject Key Identifier	BFB41641A2A7	9FD74D85010AA15CBEDBC5D2E594	
Authority Key Identifier	CC2EAD898C83	BE340A32569A5EA927DD2373AC7C6	
Extended Key Usage	id-kp-emailProte	ction	
Name Constraints	not included in th	nis Issuing CA certificate	
Certificate Policies	Legacy) • 2.23.140.1. Multipurpos • 2.23.140.1. Validated S • 0.4.0.2042. • 2.16.756.1.	5.1.3 (CAB SMIME BR Policy-OID for Mailbox trict) 1.3 (ETSI EN 319 411-1 LCP) 89.2.1.11 (SwissSign Certificate Policy for Certificate Policy (LCP))	
CRL Distribution Points	http://crl.swisssig 3223acef5c23	gn.ch/cdp-3ee55fd4-5938-41ee-82db-	
Authority Information Access	calssuers	http://aia.swisssign.ch/air-4a7f1788-26b5- 48ec-a547-c1cd0bf17c3d	
	OCSP	not included in this Issuing CA certificate	

SHA1 Fingerprint	218fa7506c8bd630c59b2e6bb47ee262e4296676
SHA256 Fingerprint	e3367fe0597156205e947903d226c30329951cee3e63e01fd414f00f85804667



3.2.10 SwissSign RSA SMIME OV ICA 2024 - 1

Field/Extension	Value(s)		Comment
Version	Version 3		Certificate format version
Serial Number	4cc55a537ae82t	pa4c4240767584dda63d6844e1b	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSA	Encryption	
Issuer Distinguished name	CN=SwissSign F O = SwissSign A C = CH	RSA SMIME Root CA 2022 - 1 G	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN=SwissSign F O = SwissSign A C = CH	RSA SMIME OV ICA 2024 - 1 G	Unique subject distinguished name of the certificate
Valid from	2024-05-28 08:5	6:49 UTC	Start of certificate validity.
Valid to	2036-05-28 08:5	6:49 UTC	End of certificate validity.
Basic Constraints	CA:TRUE, pathle	en:0	Critical
Key Usage	Certificate Sign,	CRL Sign	Critical
Subject Key Identifier	2980EFB12AF13	3752AB497C78FB81F38AEE27C7C7	
Authority Key Identifier	CC2EAD898C83	BE340A32569A5EA927DD2373AC7C6	
Extended Key Usage	id-kp-emailProte id-kp-clientAuth	ction	
Name Constraints	not included in th	nis Issuing CA certificate	
Certificate Policies	Legacy) • 2.23.140.1. Multipurpos • 2.23.140.1. Strict) • 0.4.0.2042.	5.2.3 (CAB SMIME BR Organization Validated 1.1 (ETSI EN 319 411-1 NCP) 89.2.1.14 (SwissSign OV Certificate Policy)	
CRL Distribution Points	http://crl.swisssig 3223acef5c23	n.ch/cdp-3ee55fd4-5938-41ee-82db-	
Authority Information Access	calssuers	http://aia.swisssign.ch/air-4a7f1788-26b5- 48ec-a547-c1cd0bf17c3d	
	OCSP	not included in this Issuing CA certificate	

SHA1 Fingerprint	16c357ec5835578ac041db6d5710c30c7566f5a0
SHA256 Fingerprint	1f11d479c62de8daa554e28674dc58c00bdc0401c175e23689e8be95dfd687bf



3.2.11 SwissSign RSA SMIME SV ICA 2024 - 1

Field/Extension	Value(s)		Comment
Version	Version 3		Certificate format version
Serial Number	3e50fe6114ac70	e44c4e7956bec81ffc0f3b02eb	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSA	Encryption	
Issuer Distinguished name	CN=SwissSign F O = SwissSign A C = CH	RSA SMIME Root CA 2022 - 1 G	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN=SwissSign F O = SwissSign A C = CH	RSA SMIME SV ICA 2024 - 1 G	Unique subject distinguished name of the certificate
Valid from	2024-05-28 09:0	3:21 UTC	Start of certificate validity.
Valid to	2036-05-28 09:0	3:21 UTC	End of certificate validity.
Basic Constraints	CA:TRUE, pathle	en:0	Critical
Key Usage	Certificate Sign,	CRL Sign	Critical
Subject Key Identifier	b8ea31b3dbc64	3fb0d60d35ca9ed9a8be00eb856	
Authority Key Identifier	CC2EAD898C83	3E340A32569A5EA927DD2373AC7C6	
Extended Key Usage	id-kp-emailProte id-kp-clientAuth msEFS msSCL	ction	
Name Constraints	not included in th	nis Issuing CA certificate	
Certificate Policies	Legacy) • 2.23.140.1. Multipurpos • 2.23.140.1. Strict) • 0.4.0.2042. • 2.16.756.1.	5.3.1 (CAB SMIME BR Sponsor-validated 5.3.2 (CAB SMIME BR Sponsor-validated e) 5.3.3 (CAB SMIME BR Sponsor-validated 1.1 (ETSI EN 319 411 NCP) 89.2.1.12 (SwissSign NCP) 89.2.1.13 (SwissSign NCP extended)	
CRL Distribution Points	http://crl.swisssig 3223acef5c23	gn.ch/cdp-3ee55fd4-5938-41ee-82db-	
Authority Information Access	calssuers http://aia.swisssign.ch/air-4a7f1788-26b5- 48ec-a547-c1cd0bf17c3d		
	OCSP not included in this Issuing CA certificate		

SHA1 Fingerprint	a611c4188829ce85e1cf6cb5292e3f4b064cd0cd
SHA256 Fingerprint	7e301988a102a5e93d2249666bb631020ba58fc703de7b583e91d5449fd0d3af



3.3 End-entity certificates

Please note: On 1 September 2023 at latest only certificates compliant to the S/MIME BR Guidelines [8] are issued. The issuance of these certificate types (Mailbox Validated & Sponsor Validated) may start between the publication of this document and 1 September 2023.

3.3.1 Lightweight Certificate Policy (LCP) / Mailbox Validated (MV)

3.3.1.1 SwissSign Personal S/MIME E-Mail ID Silver Certificate (LCP) issued by SwissSign RSA SMIME LCP ICA 2021 - 2 - Default profile (E-Mail only) – *Issued until 1 September 2023 (latest)*

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSA	Encryption	
Issuer Name	CN = SwissSign O = SwissSign A C = CH	RSA SMIME LCP ICA 2021 – 2 G	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	E-Mail address of Subject as stated in certificate application.	(mandatory)
	Email	E-mail address of Subject as stated in certificate application.	(optional)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	FA54C082A6FE	96BD04C75F9F5F820C3DC3954F47	(mandatory)
Subject Key Identifier	SHA-1 hash valu 4.2.1.2	e of Public Key according to RFC5280 chapter	(mandatory)
Key Usage	digitalSignature,	keyEncipherment, dataEncipherment	(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtec	ction	(mandatory)
Subject Alternative Name	E-mail address o	f the subject	(mandatory)
Certificate Policies	Policy OID: 2.16. CPSURI:	.2042.1.3 (ETSI LCP) 756.1.89.2.1.11 (SwissSign LCP) .swisssign.com/SwissSign_CPS_SMIME.pdf	(mandatory)
CRL Distribution Points	3DC3954F47 Idap://directory.sv 9F5F820C3DC39	n.net/FA54C082A6FE96BD04C75F9F5F820C wisssign.net/CN=FA54C082A6FE96BD04C75F 954F47,O=SwissSign,C=CH?certificateRevocat ectClass=cRLDistributionPoint	(mandatory) URLs of the CRL Distribution points (LDAP and/or HTTP)
Authority Information Access			(mandatory)
	OCSP	http://ocsp.swisssign.net/FA54C082A6FE96B D04C75F9F5F820C3DC3954F47	(mandatory)



Microsoft Certificate	OID to designate the specific MS-Template	(optional)
	Integer to designate the «templateMajorVersion»	(optional)
	Integer to designate the «templateMinorVersion»	(optional)

3.3.1.2 SwissSign E-Mail ID Silver (LCP) Certificate issued by SwissSign RSA SMIME LCP ICA 2021 - 2 - E-Mail & organization – *Issued until 1 September 2023 (latest)*

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSA	Encryption	
Issuer Name	Please see the g	eneral profile in clause 3.3.1.1	
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	E-Mail address of Subject as stated in certificate application	(mandatory)
	Email	E-mail address of Subject as stated in certificate application	(optional)
	OrganizationalU nit (OU)	Organizational unit as stated in certificate application.	(optional)
	OrganizationNa me (O)	Subject (organization) name as stated in certificate application	(mandatory)
	LocalityName (L)	Name of the locality as described in the certificate application	(optional)
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	Please see the g	eneral profile in clause 3.3.1.1	
Subject Key Identifier	Please see the g	eneral profile in clause 3.3.1.1	
Key Usage	Please see the g	eneral profile in clause 3.3.1.1	
Extended Key Usage	Please see the g	eneral profile in clause 3.3.1.1	
Subject Alternative Name	Please see the g	eneral profile in clause 3.3.1.1	
Certificate Policies	Please see the g	eneral profile in clause 3.3.1.1	
CRL Distribution Points	Please see the g		
Authority Information Access	Please see the g	eneral profile in clause 3.3.1.1	



3.3.1.3	SwissSign Personal S/MIME E-Mail ID Silver Certificate (LCP) issued by SwissSign RSA SMIME LCP ICA 2022 – 1 -
	Default Profile (E-Mail only) – Issued until 1 September 2023 (latest)

