#### **Bugzilla ID:** 453460 **Bugzilla Summary:** Add "SwissSign Gold CA - G2" as EV Root Certificate

CAs wishing to have their certificates included in Mozilla products must comply with the requirements of the Mozilla CA certificate policy (http://www.mozilla.org/projects/security/certs/policy/) and must supply the information necessary to determine whether or not the policy's requirements have been satisfied, as per <u>http://wiki.mozilla.org/CA:Information\_checklist</u>.

General Information	Data
CA Name	SwissSign
Website URL (English version)	http://www.swisssign.com/
Organizational type. (E.g., whether the CA is	Public Corporation
operated by a private or public corporation,	
government agency, academic institution or	
consortium, NGO, etc.)	
Primary market / customer base. (Which types of	SwissSign AG is a commercial CSP that provides certification services for individual and
customers does the CA serve? Are there particular	corporate customers. SwissSign operates the certificate authority for the Swiss Post and is
vertical market segments in which it operates? Does	mostly focused on Switzerland but Registration Services may be used internationally.
it focus its activities on a particular country or other	
geographic region?)	

Info Needed	Data
Certificate Name	SwissSign Gold CA - G2
Cert summary / comments	This request is to EV-enable this root, which is already in the NSS store. This root has three internally-operated subordinate CAs: the SwissSign Personal Gold CA issues certificates for natural persons and organizations, the SwissSign Server Gold CA issues certificates for systems, and the SwissSign EV Gold CA issues EV certificates.
The root CA certificate URL	Already in NSS.
SHA-1 fingerprint.	d8:c5:38:8a:b7:30:1b:1b:6e:d4:7a:e6:45:25:3a:6f:9f:1a:27:61
Valid from	2006-10-25
Valid to	2036-10-25
Cert Version	3
Modulus length / key length	4096
CRL	http://crl.swisssign.net/0E414F33ED1FEE8DAF6A1916B706D286B253008A

<ul><li>URL</li><li>update frequency for end-entity certificates</li></ul>	From CP/CPS: At least once every 24 hours. At most, 24 hours may pass from the time a certificate is revoked until the revocation is reported on the CRL.
OCSP (if applicable)	http://ocsp.swisssign.net/0E414F33ED1FEE8DAF6A1916B706D286B253008A
OCSP Responder URL	
• Max time until OCSP responders updated to reflect end-entity revocation	From CP/CPS: Real-time. The OCSP responder will report a certificate revoked immediately after the revocation has been completed.
http://www.cabforum.org/EV Certificate Guidelines	
V11.pdf Section 26(b):	Comment #8:
"If the CA provides revocation information via an	=> There is no expiration time for OCSP as this is done in Real-time. The OCSP
Online Certificate Status Protocol (OCSP) service, it	responder will report a certificate revoked immediately after the revocation has been
MUST update that service at least every four days.	completed. (Refer to the CP/CPS attachments, section 4.9.7)
OCSP responses from this service MUST have a	=> In the answer itself from the OCSP side the nextUpdate is set to thisUpdate + 25 hours
maximum expiration time of ten days."	
List or description of subordinate CAs operated by the	Hierarchy diagram provided in section 1.1. of the CPS.
CA organization associated with the root CA. (For	
example, this might include subordinate CAs created	From CP/CPS:
to issue different classes or types of end entity	The "SwissSign Gold CA" is one of the certification authorities operated by SwissSign AG.
certificates: Class 1 vs. class 2 certificates, qualified	The "SwissSign Gold CA" has three subordinate CAs: the "SwissSign Personal Gold CA",
vs. non-qualified certificates, EV certificates vs. non-	the "SwissSign Server Gold CA" and the "SwissSign EV Gold CA". The "SwissSign
EV certificates, SSL certificates vs. email certificates,	Personal Gold CA" issues certificates that support digital signing and/or encryption for
and so on.)	individuals. The SwissSign Server Gold CA issues certificates for servers. The SwissSign EV
	Gold CA issues Extended Validation SSL certificates.
For internally-operated subordinate CAs the key is to	
confirm that their operation is addressed by the	For the issuance of Extended Validation SSL certificates, SwissSign fully complies with all
relevant CPS, and that any audit covers them as well	the rules and regulations published by the CA/Browser Forum ( <u>http://www.cabforum.org/</u> ):
as the root.	
	The "SwissSign Personal Gold CA", the "SwissSign Server Gold CA" and the "SwissSign
	EV Gold CA" are issuing CAs for certificates that meet the stipulations of the European
	Technical Specification ETSI TS 102 042 - "Normalized" Certificate Policy (NCP).
For subordinate CAs operated by third parties, if any:	None
General description of the types of	This root CA may also operate other customer-specific Issuing CAs if and only if they fully
third-party subordinates that exist, and what the	comply with all the stipulations of the "Gold G2" CP/CPS.
general legal/technical arrangements are by which	

