Bugzilla ID: 792377

Bugzilla Summary: Add CA Disig root certificates

CAs wishing to have their certificates included in Mozilla products must

- 1) Comply with the requirements of the Mozilla CA certificate policy (http://www.mozilla.org/projects/security/certs/policy/)
- 2) Supply all of the information listed in http://wiki.mozilla.org/CA:Information_checklist.
 - a. Review the Recommended Practices at https://wiki.mozilla.org/CA:Recommended_Practices
 - b. Review the Potentially Problematic Practices at https://wiki.mozilla.org/CA:Problematic_Practices

General information about the CA's associated organization

CA Company Name	Disig
Website URL	http://www.disig.eu
Website one	http://www.disig.sk
Organizational type	Private Corporation
Primark Market / Customer Base	Disig is a public Certification Service Provider, located in Slovakia. Disig focus its certification service mainly for
	Slovakian market for the customer from general public, private companies, governmental organization.
CA Contact Information	CA Email Alias: caoperator@disig.sk
	CA Phone Number:+421 2 20850140
	Title / Department: Senior consultant at Information Security department

Technical information about each root certificate

Cert Name	CA Disig Root R1	CA Disig Root R2
Certificate	CN = CA Disig Root R1	CN = CA Disig Root R2
Issuer Field	0 = Disig a.s.	0 = Disig a.s.
	L = Bratislava	L = Bratislava
	C = SK	C = SK
Certificate	Will eventually replace the current CA Disig root certificate	Root certificate for SHA2 CA chain hierarchy
Summary	included in Mozilla products (Bugzilla #455878). This root will	This root will sign internally-operated intermediate certificates
	sign internally-operated intermediate certificates that will sign	that will sign entity certificates for SSL, digital signature,
	entity certificates for SSL, digital signature, sending/receiving e-	sending/receiving e-mail, and code signing.
	mail, and code signing.	
Root Cert URL	http://www.disig.sk/rootcar1/cert/rootcar1.der	http://www.disig.sk/rootcar2/cert/rootcar2.der
SHA1	8E:1C:74:F8:A6:20:B9:E5:8A:F4:61:FA:EC:2B:47:56:51:1A:52:C6	B5:61:EB:EA:A4:DE:E4:25:4B:69:1A:98:A5:57:47:C2:34:C7:D9:71
Valid From	2012-07-19	2012-07-19
Valid To	2042-07-19	2042-07-19
Certificate	3	3
Version		
Signature	SHA-1	SHA-256
Algorithm		
Modulus	4096	4096
Test Website	https://testssl-valid-r1i1.disig.sk	https://testssl-valid-r2i1.disig.sk

CRL URL	http://www.disig.sk/rootcar1/crl/rootcar1.crl	http://www.disig.sk/rootcar2/crl/rootcar2.crl
	http://www.disig.sk/subcar1i1/crl/subcar1i1.crl	http://www.disig.sk/subcar2i1/crl/subcar2i1.crl
	(NextUpdate: 24 hours)	(NextUpdate: 24 hours)
CRL Frequency	CP section 4.4.3: immediate upon revocation, otherwise every 24 l	nours
OCSP URL	http://rootcar1-ocsp.disig.sk/ocsp/rootcar1	http://rootcar2-ocsp.disig.sk/ocsp/rootcar2
	http://subcar1i1-ocsp.disig.sk/ocsp/subcar1i1	http://subcar2i1-ocsp.disig.sk/ocsp/subcar2i1
	No expiration time set. OCSP responder is on-line updated - max	No expiration time set. OCSP responder is on-line updated - max
	delay is 15 seconds from revocation.	delay is 15 seconds from revocation.
Requested Trust	Websites (SSL/TLS)	Websites (SSL/TLS)
Bits	Email (S/MIME)	Email (S/MIME)
	Code Signing	Code Signing
SSL Validation	OV	OV
Туре		
EV Policy OID(s)	Not Applicable. Not requesting EV treatment for this root.	Not Applicable. Not requesting EV treatment for this root.

CA Hierarchy information for each root certificate

CA Hierarchy	CA Disig Root R1	CA Disig Root R2
	- CA Disig R0I1 (SSL certificates)	- CA Disig R0I1 (SSL certificates)
	- CA Disig R0I2 (e-mail certificates, digital signature	- CA Disig R0I2 (e-mail certificates, digital signature
	certificates, code signing)	certificates, code signing)
Externally Operated	None, and none planned.	None, and none planned.
SubCAs		
Cross-Signing	None, and none planned.	None, and none planned.