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSA	Encryption	
Issuer Name	CN = SwissSign O = SwissSign A C = CH	RSA SMIME LCP ICA 2022 – 1 G	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	E-Mail address of Subject as stated in certificate application.	(mandatory)
	Email	E-mail address of Subject as stated in certificate application.	(optional)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	0B83D4722086C	CE13AEF99B677CD51A6A3728F5C	(mandatory)
Subject Key Identifier	SHA-1 hash valu 4.2.1.2	e of Public Key according to RFC5280 chapter	(mandatory)
Key Usage	digitalSignature, keyEncipherment, dataEncipherment		(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtection		(mandatory)
Subject Alternative Name	E-mail address o	f the subject	(mandatory)
Certificate Policies	Policy OID: 0.4.0.2042.1.3 (ETSI LCP) Policy OID: 2.16.756.1.89.2.1.11 (SwissSign LCP) CPSURI: https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf		(mandatory)
CRL Distribution Points	http://crl.swisssign.ch/cdp-d5057ba0-ce09-4d1d-8cc9- 0a60fa4c49c0		(mandatory) HTTP-URL of the CRL Distribution point
Authority Information Access	calssuers	http://aia.swisssign.ch/air-79b46fac-4cd2- 4d42-9fe0-9cd078d13d8c	(mandatory)
	OCSP	http://ocsp.swisssign.ch/sign/ocs-aaccced5- 66e8-4069-9b1b-fd29ab73efec	(mandatory)
Microsoft Certificate	OID to designate the specific MS-Template		(optional)
Template	Integer to designate the «templateMajorVersion»		(optional)
	Integer to design	ate the «templateMinorVersion»	(optional)



3.3.1.4	Mailbox-Validated Certificate issued by SwissSign RSA SMIME LCP ICA 2022 - 1 - Default Profile (E-Mail only) -
	issued until 15 September 2024

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSA	Encryption	
Issuer Name	CN = SwissSign O = SwissSign A C = CH	RSA SMIME LCP ICA 2022 – 1 G	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	E-Mail address of Subject as stated in certificate application.	(mandatory)
	Email	E-mail address of Subject as stated in certificate application.	(optional)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	0B83D4722086C	CE13AEF99B677CD51A6A3728F5C	(mandatory)
Subject Key Identifier	SHA-1 hash value of Public Key according to RFC5280 chapter 4.2.1.2		(mandatory)
Key Usage	digitalSignature, keyEncipherment		(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtection		(mandatory)
Subject Alternative Name	E-mail address of the subject		(mandatory)
Certificate Policies	Policy OID: 2.23.140.1.5.1.1 (CAB Mailbox-validated, Generation Legacy) Policy OID: 0.4.0.2042.1.3 (ETSI LCP) Policy OID: 2.16.756.1.89.2.1.11 (SwissSign LCP) CPSURI: https://repository.swissSign.com/SwissSign_CPS_SMIME.pdf		(mandatory)
CRL Distribution Points	http://crl.swisssig 0a60fa4c49c0	n.ch/cdp-d5057ba0-ce09-4d1d-8cc9-	(mandatory) HTTP-URL of the CRL Distribution point
Authority Information Access	calssuers	http://aia.swisssign.ch/air-79b46fac-4cd2- 4d42-9fe0-9cd078d13d8c	(mandatory)
	OCSP	http://ocsp.swisssign.ch/sign/ocs-aaccced5- 66e8-4069-9b1b-fd29ab73efec	(mandatory)
Microsoft Certificate	OID to designate the specific MS-Template		(optional)
Template	Integer to design	ate the «templateMajorVersion»	(optional)
	Integer to design	ate the «templateMinorVersion»	(optional)





Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSA	Encryption	
Issuer Name	CN = SwissSign O = SwissSign A C = CH	RSA SMIME LCP ICA 2021 – 2 G	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	E-Mail address of Subject as stated in certificate application.	(mandatory)
	Email	E-mail address of Subject as stated in certificate application.	(optional)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	FA54C082A6FE	96BD04C75F9F5F820C3DC3954F47	(mandatory)
Subject Key Identifier	SHA-1 hash valu 4.2.1.2	e of Public Key according to RFC5280 chapter	(mandatory)
Key Usage	digitalSignature, keyEncipherment		(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtection		(mandatory)
Subject Alternative Name	E-mail address of the subject		(mandatory)
Certificate Policies	Policy OID: 2.23.140.1.5.1.1 (CAB Mailbox-validated, Generation Legacy) Policy OID: 0.4.0.2042.1.3 (ETSI LCP) Policy OID: 2.16.756.1.89.2.1.11 (SwissSign LCP) CPSURI: https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf		(mandatory)
CRL Distribution Points	http://crl.swisssign.net/FA54C082A6FE96BD04C75F9F5F820C 3DC3954F47 Idap://directory.swisssign.net/CN=FA54C082A6FE96BD04C75F 9F5F820C3DC3954F47,O=SwissSign,C=CH?certificateRevocat ionList?base?objectClass=cRLDistributionPoint		(mandatory) HTTP-URL of the CRL Distribution point is mandatory, the LDAP-URL is optional.
Authority Information Access	calssuers	http://swisssign.net/cgi- bin/authority/download/FA54C082A6FE96BD0 4C75F9F5F820C3DC3954F47	(mandatory)
	OCSP	http://ocsp.swisssign.net/FA54C082A6FE96B D04C75F9F5F820C3DC3954F47	(mandatory)
Microsoft Certificate	OID to designate the specific MS-Template		(optional)
Template	Integer to designate the «templateMajorVersion»		(optional)
	Integer to designate the «templateMinorVersion»		(optional)

3.3.1.5 Mailbox-Validated Certificate issued by SwissSign RSA SMIME LCP ICA 2021 – 2 - Default Profile (E-Mail only)



3.3.1.6	Mailbox-Validated Certificate issued by SwissSign RSA SMIME MV ICA 2024 - 1 - (E-Mail only; issuance starting 15
	September 2024 latest)

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSA	Encryption	
Issuer Name	CN = SwissSign O = SwissSign A C = CH	RSA SMIME MV ICA 2024 - 1 G	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	E-Mail address of Subject as stated in certificate application.	(mandatory)
	Email	E-mail address of Subject as stated in certificate application.	(optional)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	bfb41641a2a79fc	d74d85010aa15cbedbc5d2e594	(mandatory)
Subject Key Identifier	SHA-1 hash value of Public Key according to RFC5280 chapter 4.2.1.2		(mandatory)
Key Usage	digitalSignature, keyEncipherment		(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtection		(mandatory)
Subject Alternative Name	E-mail address of the subject		(mandatory)
Certificate Policies	Policy OID: 2.23.140.1.5.1.1 (CAB Mailbox-validated, Generation Legacy) Policy OID: 0.4.0.2042.1.3 (ETSI LCP) Policy OID: 2.16.756.1.89.2.1.11 (SwissSign LCP) CPSURI: https://repository.swissSign.com/SwissSign_CPS_SMIME.pdf		(mandatory)
CRL Distribution Points	http://crl.swisssign.ch/cdp-e97f07c4-e634-4cec-8e2a- 04b20a7a30c5		(mandatory) HTTP-URL of the CRL Distribution point
Authority Information Access	calssuers http://aia.swisssign.ch/air-26a71c09-47eb- 455a-9b28-4bd72df0928d		(mandatory)
	OCSP	http://ocsp.swisssign.ch/sign/ocs-aaccced5- 66e8-4069-9b1b-fd29ab73efec	(mandatory)
Microsoft Certificate	OID to designate the specific MS-Template		(optional)
Template	Integer to design	ate the «templateMajorVersion»	(optional)
	Integer to design	ate the «templateMinorVersion»	(optional)



3.3.1.7 Allowed exceptions for Common Name

Name Allowed exceptions with a fixed string in the common name in LCP certificates, with a then mandatory entry for /E-Mail are:

- "Secure Mail: Gateway Certificate" "Secure Mail: SEPPmail Certificate" "XnetSolutions Mailgateway" _
- -
- -
- -
- "Secure Mail: SX-Mail Crypt Certificate" "Secure E-Mail: SX-Mail Crypt Certificate" "Zertificon Mailgateway" -
- -
- "Z1 SecureMail Gateway Certificate" _



3.3.2 Normalized Certificate Policy (NCP) / Sponsor Validated (SV)

3.3.2.1 Pro S/MIME E-Mail ID Gold Certificate issued by SwissSign Personal Gold CA 2014 - G22 - Default profile (no authentication)

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSA	Encryption	
Issuer Name	CN = SwissSign O = SwissSign A C = CH	Personal Gold CA 2014 - G22 G	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	GivenName Surname or pseudo: Pseudonym	(mandatory)
	GivenName	Subject's Given Name as stated in certificate application.	(optional)
	Surname	Subject's Surname Name as stated in certificate application.	(optional)
	Pseudonym	Subject's Pseudonym as stated in certificate application.	(optional)
	Email	E-mail address of Subject as stated in certificate application.	(optional)
	SerialNumber	Unique number generated by the TSP.	(optional, only mandatory if Email missing)
	OrganizationalU nit (OU)	Organizational unit as stated in certificate application.	(optional)
	OrganizationNa me (O)	Subject (organization) name as stated in certificate application.	(optional)
	Street	Name of street as described in the certificate application.	(optional)
	PostalCode	Postal code as described in the certificate application.	(optional)
	LocalityName (L)	Name of the locality as described in the certificate application	(optional)
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	DA32F949F8510	C9871660CD9CEB6DB923F094BEF	(mandatory)
Subject Key Identifier	SHA-1 hash valu 4.2.1.2	e of Public Key according to RFC5280 chapter	(mandatory)



Key Usage	digitalSignature, dataEnciphermer	nonRepudiation, keyEncipherment, nt	(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProted	tion	(mandatory)
Subject Alternative Name	E-mail address of the subject		(mandatory)
Certificate Policies	Policy OID: 2.16.756.1.89.2.1.12 CPSURI: https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf Policy OID: 0.4.0.2042.1.1 (NCP)		(mandatory)
CRL Distribution Points	http://crl.swisssign.net/DA32F949F851CC9871660CD9CEB6DB 923F094BEF Idap://directory.swisssign.net/CN=DA32F949F851CC9871660C D9CEB6DB923F094BEF%2CO=SwissSign%2CC=CH?certificat eRevocationList?base?objectClass=cRLDistributionPoint		URLs of the CRL Distribution points (LDAP and/or HTTP)
Authority Information Access	calssuers	http://swisssign.net/cgi- bin/authority/download/DA32F949F851CC987 1660CD9CEB6DB923F094BEF	(mandatory)
	OCSP	http://ocsp.swisssign.net/DA32F949F851CC9 871660CD9CEB6DB923F094BEF	(mandatory)



3.3.2.2	Pro S/MIME E-Mail ID Gold Certificate issued by SwissSign Personal Gold CA 2014 - G22 - no authentication, MS-
	template