those subordinates are authorized, controlled, and	Comment #8:
audited.	3) Does this root have any sub-CAs that are operated by third parties?
	=> No
List any other root CAs that have issued cross-signing	None
certificates for this root CA	
Requested Trust Bits	Websites
One or more of:	Email
• Websites (SSL/TLS)	Code
• Email (S/MIME)	
• Code (Code Signing)	
If SSL certificates are issued within the hierarchy	OV, EV
rooted at this root CA certificate:	
DV, OV, and/or EV	
EV policy OID	2.16.756.1.89.1.2.1.1
Example certificate(s) issued within the hierarchy	https://testevg2.swisssign.net/
rooted at this root, including the full certificate	
chain(s) where applicable.	
<ul> <li>For SSL certificates this should also include</li> </ul>	
URLs of one or more web servers using the	
certificate(s).	
• There should be at least one example certificate	
for each of the major types of certificates issued,	
e.g., email vs. SSL vs. code signing, or EV vs. OS	
vs. DV.	
• Note: mainly interested in SSL, so OK if no email	
example.	
CP/CPS	CP/CPS:
	https://bugzilla.mozilla.org/attachment.cgi?id=360528
	End User Agreement:
	http://repository.swisssign.com/SwissSign-Gold-EUA-R3.pdf
	SwissSign Document Repository <u>http://repository.swisssign.com/</u>
AUDIT	Audit Type: WebTrust for EV
	Auditor: KPMG
	Statement of completed point in time audit:

https://bugzilla.mozilla.org/attachment.cgi?id=346440
October, 2008
Audit Type: ETSI TS 101.456
Auditor: KPMG
Letter from KPMG confirming audit
https://bugzilla.mozilla.org/attachment.cgi?id=336659
June, 2008
SwissSign is listed in the Directory of the certified bodies conform to the Bundesgesetz über
die elektronische Signatur (ZertES):
Swiss Accreditation Service Certified Bodies List, SAS details for SwissSign
The criteria include ETSI TS 101.456
EV audit statement attached to bugzilla has been confirmed by KPMG via email.
Friday, November 7, 2008.

### Review CPS sections dealing with subscriber verification (COMPLETE)

- Verify domain check for SSL
  - In section 3.2.2 of the CP/CPS
- Verify the email account associated with the email address in the cert is owned by the subscriber. In addition to verification of subscriber's legal identity.
  - In section 3.2.3 of the CP/CPS.
- Verify identity info in code signing certs is that of subscriber
  - In section 3.2 of the CP/CPS
- Make sure it's clear which checks are done for which context (cert usage)

# Flag Problematic Practices (COMPLETE)

#### (http://wiki.mozilla.org/CA:Problematic\_Practices)

Comment #8: "I looked at your comments in the Information Gathering Document and those are correct: no one is relevant for SwissSign"

- <u>1.1</u>Long-lived DV certificates
  - Not found
- <u>1.2</u> Wildcard DV SSL certificates
  - $\circ \quad \text{Not found} \quad$
- <u>1.3</u> Issuing end entity certificates directly from roots
  - Root is offline, with subordinates to issue certs.

- <u>1.4</u> Allowing external entities to operate unconstrained subordinate CAs
  - o No
- <u>1.5</u> Distributing generated private keys in PKCS#12 files
  - CPS Section 6.1.2 Private key delivery to subscriber

Subscribers of the SwissSign RA have the choice, where the keys will be generated. SwissSign AG recommends to generate the keys for a signing certificate on a secure crypto device and the keys for an encryption certificate on the SwissSign web site. Private keys generated on a secure crypto device or browser-generated keys do not need to be delivered. The delivery of private keys generated on the SwissSign web site will be delivered through a passphrase-protected download mechanism (PKCS#12). Other RAs may manage the key generation and the delivery differently.

- <u>1.6</u> Certificates referencing hostnames or private IP addresses
  - Not found
- <u>1.7</u> OCSP Responses signed by a certificate under a different root
  - $\circ \quad \text{Not found} \quad$
- <u>1.8</u> CRL with critical CIDP Extension
  - $\circ$  CRL download works

# Verify Audits (COMPLETE)

(Sections 8, 9, and 10 of http://www.mozilla.org/projects/security/certs/policy/)

- Validate contact info in report, call to verify that they did indeed issue this report.
   Independent verification of authenticity of the audit report was completed.
- For EV CA's, verify current WebTrust EV Audit done.
  - Yes
- Review Audit to flag any issues noted in the report
  - No issues noted