Verification Policies and Practices

Policy	CP (Slovak): http://www.disig.sk/_pdf/cp-disig.pdf
Documentation	CP (English): http://www.disig.eu/_pdf/cp-cadisig-eng.pdf
	CPS (Slovak): http://www.disig.sk/_pdf/cps_ra_cadisig.pdf
	CPS (English): http://www.disig.eu/_pdf/cps_ra_cadisig_eng.pdf
Audits	Audit Type: ETSI 102042
	Auditor: Ing. Juraj Zelenay (juraj.zelenay@mpicons.sk) , Ing. Rastislav Machel (rastislav.machel@machel-cs.eu)
	Auditor Qualifications: http://www.isaca.sk/priprava-na-certifikaty/zoznam-drzitelov-certifikatov/
	Audit Report and Management's Assertions: http://www.disig.sk/_pdf/Audit_Statement_2011_CA_Disig.pdf (2011.11.28)
	Email exchanged with Mr. Zelenay to confirm authenticity of audit statement.
Baseline	What is your status in regards to complying with the CAB Forum Baseline Requirements?
Requirements (SSL)	(https://www.cabforum.org/Baseline_Requirements_V1.pdf)
Organization	CP section 3.1.7: Authentication of organization identity
Verification	CP section 3.1.8: Authentication of individual identity
Procedures	CPS section 3.1.7: Authentication of legal identity (organization)
	CPS section 3.1.8: Authentication of individual identity
	CPS section 3.1.9: Authentication of the component identity

SSL Verification Procedures

CP section 3.1.9: Authentication of the component identity

CMA (Certificate Management Authority) has to guarantee that the certificate issued for hardware or software component (code signing) that is able to use the certificate, that the component identity and the public key are bonded together. For this reason the component has to be assigned to a specific person or to a person that is authorized to deal on behalf of a company that is administrating the component. (see section 5.2).

Person is obliged to provide following information to CMA, as described in sections 3.1.10 and 5.2:

- identification of component (name for software component),
- public key of the component (part of certificate request),
- authorization of component and its characteristics (URL and application description for software component),
- contact information, that CMA may, if necessary, to communicate with this person,

CMA will be verify the accuracy of any authorization (values of distinguishing name) to be listed in the certificate and verify the data submitted. Methods to implement this authentication and control data include:

- verify the identity of the person in accordance with the requirements of section 3.1.8,
- verify the identity of the organization, which includes the component, in accordance with the requirements of section 3.1.7.
- verify the competency of using data to be introduced in individual items of the certificate, with an emphasis on CommonName. (Note: The typical value of this item will be fully registered domain name.)

In the case of using the domain name is the condition that the second level domain is owned by an entity which is an applicant for a certificate for the server. Subject has to demonstrate to RA operator that it is the holder of the domain for which calls for issuance of the certificate.

The existence of a domain and its owner has been verified through WHOIS services provided by the web top level domain sponsoring organization(e.g. for domain ".sk" is the sponsoring organization SK-NIC - www.sk-nic.sk; for domain ".eu" is the sponsoring organization EURid vzw/asbl established in Belgium for the domain ".com" is sponsoring organization VeriSign Global Registry Services based in the U.S.).

Full domain name will be verified by sending an e-mail which will contain secret information to some unforeseeable e-mail accounts for the domain listed in the record obtained from the WHOIS service respectively on the e-mail from that domain for these possible accounts: admin, administrator, webmaster, hostmaster or postmaster.

An applicant for a certificate for the domain shall send back verification information as proof of ownership of the domain within specified period of time.

If from the data obtained from the above sources is not possible to reliably determine that the applicant is the owner of the domain or person acting on behalf of the owner of the domain, CA Disig refuses to issue a certificate to that request. Registration Authority verifies a written confirmation from independent sources on the Internet such as www.sk-nic.sk for SK domain respectively www.eurid.eu for EU domain, etc.

In the case of registered IP addresses RA will not investigate whether the body - the applicant for a certificate for the server uses the registered IP address legitimately e.g. whether the registered IP address is the address segment, which is registered in the RIPE organization for the entity - the applicant for a certificate for the server. In this case, is automatically assumed that that subject - the applicant for a certificate for the server use in the application for the certificate registered IP address and applicant gave to CA Disig a solemn declaration that the IP address used lawfully and that he is aware of all the consequences and responsibility for any unauthorized use of the IP address.

The CA Disig implements a process that prevents an OU attribute from including a name, DBA, tradename, trademark, address, location, or other text that refers to a specific natural person or Legal Entity unless the CA Disig has verified this information.