Field/Extension	Values	Comment
Version	Version 3	Certificate format version
SignatureAlgorithm	SHA256withRSAEncryption	
Issuer Name	Please see the general profile in clause 3.3.2.1	
Subject DN	Please see the general profile in clause 3.3.2.1	
Valid from		Start of certificate validity.
Valid to		End of certificate validity.
Authority Key Identifier	Please see the general profile in clause 3.3.2.1	(mandatory)
Subject Key Identifier	Please see the general profile in clause 3.3.2.1	(mandatory)
Key Usage	Please see the general profile in clause 3.3.2.1	
Extended Key Usage	Please see the general profile in clause 3.3.2.1	
Subject Alternative Name	Please see the general profile in clause 3.3.2.1	
Certificate Policies	Please see the general profile in clause 3.3.2.1	
CRL Distribution Points	Please see the general profile in clause 3.3.2.1	
Authority Information Access	Please see the general profile in clause 3.3.2.1	
Microsoft Certificate Template	OID to designate the specific MS-Template	(mandatory)
	Integer to designate the «templateMajorVersion»	(mandatory)
	Integer to designate the «templateMinorVersion»	(mandatory)

3.3.2.3 Pro S/MIME E-Mail ID Gold Certificate issued by SwissSign RSA SMIME NCP ICA 2021 - 1 - Default profile (no authentication)

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSAE	ncryption	
Issuer Name	CN=SwissSign RSA SMIME NCP ICA 2021 - 1 O = SwissSign AG C = CH		Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	GivenName Surname or pseudo: Pseudonym	(mandatory)
	GivenName	Subject's Given Name as stated in certificate application.	(optional)
	Surname	Subject's Surname Name as stated in certificate application.	(optional)



r	1		
	Pseudonym	Subject's Pseudonym as stated in certificate application.	(optional)
	Email	E-mail address of Subject as stated in certificate application.	(optional)
	SerialNumber	Unique number generated by the TSP.	(optional, only mandatory if Email missing)
	OrganizationalUni t (OU)	Organizational unit as stated in certificate application.	(optional)
	OrganizationNam e (O)	Subject (organization) name as stated in certificate application.	(optional)
	Street	Name of street as described in the certificate application.	(optional)
	PostalCode	Postal code as described in the certificate application.	(optional)
	LocalityName (L)	Name of the locality as described in the certificate application	(optional)
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	E1644D6ECA9EC75DC97ECD4FDC3B53F45D0F18D3		(mandatory)
Subject Key Identifier	SHA-1 hash value of Public Key according to RFC5280 chapter 4.2.1.2		(mandatory)
Key Usage	digitalSignature, nonRepudiation, keyEncipherment, dataEncipherment		(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtection		(mandatory)
Subject Alternative Name	E-mail address of the subject		(mandatory)
Certificate Policies	Policy OID: 2.16.756.1.89.2.1.12 CPSURI: https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf Policy OID: 0.4.0.2042.1.1 (NCP)		(mandatory)
CRL Distribution Points	http://crl.swisssign.net/E1644D6ECA9EC75DC97ECD4FDC3B53 F45D0F18D3 Idap://directory.swisssign.net/CN=E1644D6ECA9EC75DC97ECD 4FDC3B53F45D0F18D3%2CO=SwissSign%2CC=CH?certificate RevocationList?base?objectClass=cRLDistributionPoint		URLs of the CRL Distribution points (LDAP and/or HTTP)
Authority Information Access	calssuers	http://swisssign.net/cgi- bin/authority/download/E1644D6ECA9EC75D C97ECD4FDC3B53F45D0F18D3	(mandatory)
	OCSP	http://ocsp.swisssign.net/E1644D6ECA9EC75 DC97ECD4FDC3B53F45D0F18D3	(mandatory)



Template	OID to designate the specific MS-Template	(optional)
	Integer to designate the «templateMajorVersion»	(optional)
	Integer to designate the «templateMinorVersion»	(optional)



3.3.2.4	Pro S/MIME E-Mail ID Gold Certificate issued by SwissSign RSA SMIME NCP ICA 2022 - 1 - Default profile (no
	authentication)

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSAEncryption		
Issuer Name	CN=SwissSign RS O = SwissSign AG C = CH	A SMIME NCP ICA 2022 - 1	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	GivenName Surname or pseudo: Pseudonym	(mandatory)
	GivenName	Subject's Given Name as stated in certificate application.	(optional)
	Surname	Subject's Surname Name as stated in certificate application.	(optional)
	Pseudonym	Subject's Pseudonym as stated in certificate application.	(optional)
	Email	E-mail address of Subject as stated in certificate application.	(optional)
	SerialNumber	Unique number generated by the TSP.	(optional, only mandatory if Email missing)
	OrganizationalUni t (OU)	Organizational unit as stated in certificate application.	(optional)
	OrganizationNam e (O)	Subject (organization) name as stated in certificate application.	(optional)
	Street	Name of street as described in the certificate application.	(optional)
	PostalCode	Postal code as described in the certificate application.	(optional)
	LocalityName (L)	Name of the locality as described in the certificate application	(optional)
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	E4BEC760A782A318E864FCE216530587D46AE98E		(mandatory)
Subject Key Identifier	SHA-1 hash value of Public Key according to RFC5280 chapter 4.2.1.2		(mandatory)
Key Usage	digitalSignature, no	nRepudiation, keyEncipherment,	(mandatory)





	dataEncipherment		Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtection		(mandatory)
Subject Alternative Name	E-mail address of the subject		(mandatory)
Certificate Policies	Policy OID: 2.16.756.1.89.2.1.12 CPSURI: <u>https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf</u> Policy OID: 0.4.0.2042.1.1 (NCP)		(mandatory)
CRL Distribution Points	http://crl.swisssign.ch/cdp-5639ce88-5da9-408f-b25d- 685d1e3e020a		URLs of the CRL Distribution points (LDAP and/or HTTP)
Authority Information Access	calssuers http://aia.swisssign.ch/air-9c868187-6fca- 4313-aa5b-ce5fec83132f		(mandatory)
	OCSP	http://ocsp.swisssign.ch/sign/ocs-aaccced5- 66e8-4069-9b1b-fd29ab73efec	(mandatory)
Microsoft Certificate	OID to designate the specific MS-Template		(optional)
Template	Integer to designate the «templateMajorVersion»		(optional)
	Integer to designate the «templateMinorVersion»		(optional)



3.3.2.5 Sponsor-Validated E-Mail ID Gold Certificate issued by SwissSign RSA SMIME NCP ICA 2022 - 1 - Default profile (no authentication) - issued until 15 September 2024

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSAE	ncryption	
Issuer Name	CN=SwissSign RS, O = SwissSign AG C = CH	A SMIME NCP ICA 2022 - 1	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	GivenName Surname or pseudo: Pseudonym	(mandatory)
	GivenName	Subject's Given Name as stated in certificate application	(optional)
	Surname	Subject's Surname Name as stated in certificate application	(optional)
	Pseudonym	Subject's Pseudonym as stated in certificate application.	(optional)
	Email	E-mail address of Subject as stated in certificate application	(optional)
	SerialNumber	Unique number generated by the TSP	(optional, only mandatory if Email missing)
	OrganizationNam e (O)	Subject (organization) name as stated in certificate application	(mandatory)
	OrganizationIdenti fier	Identifier of the organization according to CABF S/MIME BR	(mandatory)
	LocalityName (L)	Name of the locality as described in the certificate application	(optional)
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	E4BEC760A782A3	18E864FCE216530587D46AE98E	(mandatory)
Subject Key Identifier	SHA-1 hash value 4.2.1.2	of Public Key according to RFC5280 chapter	(mandatory)
Key Usage	digitalSignature, ke	yEncipherment	(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtection	on	(mandatory)
Subject Alternative	E-mail address of t	he subject	(mandatory)



Name			
Certificate Policies	Policy OID: 2.23.140.1.5.3.1 (CABF Sponsor-Validated, Generation Legacy) Policy OID: 0.4.0.2042.1.1 (NCP) Policy OID: 2.16.756.1.89.2.1.12 (SwissSign NCP CP) CPSURI: https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf		(mandatory)
CRL Distribution Points	http://crl.swisssign.ch/cdp-5639ce88-5da9-408f-b25d- 685d1e3e020a		URLs of the CRL Distribution points (LDAP and/or HTTP)
Authority Information Access			(mandatory)
	OCSP	http://ocsp.swisssign.ch/sign/ocs-aaccced5- 66e8-4069-9b1b-fd29ab73efec	(mandatory)
Microsoft Certificate	OID to designate the specific MS-Template		(optional)
Template	Integer to designate the «templateMajorVersion»		(optional)
	Integer to designate	e the «templateMinorVersion»	(optional)



3.3.2.6	Sponsor-Validated E-Mail ID Gold Certificate issued by SwissSign RSA SMIME NCP ICA 2021 - 1 - Default profile (no
	authentication)

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSAEr	ncryption	
Issuer Name	CN=SwissSign RS/ O = SwissSign AG C = CH	A SMIME NCP ICA 2021 - 1	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	GivenName Surname or pseudo: Pseudonym	(mandatory)
	GivenName	Subject's Given Name as stated in certificate application.	(optional)
	Surname	Subject's Surname Name as stated in certificate application.	(optional)
	Pseudonym	Subject's Pseudonym as stated in certificate application.	(optional)
	Email	E-mail address of Subject as stated in certificate application.	(optional)
	SerialNumber	Unique number generated by the TSP.	(optional, only mandatory if Email missing)
	OrganizationNam e (O)	Subject (organization) name as stated in certificate application.	(mandatory)
	OrganizationIdenti fier	Identifier of the organization according to CABF S/MIME BR	(mandatory)
	LocalityName (L)	Name of the locality as described in the certificate application	(optional)
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	E1644D6ECA9EC75DC97ECD4FDC3B53F45D0F18D3		(mandatory)
Subject Key Identifier	SHA-1 hash value of Public Key according to RFC5280 chapter 4.2.1.2		(mandatory)
Key Usage	digitalSignature, ke	yEncipherment	(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtection	on	(mandatory)





Subject Alternative Name	E-mail address of t	he subject	(mandatory)
Certificate Policies	Policy OID: 2.23.140.1.5.3.1 (CABF Sponsor-Validated, Generation Legacy) Policy OID: 0.4.0.2042.1.1 (NCP) Policy OID: 2.16.756.1.89.2.1.12 (SwissSign NCP CP) CPSURI: https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf		(mandatory)
CRL Distribution Points	http://crl.swisssign.net/E1644D6ECA9EC75DC97ECD4FDC3B53 F45D0F18D3 Idap://directory.swisssign.net/CN=E1644D6ECA9EC75DC97ECD 4FDC3B53F45D0F18D3%2CO=SwissSign%2CC=CH?certificate RevocationList?base?objectClass=cRLDistributionPoint		URLs of the CRL Distribution points (HTTP-URL is mandatory)
Authority Information Access	calssuers http://swisssign.net/cgi- bin/authority/download/E1644D6ECA9EC75D C97ECD4FDC3B53F45D0F18D3		(mandatory)
	OCSP	http://ocsp.swisssign.net/E1644D6ECA9EC75 DC97ECD4FDC3B53F45D0F18D3	(mandatory)
Microsoft Certificate	OID to designate the specific MS-Template		(optional)
Template	Integer to designate	e the «templateMajorVersion»	(optional)
	Integer to designate	e the «templateMinorVersion»	(optional)



3.3.2.7 Sponsor-Validated E-Mail ID Gold Certificate issued by SwissSign RSA SMIME SV ICA 2024 - 1- Default profile (no authentication; issuance starting 15 September 2024 latest)

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSAEr	ncryption	
Issuer Name	CN = SwissSign RS O = SwissSign AG C = CH	SA SMIME SV ICA 2024 - 1	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	GivenName Surname or pseudo: Pseudonym	(mandatory)
	GivenName	Subject's Given Name as stated in certificate application	(optional)
	Surname	Subject's Surname Name as stated in certificate application	(optional)
	Pseudonym	Subject's Pseudonym as stated in certificate application.	(optional)
	Email	E-mail address of Subject as stated in certificate application	(optional)
	SerialNumber	Unique number generated by the TSP	(optional, only mandatory if Email missing)
	OrganizationNam e (O)	Subject (organization) name as stated in certificate application	(mandatory)
	OrganizationIdenti fier	Identifier of the organization according to CABF S/MIME BR	(mandatory)
	LocalityName (L)	Name of the locality as described in the certificate application	(optional)
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	b8ea31b3dbc643fb	0d60d35ca9ed9a8be00eb856	(mandatory)
Subject Key Identifier	SHA-1 hash value 4.2.1.2	of Public Key according to RFC5280 chapter	(mandatory)
Key Usage	digitalSignature, ke	yEncipherment	(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtection	on	(mandatory)
Subject Alternative	E-mail address of t	he subject	(mandatory)



Name			
Certificate Policies	 Policy OID: 2.23.140.1.5.3.1 (CABF Sponsor-Validated, Generation Legacy) Policy OID: 0.4.0.2042.1.1 (NCP) Policy OID: 2.16.756.1.89.2.1.12 (SwissSign NCP CP) CPSURI: https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf 		(mandatory)
CRL Distribution Points	http://crl.swisssign.ch/cdp-f4ed88c4-aae4-490a-99f8-8f5fd9ff751d		URLs of the CRL Distribution points (LDAP and/or HTTP)
Authority Information Access	calssuers	http://aia.swisssign.ch/air-f3a575a3-839c- 4637-87f3-955897d7cb4b	(mandatory)
	OCSP	http://ocsp.swisssign.ch/sign/ocs-aaccced5- 66e8-4069-9b1b-fd29ab73efec	(mandatory)
Microsoft Certificate	OID to designate the specific MS-Template		(optional)
Template	Integer to designate the «templateMajorVersion»		(optional)
	Integer to designate	e the «templateMinorVersion»	(optional)



3.3.2.8 Allowed exceptions for Common Name

Allowed exceptions with a fixed string in the common name in NCP certificates, with a then mandatory entry for /E-Mail are:

- "Secure Mail: Gateway Certificate" "Secure Mail: SEPPmail Certificate" "XnetSolutions Mailgateway" _
- -
- -
- -
- "Secure Mail: SX-Mail Crypt Certificate" "Secure E-Mail: SX-Mail Crypt Certificate" "Zertificon Mailgateway" -
- -
- "Z1 SecureMail Gateway Certificate" _



3.3.3 Normalized Certificate Policy (NCP) extended / Sponsor Validated (SV) extended

3.3.3.1 Pro S/MIME E-Mail ID Gold Certificate issued by SwissSign RSA SMIME NCP extended ICA 2021 - 1 (NCP) – Default Profile (authentication)

Field/Extensio n	Values		Comment	
Version	Version 3		Certificate format version	
SignatureAlgori thm	SHA256withRSAEncryption or RSASSA-PSS with SHA- 256			
Issuer Name	CN = Swis O = Swiss C = CH	sSign RSA SMIME NCP extended ICA 2021 - 1 Sign AG		
Subject DN			Unique subject distinguishe certificate	d name of the
	Common Name (CN)	GivenName Surname or pseudo: Pseudonym	(mandatory)	
	GivenNa me	Subject's Given Name as stated in certificate application.	(optional)	
	Surname	Subject's Surname Name as stated in certificate application.	(optional)	
	Pseudon ym	Subject's Pseudonym as stated in certificate application.	rtificate (optional)	
	User ID (U	ID)	Login ID of user	(optional)
	Email	E-mail address of Subject as stated in certificate application.	(optional)	
	SerialNu mber	Unique number generated by the TSP.	(optional, only mandatory if	Email missing)
	Organizat ionalUnit (OU)	Organizational unit as stated in certificate application.	(optional)	
	Organizat ionName (O)	Subject (organization) name as stated in certificate application.	(optional)	
	Street	Name of street as described in the certificate application.	(optional)	
	PostalCo de	Postal code as described in the certificate application.	(optional)	
	LocalityN ame (L)	Name of the locality as described in the certificate application	(optional)	
	State (ST) State or province name or code as described in certificate application and in accordance with ISO 3166-2		(optional)	
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)	

SwissSign

Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	2B661A63041903A719FC35E7C3B8D1368F4E9A41		
Subject Key Identifier	SHA-1 has chapter 4.2.1.2	h value of Public Key according to RFC5280	(mandatory)
Key Usage		ature, nonRepudiation, keyEncipherment, nerment, keyAgreement	(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emai	Protection, id-kp-clientAuth, msEFS, msSCL	(mandatory) The values msEFS, msSCL are optional.
Subject	E-mail add	ress of the subject	(mandatory)
Alternative Name		rincipalName/Microsoft UPN (OID .311.20.2.3)	(optional)
Certificate Policies	Policy OID extended) CPSURI:	: 0.4.0.2042.1.1 (ETSI NCP) : 2.16.756.1.89.2.1.13 (SwissSign NCP ository.swisssign.com/SwissSign_CPS_SMIME.p	
CRL Distribution Points	http://crl.swisssign.net/2B661A63041903A719FC35E7C3B 8D1368F4E9A41 Idap://directory.swisssign.net/CN=2B661A63041903A719F C35E7C3B8D1368F4E9A41%2CO=SwissSign%2CC=CH? certificateRevocationList?base?objectClass=cRLDistributio nPoint		URLs of the CRL Distribution points (LDAP and/or HTTP)
Authority Information Access	calssuers	http://swisssign.net/cgi- bin/authority/download/2B661A63041903A719F C35E7C3B8D1368F4E9A41	(mandatory)
	OCSP	http://ocsp.swisssign.net/2B661A63041903A71 9FC35E7C3B8D1368F4E9A41	(mandatory)
Microsoft	OID to designate the specific MS-Template		(optional)
Certificate Template	Integer to designate the «templateMajorVersion»		(optional)
	Integer to designate the «templateMinorVersion»		(optional)
Microsoft Secure Identifier (SID)	String-Value		(optional) The value of the SID-extension is required by Microsoft-systems for authentication and assigned by these systems as well.

3.3.3.2 Pro S/MIME E-Mail ID Gold Certificate issued by SwissSign RSA SMIME NCP extended ICA 2021 - 1 – Document Signing (only for certificates issued before 1 April 2022)

Field/Extension	Values	Comment
Version	Version 3	Certificate format version

SwissSign

SignatureAlgorithm	SHA256withRSAEncryption	
Issuer Name	Please see the general profile in clause 3.3.3.1	
Subject DN	Please see the general profile in clause 3.3.3.1	
Valid from		Start of certificate validity.
Valid to		End of certificate validity.
Authority Key Identifier	Please see the general profile in clause 3.3.3.1	
Subject Key Identifier	Please see the general profile in clause 3.3.3.1	(mandatory)
Key Usage	Please see the general profile in clause 3.3.3.1	
Extended Key Usage	id-kp-emailProtection	(mandatory)
Subject Alternative Name	Please see the general profile in clause 3.3.3.1	optional
Certificate Policies	Please see the general profile in clause 3.3.3.1	
CRL Distribution Points	Please see the general profile in clause 3.3.3.1	
Authority Information Access	Please see the general profile in clause 3.3.3.1	

3.3.3.3 Pro S/MIME E-Mail ID Gold Certificate issued by SwissSign RSA SMIME NCP extended ICA 2022 - 1 (NCP) – Default Profile (authentication)

Field/Extensio n	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorit hm	SHA256wi	thRSAEncryption or RSASSA-PSS with SHA-256	
Issuer Name	CN = SwissSign RSA SMIME NCP extended ICA 2022 - 1 O = SwissSign AG C = CH		
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	GivenName Surname or pseudo: Pseudonym	(mandatory)
	GivenNa me	Subject's Given Name as stated in certificate application.	(optional)
	Surname	Subject's Surname Name as stated in certificate application.	(optional)
	Pseudon ym	Subject's Pseudonym as stated in certificate application.	(optional)
	Email	E-mail address of Subject as stated in certificate application.	(optional)
	SerialNu mber	Unique number generated by the TSP.	(optional, only mandatory if Email missing)