-	
	CPS section 3.1.9: Authentication of the component identity The existence of a domain and its owner has been verified through WHOIS services provided by the web top level domain sponsoring organization (e.g. for domain ".sk" is the sponsoring organization SK-NIC - www.sk-nic.sk; for domain ".eu" is the sponsoring organization EURid vzw/asbl established in Belgium for the domain ".com" is sponsoring organization VeriSign Global Registry Services based in the U.S.). Full domain name will be verified by sending an e-mail which will contain secret information to some unforeseeable e-mail accounts for the domain listed in the record obtained from the WHOIS service respectively on the e-mail from that domain for these possible accounts: admin, administrator, webmaster, hostmaster or postmaster.
	CPS section 4.1.2.2: RA procedure before issuing a SSL certificate
Email Address Verification Procedures	CP section 4.1.2: 9. In connection with the verification of an e-mail address in the request for certificate which is used to sign electronic messages (extension "Secure Email (1.3.6.1.5.5.7.3.4)") perform RA worker verification checks of e-mail addresses in the certificate request, via the responds to the e-mail, from which request was send. Verification is carried out so that to the e-mail address is sending a mail message containing secret unpredictable information (authentication information). An applicant for a certificate shall send back to the CA Disig verification information as evidence of control of the e-mail addresses. In case that the verification of e-mail address runs unsuccessfully, CA Disig refuses to issue the certificate. If the certificate request for issuing subsequent certificate is sent via e-mail and that e-mail is signed with the valid electronic signature and certificate was issued by CA Disig and e-mail in the request is identical with the sender e-mail, verifying od e-mail address is not required.
	CPS section 4.1.1.3: 2. In the case when certificate request sent in advance contains the same e- mail address as from which it was sent, the RA staff shall verify validity of this e-mail address Verification is carried out so that to the e-mail address is sending a mail message containing secret unpredictable information (authentication information). An applicant for a certificate shall send back to the CA Disig verification information as evidence of control of the e-mail addresses. The answer shall be send within a specified period of time sufficient for sending email. In case that the verification of e-mail address runs unsuccessfully, CA Disig refuses to issue the certificate. Detailed procedure is described in the RA working manuals and is also subject to the initial training of RA staff.
Code Signing	CP section 3.1.9: Authentication of the component identity
Subscriber	CPS section 3.1.9: Authentication of the component identity
Verification Procedures	Hardware or software component that will use certificates will be subject to certification and CA Disig SSL certificate respectively code-signing certificate (not a personal certificate) can be created.
Trocedures	For this reason the component has to be assigned to a specific person or to a person that is authorized to deal on behalf of a company that is administrating the component. (see section 3.1.8 and 5.2).
Multi-factor Authentication	Audit statement: verified multi-factor auth in place for all accounts capable of directly causing cert issuance. CP and CPS section 5: Physical, procedural, and personnel security controls CP and CPS section 6: Technical Security Controls
Network Security	CP and CPS section 6.4: CA Disig computer equipment is used exclusively for the purposes of conducting certification activities. Information security of CA Disig system is regularly control for compliance with the requirement of ISO 17799 and ISO 13335.

Response to Mozilla's CA Recommended Practices (https://wiki.mozilla.org/CA:Recommended_Practices)

Publicly Available CP and CPS	Yes. See above.
<u>CA Hierarchy</u>	Yes. See above.
<u>Audit Criteria</u>	See above.
Document Handling of IDNs in CP/CPS	<mark>?</mark>
Revocation of Compromised Certificates	Yes. CPS section 4.4.1, Circumstances of revocation
Verifying Domain Name Ownership	Yes. See above.
<u>Verifying Email Address Control</u>	Yes. See above.
Verifying Identity of Code Signing Certificate	Yes. See above.
<u>Subscriber</u>	
DNS names go in SAN	<mark>?</mark>
Domain owned by a Natural Person	?
<u>OCSP</u>	Yes. Tested.

Response to Mozilla's list of Potentially Problematic Practices (https://wiki.mozilla.org/CA:Problematic_Practices)

-	being Fractices (https://wikimozma.org/graffroblematic_fractices)
<u>Long-lived DV certificates</u>	SSL certs are OV.
	CP section 3.2: All CA Disig certificates are issued with the validity period maximum of 36 month e.g. 3
	years.
Wildcard DV SSL certificates	<mark>?</mark>
Email Address Prefixes for DV Certs	If DV SSL certs, then list the acceptable email addresses that are used for verification.
Delegation of Domain / Email validation to	<mark>?</mark>
third parties	
<u>Issuing end entity certificates directly from</u>	No. See above.
<u>roots</u>	
Allowing external entities to operate	No. See above.
subordinate CAs	
Distributing generated private keys in	No. CPS section 6.1.1: CA Disig essentially does not make a key pairs generation for the foreign entity
PKCS#12 files	
Certificates referencing hostnames or	Yes. CP section 3.1.9: In the case of registered IP addresses RA will not investigate whether the body -
<u>private IP addresses</u>	the applicant for a certificate for the server uses the registered IP address legitimately e.g. whether
	the registered IP address is the address segment, which is registered in the RIPE organization for the
	entity - the applicant for a certificate for the server. In this case, is automatically assumed that that
	subject - the applicant for a certificate for the server use in the application for the certificate
	registered IP address and applicant gave to CA Disig a solemn declaration that the IP address used
	lawfully and that he is aware of all the consequences and responsibility for any unauthorized use of
	the IP address.
<u>Issuing SSL Certificates for Internal Domains</u>	Yes. See above.
OCSP Responses signed by a certificate	No. Tested.
under a different root	

CRL with critical CIDP Extension	No. Tested.
Generic names for CAs	CN includes CA name.