	Organizat ionalUnit	Organizational unit as stated in certificate application.	(optional)	
	(OU)			
	Organizat ionName (O)	Subject (organization) name as stated in certificate application.	(optional)	
	Street	Name of street as described in the certificate application.	(optional)	
	PostalCo de	Postal code as described in the certificate application.	(optional)	
	LocalityN ame (L)	Name of the locality as described in the certificate application	(optional)	
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)	
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)	
	User ID (UID)	Login ID of user	(optional)	
Valid from			Start of certificate validity.	
Valid to			End of certificate validity.	
Authority Key Identifier	56A2DFF3E1841D1BA0FF7F3FF071188528F83DCD			
Subject Key Identifier	SHA-1 hash value of Public Key according to RFC5280 chapter 4.2.1.2		(mandatory)	
Key Usage	digitalSignature, nonRepudiation, keyEncipherment, dataEncipherment, keyAgreement		(mandatory) Critical extension, any combination of these key usages is permissible.	
Extended Key Usage	id-kp-emai	Protection, id-kp-clientAuth, msEFS, msSCL	(mandatory) The values msEFS, msSCL are optional.	
Subject	E-mail add	ress of the subject	(mandatory)	
Alternative Name	universalPrincipalName/Microsoft UPN (OID 1.3.6.1.4.1.311.20.2.3)		(optional)	
Certificate Policies	Policy OID: 0.4.0.2042.1.1 (ETSI NCP) Policy OID: 2.16.756.1.89.2.1.13 (SwissSign NCP extended) CPSURI: https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf			
CRL Distribution Points	http://crl.swisssign.ch/cdp-26ab0cd6-f539-4f93-be04- 39250cd56682		URLs of the CRL Distribution points (LDAP and/or HTTP)	
Authority Information	calssuers	http://aia.swisssign.ch/air-d8cd150b-23a8-4989- a18e-b683fdb5bb85	(mandatory)	
Access	OCSP	http://ocsp.swisssign.ch/sign/ocs-aaccced5- 66e8-4069-9b1b-fd29ab73efec	(mandatory)	



Microsoft Certificate	OID to designate the specific MS-Template	(optional)	
Template	Integer to designate the «templateMajorVersion»	(optional)	
	Integer to designate the «templateMinorVersion»	(optional)	
Microsoft Secure Identifier (SID	String-Value	(optional) The value of the SID-extension is required by Microsoft-systems for authentication and assigned by these systems as well.	



3.3.3.4	Pro S/MIME E-Mail ID Gold Certificate issued by SwissSign Personal Gold CA 2014 G22 –Default Profile,
	authentication

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSA	Encryption or RSASSA-PSS with SHA-256	
Issuer Name	CN = SwissSign O = SwissSign A C = CH	Personal Gold CA 2014 - G22 G	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	GivenName Surname or pseudo: Pseudonym	(mandatory)
	GivenName	Subject's Given Name as stated in certificate application.	(optional)
	Surname	Subject's Surname Name as stated in certificate application.	(optional)
	Pseudonym	Subject's Pseudonym as stated in certificate application.	(optional)
	Email	E-mail address of Subject as stated in certificate application.	(optional)
	SerialNumber	Unique number generated by the TSP.	(optional, only mandatory if Email missing)
	OrganizationalU nit (OU)	Organizational unit as stated in certificate application.	(optional)
	OrganizationNa me (O)	Subject (organization) name as stated in certificate application.	(optional)
	Street	Name of street as described in the certificate application.	(optional)
	PostalCode	Postal code as described in the certificate application.	(optional)
	LocalityName (L)	Name of the locality as described in the certificate application	(optional)
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)
	User ID (UID)	Login ID of user	(optional) Used for smartcard-login
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	DA32F949F851C	CC9871660CD9CEB6DB923F094BEF	
Subject Key Identifier	SHA-1 hash valu	e of Public Key according to RFC5280 chapter	(mandatory)





	4.2.1.2		
Key Usage	digitalSignature, no dataEncipherment,	nRepudiation, keyEncipherment, keyAgreement	(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtection, id-kp-clientAuth, msEFS, msSCL		(mandatory) The values msEFS, msSCLare optional.
Subject Alternative Name	E-mail address of t	he subject,	(mandatory)
	universalPrincipalN 1.3.6.1.4.1.311.20.2	lame/Microsoft UPN (OID 2.3)	(optional)
Certificate Policies	Policy OID: 2.16.75 CPSURI: https://repository.sv Policy OID: 0.4.0.20	visssign.com/SwissSign_CPS_SMIME.pdf	
CRL Distribution Points	http://crl.swisssign.net/DA32F949F851CC9871660CD9CEB6DB 923F094BEF Idap://directory.swisssign.net/CN=DA32F949F851CC9871660C D9CEB6DB923F094BEF%2CO=SwissSign%2CC=CH?certificat eRevocationList?base?objectClass=cRLDistributionPoint		
Authority Information Access	calssuers <u>http://swisssign.net/cgi-bin/authority/download/DA32F949F851CC9</u> 871660CD9CEB6DB923F094BEF		(mandatory)
	OCSP	http://ocsp.swisssign.net/DA32F949F851CC 9871660CD9CEB6DB923F094BEF	(mandatory)



3.3.3.5	Pro S/MIME E-Mail ID Gold Certificate issued by SwissSign Personal Gold CA 2014 - G22 - authentication, MS-
	Template

Field/Extension	Values	Comment
Version	Version 3	Certificate format version
SignatureAlgorithm	SHA256withRSAEncryption	
Issuer Name	Please see the general profile in clause 3.3.3.3	
Subject DN	Please see the general profile in clause 3.3.3.3	
	User ID (UID)	(optional)
Valid from		Start of certificate validity.
Valid to		End of certificate validity.
Authority Key Identifier	Please see the general profile in clause 3.3.3.3	
Subject Key Identifier	Please see the general profile in clause 3.3.3.3	
Key Usage	digitalSignature, nonRepudiation, keyEncipherment, dataEncipherment, keyAgreement	(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtection, id-kp-clientAuth, msEFS, msSCL	(mandatory) The values msEFS, msSCL are optional.
Subject Alternative Name	E-mail address of the subject	(mandatory)
	universalPrincipalName/Microsoft UPN (OID 1.3.6.1.4.1.311.20.2.3)	(optional)
Certificate Policies	Policy OID: 2.16.756.1.89.2.1.13 CPSURI: https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf Policy OID: 0.4.0.2042.1.1 (NCP)	
CRL Distribution Points	Please see the general profile in clause 3.3.3.3	
Authority Information Please see the general profile in clause 3.3.3 Access Please see the general profile in clause 3.3.3		
Microsoft Certificate	OID to designate the specific MS-Template	(mandatory)
Template	Integer to designate the «templateMajorVersion»	(mandatory)
	Integer to designate the «templateMinorVersion»	(mandatory)

3.3.3.6 E-Mail ID Gold Certificate issued by SwissSign Personal Gold CA 2014 – G22 (NCP) – Document Signing only

Field/Extension Values		Comment
Version	Version 3	Certificate format version
SignatureAlgorithm	SHA256withRSAEncryption	
Issuer Name	Please see the general profile in clause 3.3.3.3	
Subject DN	Please see the general profile in clause 3.3.3.3	





Valid from		Start of certificate validity.
Valid to		End of certificate validity.
Authority Key Identifier	Please see the general profile in clause 3.3.3.3	
Subject Key Identifier	Please see the general profile in clause 3.3.3.3	(mandatory)
Key Usage	Please see the general profile in clause 3.3.3.3	
Extended Key Usage	id-kp-emailProtection, DocumentSigning, Authentic Documents Trust	(mandatory) Any combination of the EKU values is permissible.
Subject Alternative Name	Please see the general profile in clause 3.3.3.3	optional
Certificate Policies	Policy OID: 2.16.756.1.89.2.1.13 CPSURI: https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf Policy OID: 0.4.0.2042.1.1 (NCP)	
CRL Distribution Points	Please see the general profile in clause 3.3.3.3	
Authority Information Access	Please see the general profile in clause 3.3.3.3	



3.3.3.7	Sponsor-Validated E-Mail ID Gold Certificate issued by SwissSign RSA SMIME NCP extended ICA 2022 - 1 - with
	authentication

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSAEr	ncryption OR RSA-PSS	
Issuer Name	CN=SwissSign RS/ O = SwissSign AG C = CH	A SMIME NCP extended ICA 2022 - 1	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	GivenName Surname or pseudo: Pseudonym	(mandatory)
	GivenName	Subject's Given Name as stated in certificate application	(optional)
	Surname	Subject's Surname Name as stated in certificate application	(optional)
	Pseudonym	Subject's Pseudonym as stated in certificate application	(optional)
	Email	E-mail address of Subject as stated in certificate application	(optional)
	SerialNumber	Unique number generated by the TSP	(optional, only mandatory if Email missing)
	OrganizationNam e (O)	Subject (organization) name as stated in certificate application	(mandatory)
	OrganizationIdenti fier	Identifier of the organization according to CABF S/MIME BR	(mandatory)
	LocalityName (L)	Name of the locality as described in the certificate application	(optional)
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)
	User ID (UID)	Login ID of user	(optional)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	56A2DFF3E1841D	1BA0FF7F3FF071188528F83DCD	(mandatory)
Subject Key Identifier	SHA-1 hash value o 4.2.1.2	of Public Key according to RFC5280 chapter	(mandatory)



Key Usage	digitalSignature, nonRepudiation, keyEncipherment, dataEncipherment		 (mandatory) Critical extension, allowed combinations according to standard: digitalSignature,nonRepudiation, keyEncipherment, dataEncipherment digitalSignature digitalSignature, nonRepudiation keyEncipherment keyEncipherment keyEncipherment keyEncipherment, dataEncipherment
Extended Key Usage	id-kp-emailProtecti	on	(mandatory)
	id-kp-clientAuth		(optional)
	msEFS ("Microsoft	Encrypted File System")	(optional)
	msSCL ("Microsoft	SmartCard Login")	(optional)
Subject Alternative Name	E-mail address of the subject		(mandatory)
Name	otherName: universalPrincipalName/Microsoft UPN (OID 1.3.6.1.4.1.311.20.2.3)		(optional)
Certificate Policies	Policy OID: 2.23.140.1.5.3.1 (CABF Sponsor-Validated, Generation Legacy) Policy OID: 0.4.0.2042.1.1 (NCP) Policy OID: 2.16.756.1.89.2.1.13 (SwissSign NCP CP) CPSURI: https://repository.swisssign.com/SwissSign CPS SMIME.pdf		(mandatory)
CRL Distribution Points	http://crl.swisssign. 39250cd56682	ch/cdp-26ab0cd6-f539-4f93-be04-	Mandatory with HTTP-URL
Authority Information Access	calssuers	http://aia.swisssign.ch/air-d8cd150b-23a8- 4989-a18e-b683fdb5bb85	(mandatory)
	OCSP	http://ocsp.swisssign.ch/sign/ocs-aaccced5- 66e8-4069-9b1b-fd29ab73efec	(mandatory)
Microsoft Certificate	OID to designate the specific MS-Template		(optional)
Template	Integer to designate the «templateMajorVersion»		(optional)
	Integer to designate the «templateMinorVersion»		(optional)
Microsoft Secure Identifier (SID)	String-Value		(optional) The value of the SID-extension is required by Microsoft-systems for authentication and assigned by these systems as well.



3.3.3.8	Sponsor-Validated E-Mail ID Gold Certificate issued by SwissSign RSA SMIME NCP extended ICA 2021 - 1 – with
	authentication

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSAEncryption OR RSA-PSS		
Issuer Name	CN=SwissSign RS, O = SwissSign AG C = CH	A SMIME NCP extended ICA 2021 - 1	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	GivenName Surname or pseudo: Pseudonym	(mandatory)
	GivenName	Subject's Given Name as stated in certificate application.	(optional)
	Surname	Subject's Surname Name as stated in certificate application.	(optional)
	Pseudonym	Subject's Pseudonym as stated in certificate application.	(optional)
	Email	E-mail address of Subject as stated in certificate application.	(optional)
	SerialNumber	Unique number generated by the TSP.	(optional, only mandatory if Email missing)
	OrganizationNam e (O)	Subject (organization) name as stated in certificate application.	(mandatory)
	OrganizationIdenti fier	Identifier of the organization according to CABF S/MIME BR	(mandatory)
	LocalityName (L)	Name of the locality as described in the certificate application	(optional)
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)
	User ID (UID)	Login ID of user	(optional)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier E1644D6ECA9EC75DC97ECD4FDC3B53F45D0F18D3		(mandatory)	
Subject Key Identifier	ect Key Identifier SHA-1 hash value of Public Key according to RFC5280 chapter 4.2.1.2		(mandatory)
Key Usage	digitalSignature, no dataEncipherment	nRepudiation, keyEncipherment,	(mandatory) Critical extension •
Extended Key Usage	id-kp-emailProtection	วท	(mandatory)



id-kp-clientAuth		optional	
	msEFS ("Microsoft Encrypted File System")		(optional)
	msSCL ("Microsoft SmartCard Login")		(optional)
Subject Alternative	E-mail address of t	he subject	(mandatory)
Name	otherName: univers 1.3.6.1.4.1.311.20.2	salPrincipalName/Microsoft UPN (OID 2.3)	(optional)
Certificate Policies	Policy OID: 2.23.140.1.5.3.1 (CABF Sponsor-Validated, Generation Legacy) Policy OID: 0.4.0.2042.1.1 (NCP) Policy OID: 2.16.756.1.89.2.1.13 (SwissSign NCP CP) CPSURI: https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf		(mandatory)
CRL Distribution Points	F45D0F18D3 Idap://directory.swis 4FDC3B53F45D0F	net/E1644D6ECA9EC75DC97ECD4FDC3B53 sssign.net/CN=E1644D6ECA9EC75DC97ECD 18D3%2CO=SwissSign%2CC=CH?certificate se?objectClass=cRLDistributionPoint	URLs of the CRL Distribution points (HTTP-URL is mandatory)
Authority Information Access	calssuers	http://swisssign.net/cgi- bin/authority/download/E1644D6ECA9EC75D C97ECD4FDC3B53F45D0F18D3	(mandatory)
	OCSP	http://ocsp.swisssign.net/E1644D6ECA9EC75 DC97ECD4FDC3B53F45D0F18D3	(mandatory)
Microsoft Certificate	OID to designate the specific MS-Template		(optional)
Template	Integer to designate the «templateMajorVersion»		(optional)
	Integer to designate the «templateMinorVersion»		(optional)
Microsoft Secure Identifier (SID)	String-Value		((optional) The value of the SID-extension is required by Microsoft-systems for authentication and assigned by these systems as well.



3.3.3.9 Sponsor-Validated E-Mail ID Gold Certificate issued by SwissSign RSA SMIME SV ICA 2024 - 1 – with authentication (*issuance starting 15 September 2024 latest*)

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSAEncryption OR RSA-PSS		
Issuer Name	CN = SwissSign RS O = SwissSign AG C = CH	SA SMIME SV ICA 2024 - 1	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	GivenName Surname or pseudo: Pseudonym	(mandatory)
	GivenName	Subject's Given Name as stated in certificate application	(optional)
	Surname	Subject's Surname Name as stated in certificate application	(optional)
	Pseudonym	Subject's Pseudonym as stated in certificate application	(optional)
	Email	E-mail address of Subject as stated in certificate application	(optional)
	SerialNumber	Unique number generated by the TSP	(optional, only mandatory if Email missing)
	OrganizationNam e (O)	Subject (organization) name as stated in certificate application	(mandatory)
	OrganizationIdenti fier	Identifier of the organization according to CABF S/MIME BR	(mandatory)
	LocalityName (L)	Name of the locality as described in the certificate application	(optional)
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)
	User ID (UID)	Login ID of user	(optional)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	Authority Key Identifier b8ea31b3dbc643fb0d60d35ca9ed9a8be00eb856		(mandatory)
Subject Key Identifier	SHA-1 hash value of Public Key according to RFC5280 chapter 4.2.1.2		(mandatory)
Key Usage	digitalSignature, no dataEncipherment	nRepudiation, keyEncipherment,	(mandatory) Critical extension •
Extended Key Usage	id-kp-emailProtection	on	(mandatory)



id-kp-clientAuth		(optional)	
	msEFS ("Microsoft	Encrypted File System")	(optional)
	msSCL ("Microsoft SmartCard Login")		
Subject Alternative Name	E-mail address of t	he subject	(mandatory)
Name	otherName: univer 1.3.6.1.4.1.311.20.	salPrincipalName/Microsoft UPN (OID 2.3)	(optional)
Certificate Policies	 Policy OID: 2.23.140.1.5.3.1 (CABF Sponsor-Validated, Generation Legacy) Policy OID: 0.4.0.2042.1.1 (NCP) Policy OID: 2.16.756.1.89.2.1.13 (SwissSign NCP extended CP) CPSURI: https://repository.swissSign.com/SwissSign_CPS_SMIME.pdf 		(mandatory)
CRL Distribution Points	http://crl.swisssign.ch/cdp-f4ed88c4-aae4-490a-99f8-8f5fd9ff751d		Mandatory with HTTP-URL
Authority Information Access	calssuers	http://aia.swisssign.ch/air-f3a575a3-839c- 4637-87f3-955897d7cb4b	(mandatory)
	OCSP	http://ocsp.swisssign.ch/sign/ocs-aaccced5- 66e8-4069-9b1b-fd29ab73efec	(mandatory)
Microsoft Certificate	OID to designate th	ne specific MS-Template	(optional)
Template	Integer to designate the «templateMajorVersion»		(optional)
	Integer to designate the «templateMinorVersion»		(optional)
Microsoft Secure Identifier (SID)	String-Value		(optional) The value of the SID-extension is required by Microsoft-systems for authentication and assigned by these systems as well.



3.3.3.10 Allowed exceptions for Common Name

Name Allowed exceptions with a fixed string in the common name in NCP certificates, with a then mandatory entry for /E-Mail are:

- "Secure Mail: Gateway Certificate" -
- "Secure Mail: SEPPmail Certificate" -
- "XnetSolutions Mailgateway" -
- -
- "Secure Mail: SX-Mail Crypt Certificate" "Secure E-Mail: SX-Mail Crypt Certificate" -
- -
- "Zertificon Mailgateway" "Z1 SecureMail Gateway Certificate" -



3.3.4 S/MIME Organization Validated (OV)

3.3.4.1	Organization Validated E-Mail Certificate issued by SwissSign RSA SMIME OV ICA 2024 - 1
	5 5

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSAEncryption		
Issuer Name	CN = SwissSign R O = SwissSign AG C = CH	SA SMIME OV ICA 2024 - 1	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	Email address of Subject as in SAN OR Organization Name as in O-field	(mandatory)
	GivenName	Not present	
	Surname	Not present	
	Pseudonym	Not present	
	Email	Email address of Subject as in SAN	(optional)
	SerialNumber	Unique number generated by the TSP	(optional)
	Organization– Name (O)	Subject (organization) name as stated in certificate application	(mandatory)
	Organization– Identifier	Identifier of the organization according to CABF S/MIME BR	(mandatory)
	LocalityName (L)	Name of the locality as described in the certificate application	(optional)
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	2980EFB12AF137	52AB497C78FB81F38AEE27C7C7	(mandatory)
Subject Key Identifier	SHA-1 hash value of Public Key according to RFC5280 chapter 4.2.1.2		(mandatory)
Key Usage	Usage digitalSignature, keyEncipherment		(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtecti	on	(mandatory)
	id-kp-clientAuth		(optional)





Subject Alternative Name	E-mail address of t	he subject RFC822 name	(mandatory)
Certificate Policies	 Policy OID: 2.23.140.1.5.2.1 (CABF Organization-Validated, Generation Legacy) Policy OID: 0.4.0.2042.1.1 (ETSI NCP) Policy OID: 2.16.756.1.89.2.1.14 (SwissSign OV Certificate Policy) CPSURI: <u>https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf</u> 		(mandatory)
CRL Distribution Points	http://crl.swisssign.ch/cdp-0821da85-47ea-48d1-8064- 601ee819ac8f		Mandatory with HTTP-URL
Authority Information Access	calssuers	http://aia.swisssign.ch/air-8221be53-0ec0- 47b6-97f2-2ae68f2dbc8e	(mandatory)
	OCSP	http://ocsp.swisssign.ch/sign/ocs-aaccced5- 66e8-4069-9b1b-fd29ab73efec	(mandatory)
Microsoft Certificate	OID to designate the specific MS-Template		(optional)
Template	Integer to designate the «templateMajorVersion»		(optional)
	Integer to designate the «templateMinorVersion»		(optional)
Microsoft Secure Identifier (SID)	String-Value		(optional) The value of the SID-extension is required by Microsoft-systems for authentication and assigned by these systems as well.



4. Certificate Profiles of the SwissSign Silver CA - G2 PKI

The following certificate profiles are compiled in accordance with ITU-T X.509 version 3, IETF RFC 5280 [10], clause 6.6 of ETSI EN 319 411-1 [7], clause 7 of S/MIME BR Guidelines [8] and clause 9 of EVCG [9].

4.1 Root CA

4.1.1 SwissSign Silver CA - G2

Field/Extension	Value(s)	Comment
Version	Version 3	Certificate format version
Serial Number	4F1BD42F54BB2F4B	Unique serial number of the certificate
SignatureAlgorithm	sha1WithRSAEncryption	
Issuer Distinguished name	CN = SwissSign Silver CA - G2 O = SwissSign AG C = CH	Unique issuer distinguished name of the certificate
Subject Distinguished name	CN = SwissSign Silver CA - G2 O = SwissSign AG C = CH	Unique subject distinguished name of the certificate
Valid from	25 Oct 2006 08:32:46 UTC	Start of certificate validity.
Valid to	25 Oct 2036 08:32:46 UTC	End of certificate validity.
Basic Constraints	CA: TRUE	Critical
Key Usage	Certificate Sign, CRL Sign Critical	
Subject Key Identifier	17A0CDC1E441B63A5B3BCB459DBD1CC298FA8658	
Authority Key Identifier	17A0CDC1E441B63A5B3BCB459DBD1CC298FA8658	
Extended Key Usage	not included in this Root CA certificate	
Name Constraints	not included in this Root CA certificate	
Certificate Policies	Policy OID: 2.16.756.1.89.1.3.1.1 CPSURI: <u>http://repository.swisssign.com/</u>	
CRL Distribution Points	not included in this Root CA certificate	
Authority Information Access	not included in this Root CA certificate	

The Root CA certificate is identified via the following fingerprints:

SHA1 Fingerprint	9BAAE59F56EE21CB435ABE2593DFA7F040D11DCB
SHA256 Fingerprint	BE6C4DA2BBB9BA59B6F3939768374246C3C005993FA98F020D1DEDBED48A81D5



4.2 Issuing CAs

4.2.1 SwissSign Personal Silver CA 2014 - G22 (CRL & OCSP only)

Field/Extension	Value(s)		Comment
Version	Version 3		Certificate format version
Serial Number	544D64EAD1ED	336D532405D00B936	Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSA	Encryption	
Issuer Distinguished name	CN = SwissSign O = SwissSign A C = CH		Unique issuer distinguished name of the certificate
Subject Distinguished name	CN = SwissSign O = SwissSign A C = CH	Personal Silver CA 2014 - G22 G	Unique subject distinguished name of the certificate
Valid from	19 Sep 2014 20:	36:49 UTC	Start of certificate validity.
Valid to	15 Sep 2029 20:	36:49 UTC	End of certificate validity.
Basic Constraints	CA:TRUE, pathle	n:0	Critical
Key Usage	Certificate Sign,	CRL Sign	Critical
Subject Key Identifier	ifier F0C7A33291B5EBCAB5587715A74EBE1A5D614325		
Authority Key Identifier	17A0CDC1E441B63A5B3BCB459DBD1CC298FA8658		
Certificate Policies	Policy OID: 2.16.756.1.89.1.3.1.6 CPSURI: <u>http://repository.swisssign.com/SwissSign-Gold-CP-CPS.pdf</u>		
CRL Distribution Points	http://crl.swisssign.net/17A0CDC1E441B63A5B3BCB459DBD1 CC298FA8658 Idap://directory.swisssign.net/CN=17A0CDC1E441B63A5B3BC B459DBD1CC298FA8658%2CO=SwissSign%2CC=CH?certific ateRevocationList?base?objectClass=cRLDistributionPoint		
Authority Information Access	calssuers http://swisssign.net/cgi- bin/authority/download/17A0CDC1E441B63A 5B3BCB459DBD1CC298FA8658		
	OCSP	http://ocsp.swisssign.net/17A0CDC1E441B63 A5B3BCB459DBD1CC298FA8658	

The Issuing CA certificate is identified via the following fingerprints:

SHA1 Fingerprint	ABF481D8A1991E8CACDBB9BAA0969A710C596D8A
SHA256 Fingerprint	C9E40F4E83396F34A7C861817B4EDAB3DC1F8BAC699FD50CB261FA9123D55EF4



4.3 End-entity certificates

Please note: No new end-entity certificates are issued under the SwissSign Sliver CA G2.

4.3.1 SwissSign E-Mail ID Silver Certificate issued by SwissSign Personal Silver CA 2014 – G22 (LCP), E-Mail only

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSA	Encryption	
Issuer Name	CN = SwissSign O = SwissSign A C = CH	Personal Silver CA 2014 - G22 G	Unique issuer distinguished name of the certificate
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	E-Mail address of Subject as stated in certificate application.	(mandatory)
	Email	E-mail address of Subject as stated in certificate application.	(optional)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	F0C7A33291B5E	BCAB5587715A74EBE1A5D614325	(mandatory)
Subject Key Identifier	SHA-1 hash value of Public Key according to RFC5280 chapter 4.2.1.2		(mandatory)
Key Usage	digitalSignature, keyEncipherment, dataEncipherment		(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtec	ction	(mandatory)
Subject Alternative Name	E-mail address of the subject		(mandatory)
Certificate Policies	Policy OID: 2.16.756.1.89.2.1.11 CPSURI: <u>https://repository.swisssign.com/SwissSign_CPS_SMIME.pdf</u> Policy OID: 0.4.0.2042.1.3 (LCP)		(mandatory)
CRL Distribution Points	http://crl.swisssign.net/F0C7A33291B5EBCAB5587715A74EBE 1A5D614325 Idap://directory.swisssign.net/CN=F0C7A33291B5EBCAB55877 15A74EBE1A5D614325,O=SwissSign,C=CH?certificateRevocat ionList?base?objectClass=cRLDistributionPoint		(mandatory) URLs of the CRL Distribution points (LDAP and/or HTTP)
Authority Information Access	calssuers	http://swisssign.net/cgi- bin/authority/download/F0C7A33291B5EBCA B5587715A74EBE1A5D614325	(mandatory)
	OCSP	http://ocsp.swisssign.net/F0C7A33291B5EBC AB5587715A74EBE1A5D614325	(mandatory)



4.3.2 SwissSign E-Mail ID Silver Certificate issued by SwissSign Personal Silver CA 2014 – G22 (LCP), email only & MS-Template

Field/Extension	Values	Comment
Version	Version 3	Certificate format version
SignatureAlgorithm	SHA256withRSAEncryption	
Issuer Name	Please see the general profile in clause4.3.1	
Subject DN	Please see the general profile in clause 4.3.1	Unique subject distinguished name of the certificate
Valid from		Start of certificate validity.
Valid to		End of certificate validity.
Authority Key Identifier	Please see the general profile in clause 4.3.1	
Subject Key Identifier	Please see the general profile in clause 4.3.1	(mandatory)
Key Usage	digitalSignature, keyEncipherment, dataEncipherment (mandatory) Critical extension, any c of these key usages is	
Extended Key Usage	id-kp-emailProtection	(mandatory)
Subject Alternative Name	E-mail address of the subject	(mandatory)
Certificate Policies	Please see the general profile in clause 4.3.1	
CRL Distribution Points	Please see the general profile in clause 4.3.1	
Authority Information Access	Please see the general profile in clause 4.3.1	
Microsoft Certificate	OID to designate the specific MS-Template	(mandatory)
Template	Integer to designate the «templateMajorVersion»	(mandatory)
	Integer to designate the «templateMinorVersion»	(mandatory)

4.3.3 SwissSign E-Mail ID Silver Certificate issued by SwissSign Personal Silver CA 2014 – G22 (LCP), organization entry

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSA	Encryption	
Issuer Name	Please see the g	eneral profile in clause 4.3.1	
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	E-Mail address of Subject as stated in certificate application.	(mandatory)
	Email	E-mail address of Subject as stated in	(optional)



		certificate application.	
	Pseudonym Subject's Pseudonym as stated in certificate application.		(optional)
	OrganizationNa me (O)	Subject (organization) name as stated in certificate application.	(mandatory)
	OrganizationalU nit (OU)	Organizational unit as stated in certificate application.	(optional)
	LocalityName (L)	Name of the locality as described in the certificate application	(optional)
	State (ST)	State or province name or code as described in certificate application and in accordance with ISO 3166-2	(optional)
	Country (C)	Country code in accordance with ISO 3166-1	(mandatory)
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Authority Key Identifier	Please see the g	eneral profile in clause 4.3.1	
Subject Key Identifier	Please see the general profile in clause 4.3.1		(mandatory)
Key Usage	digitalSignature, keyEncipherment, dataEncipherment		(mandatory) Critical extension, any combination of these key usages is permissible.
Extended Key Usage	id-kp-emailProtection		(mandatory)
Subject Alternative Name	E-mail address of the subject		(mandatory)
Certificate Policies	Please see the g	eneral profile in clause 4.3.1	
CRL Distribution Points	Please see the g	eneral profile in clause 4.3.1	
Authority Information Access	Please see the g	eneral profile in clause 4.3.1	

4.3.4 SwissSign E-Mail ID Silver Certificate issued by SwissSign Personal Silver CA 2014 – G22 (LCP), organization entry & MS-Template

Field/Extension	Values		Comment
Version	Version 3		Certificate format version
SignatureAlgorithm	SHA256withRSA	Encryption	
Issuer Name	Please see the g	eneral profile in clause 4.3.1	
Subject DN			Unique subject distinguished name of the certificate
	Common Name (CN)	E-Mail address of Subject as stated in certificate application.	(mandatory)
	Email	E-mail address of Subject as stated in	(optional)



Image: space of the s				
Image: Application. Application. Application. OrganizationNa Subject (organization) name as stated in certificate application. (mandatory) OrganizationalU nt OrganizationalU application. (optional) Understand OrganizationalU application. (optional) LocalityName Name of the locality as described in the certificate application. (optional) LocalityName Name of the locality as described in the certificate application and in accordance with ISO 3166-2 (optional) Valid from State or province name or code as described in certificate validity. (mandatory) Valid from Country (C) Country code in accordance with ISO 3166-1 (mandatory) Valid to End of certificate validity. End of certificate validity. Valid to Image: Please see the general profile in clause 4.3.1 (mandatory) Subject Key Identifier Please see the general profile in clause 4.3.1 (mandatory) Key Usage digitalSignature, keyEncipherment, dataEncipherment (mandatory) Critical extension, any combination of these key usages is permissible. (mandatory) Extended Key Usage id-kp-emailProtection (mandatory) <td></td> <td colspan="2">certificate application.</td> <td></td>		certificate application.		
me (O) certificate application. Control is a state of the subject		Pseudonym		(optional)
nit application. Instruction (OU) LocalityName (L) Name of the locality as described in the certificate application (optional) State (ST) State or province name or code as described in certificate application and in accordance with ISO 3166-2 (optional) Valid from Country (C) Country code in accordance with ISO 3166-1 (mandatory) Valid form Start of certificate validity. End of certificate validity. Valid to End of certificate validity. Authority Key Identifier Please see the general profile in clause 4.3.1 (mandatory) Key Usage digitalSignature, keyEncipherment, dataEncipherment (mandatory) Key Usage id-kp-emailProtection (mandatory) Subject Alternative Name E-mail address of the subject (mandatory) Certificate Policies Please see the general profile in clause 4.3.1 (mandatory) Certificate Policies Please see the general profile in clause 4.3.1 (mandatory) Certificate Policies Please see the general profile in clause 4.3.1 (mandatory) Certificate Policies Please see the general profile in clause 4.3.1 (mandatory)				(mandatory)
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Authority Key IdentifierPlease see the general profile in clause 4.3.1Subject Key IdentifierPlease see the general profile in clause 4.3.1Key UsagedigitalSignature, keyEncipherment, dataEnciphermentKey Usageid-kp-emailProtectionExtended Key Usageid-kp-emailProtectionSubject Alternative NameE-mail address of the subjectCertificate PoliciesPlease see the general profile in clause 4.3.1CRL Distribution PointsPlease see the general profile in clause 4.3.1Authority Information AccessPlease see the general profile in clause 4.3.1	Valid from			Start of certificate validity.
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Subject Alternative Name E-mail address of the subject (mandatory) Certificate Policies Please see the general profile in clause 4.3.1 (mandatory) CRL Distribution Points Please see the general profile in clause 4.3.1 (mandatory) Authority Information Access Please see the general profile in clause 4.3.1 (mandatory)	Key Usage	digitalSignature, keyEncipherment, dataEncipherment		Critical extension, any combination
Certificate Policies Please see the general profile in clause 4.3.1 CRL Distribution Points Please see the general profile in clause 4.3.1 Authority Information Please see the general profile in clause 4.3.1	Extended Key Usage	id-kp-emailProteo	ction	(mandatory)
CRL Distribution Points Please see the general profile in clause 4.3.1 Authority Information Access Please see the general profile in clause 4.3.1	Subject Alternative Name	E-mail address of the subject		(mandatory)
Authority Information Access Please see the general profile in clause 4.3.1	Certificate Policies	Please see the general profile in clause 4.3.1		
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Nicrosoft Cardificate (used data and if MO Tanglet		Please see the general profile in clause 4.3.1		
······································	Microsoft Certificate	OID to designate the specific MS-Template		(mandatory)
Integer to designate the «templateMajorVersion» (mandatory)	Template Integer to designate the «templateMajorVersion»		ate the «templateMajorVersion»	(mandatory)
Integer to designate the «templateMinorVersion» (mandatory)		Integer to design	ate the «templateMinorVersion»	(mandatory)





4.3.5 Allowed exceptions for Common Name

Allowed exceptions with a fixed string in the common name, with a then mandatory entry for /E-Mail are:

- "Secure Mail: Gateway Certificate"
- "Secure Mail: SEPPmail Certificate"
- "XnetSolutions Mailgateway"
- "Secure Mail: SX-Mail Crypt Certificate"
- "Secure E-Mail: SX-Mail Crypt Certificate"
- "Zertificon Mailgateway"
- "Z1 SecureMail Gateway Certificate"



5. OCSP Profile

5.1 OCSP Response Profile

SwissSign OCSP v1 is built according to RFC 6960 [13].

OCSP response Field	Values	Comment
Response Status	0 for successful or error code	Result of the query
Response Type	id-pkix-ocsp-basic	Type of the response(mandatory)
Version	V1	(mandatory)
Responder Id	DN	Distinguished name of the OCSP responder (mandatory)
Produced At	Date	Date when the OCSP response was signed (mandatory)
CertID	Unique ID for requested certificate	The CertID from the OCSP request is included in the response.
Cert Status	Good, revoked, or unknown	Indicates the response for certificate status (mandatory)
Revocation Time		Date of revocation of certificate
		January 1, 1970 for non-issued certificates according to chapter 2.2 of RFC6960 (optional)
revocationReason		Optional for end-entity certificates. If present, the possible values are as follows: unspecified" (0), keyCompromise (1), affiliationChanged (3), superseded (4), cessationOfOperation (5) or privilegeWithdrawn (9) For CA certificates, <i>if</i> OCSP is provided on the CA level, the revocationReason code included is the same as in the CARL (only present if CA is revoked). See CRL profile below for details (chapter 6 CRL Profile). The extension is set as described in BRG clause 7.3
This Update		Date when the status was queried from database (mandatory)
Next Update		The time at or before which newer information will be available about the status of the certificate. The OCSP response is valid for 3 days. The information provided is updated at least 8 hours prior to the nextUpdate. For Root and Issuing CA: The OCSP response is valid for 3 days. The information provided is updated at least 8 hours prior to the nextUpdate.
Nonce		Value is copied from request if it is included. (optional)



Extended Revoked Definititon		Extended revoked extension according to chapter 2.2 and 4.4.8 of RFC6960 (optional)
Signature Algorithm:	sha256WithRSAEncryption	(mandatory)
Certificate		Details of certificate used to sign the response (mandatory)

The OCSP extensions used are specified below:

Nonce

The ArchiveCutOff extension is not set in the OCSP responses.



5.2 OCSP Responder Certificate

Field/Extension	Value(s)		Comment
Version	Version 3		Certificate format version
Serial Number			Unique serial number of the certificate
SignatureAlgorithm	sha256WithRSA	Encryption	
Issuer Distinguished name			Unique issuer distinguished name of the certificate (Root CA for the Issuing CA and the Issuing CA for the end entity certificate)
Subject Distinguished name	CommonName		Unique subject distinguished name of the OCSP Signer certificate.
Inditio	OrganizationNa me (O)	SwissSign AG	The CN shall include the string "OCSP" and the reference to the Issuer.
	Country (C)	СН	The CN may contain an ID unique to the specific OCSP responder certificate.
Valid from			Start of certificate validity.
Valid to			End of certificate validity.
Key Usage	digitalSignature		(mandatory)
Subject Key Identifier			(mandatory)
Authority Key Identifier			(mandatory)
Extended Key Usage	id-kp-ocspSigning		(mandatory)
Certificate Policies	Not included in this certificate		
ocspNoCheck			(mandatory)
CRL Distribution Points	Not included in th	nis certificate	
Authority Information Access	Not included in this certificate		



6. CRL Profile

SwissSign issues CRLs in accordance to the guides of RFC 5280 [10].

The CRL profile is applicable to the Root CA and its subordinated issuing CAs.

Extension Attribute	Values	Comment
Version Number	V2	CRL format version pursuant to X.509.
Signature Algorithm	sha256WithRSAEncryption	Hash method and the signature algorithm used to sign the CRL pursuant to RFC 5280.
Issuer Distinguished Name		Unique issuer distinguished name of the certificate
Effective Date		Date and time of CRL issuance.
Next Update		Date and time of issuance of the next CRL. Maximum validity for CARL of the Root CA is 1 year after the publication of the CRL. The validity for CRLs provided by the Issuing CAs is 10 days. If it is the last CRL issued for those certificates in the scope of this CRL, the nextUpdate field in the CRL will be set to "99991231235959Z" as required by IETF RFC 5280.
Revocation List Number		CRL sequence number
Revoked Certificates:		List of the serial numbers and revocation dates of the revoked Certificate.
Serial Number		Serial number of the revoked certificate.
Revocation Date		Date and time of revocation of the certificate.
reasonCode		Reason code for certificate revocation. Optional for end-entity certificates (please note: reason code 0 for "unspecified" is not set). If present, the possible values are as follows: - keyCompromise (1), - affiliationChanged (3), - superseded (4), - cessationOfOperation (5) or - privilegeWithdrawn (9) For CARL issued by the Root CA reasonCode extension is present and not marked critical possible reason codes in CARL: cACompromise (2), or cessationOfOperation (5)
Signature		Confirmation signature of the authority issued the CRL.
Authority Key Identifier		The Authority key identifier of the Issing CA

The ExpiredCertsOnCRL extension is not set as expired ceritifcates are removed from the CRL.

SwissSign

7. References

- [1] SwissSign CP LCP Certificate Policy according to Lightweight Certificate Policy, published under: https://repository.swisssign.com
- [2] SwissSign CP NCP Certificate Policy for according to Normalized Certificate Policy, published under: https://repository.swisssign.com
- [3] SwissSign CP NCP Extended Certificate Policy for Normalized Certificate Policy with extended EKU, published under: https://repository.swisssign.com
- [4] SwissSign CPR S/MIME Certificate, CRL and OCSP Profiles for S/MIME certificates, published under: https://repository.swisssign.com
- [5] SwissSign CPS S/MIME Certification Practice Statement for for S/MIME certificates, published under: https://repository.swisssign.com
- [6] SwissSign TSPS Trust Services Practice Statement, published under: https://repository.swisssign.com
- [7] ETSI EN 319 411-1V1.4.1 (2023-10) Electronic Signatures and Infrastructures (ESI); Policy and security requirements for Trust Service Providers issuing certificates; Part 1: General requirements;
- [8] SMIME-BR / S/MIME BR Guidelines: "Baseline Requirements for the Issuance and Management of Publicly-Trusted S/MIME Certificates";
- [9] EVCG: current version of the Guidelines For The Issuance And Management Of Extended Validation Certificates;
- [10] RFC 5280 Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile;
- [11] RFC 3647 Request For Comments 3647, Internet X.509 Public Key Infrastructure, Certificate Policy and Certification Practices Framework;
- [12] RFC 4055 Additional Algorithms and Identifiers for RSA Cryptography for use in the Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile;
- [13] RFC 6960 X.509 Internet Public Key Infrastructure Online Certificate Status Protocol OCSP;
- [14] RFC 6962 Certificate Transparency;
- [15] ISO 3166 Codes;