

**Bugzilla ID:** 999378

**Bugzilla Summary:** Add CERTUM's SHA2 root certificate

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](http://wiki.mozilla.org/CA:Information_checklist).
  - a. Review the Recommended Practices at [https://wiki.mozilla.org/CA:Recommended Practices](https://wiki.mozilla.org/CA:Recommended_Practices)
  - b. Review the Potentially Problematic Practices at [https://wiki.mozilla.org/CA:Problematic Practices](https://wiki.mozilla.org/CA:Problematic_Practices)

#### General information about the CA's associated organization

CA Company Name	Unizeto Certum
Website URL	<a href="http://www.certum.pl/">http://www.certum.pl/</a>
Organizational type	Public corporation
Primark Market / Customer Base	CERTUM - Broader Certification Center is an organizational unit of Unizeto Technologies SA, providing certification services related to electronic signatures. It is the oldest public certification authority in Poland and the commercial certification authority, operating on a global scale - serving customers in over 50 countries worldwide.
Inclusion in other major browsers	Yes. <a href="http://social.technet.microsoft.com/wiki/contents/articles/14219.windows-and-windows-phone-8-ssl-root-certificate-program-april-2012-u-z.aspx">http://social.technet.microsoft.com/wiki/contents/articles/14219.windows-and-windows-phone-8-ssl-root-certificate-program-april-2012-u-z.aspx</a>
CA Primary Point of Contact (POC)	POC direct email: Michał Proszkiewicz - <a href="mailto:mproszkiewicz@certum.pl">mproszkiewicz@certum.pl</a> CA Email Alias: <a href="mailto:info@certum.pl">info@certum.pl</a> CA Phone Number: +48 91 4801 201 Title / Department: CERTUM PKI Services

#### Technical information about each root certificate

Certificate Name	Certum Trusted Network CA 2
Certificate Issuer Field	CN = Certum Trusted Network CA 2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL
Certificate Summary	This is the next generation of the "Certum Trusted Network CA" root cert that was included via bug #532377.
<b>Mozilla Applied Constraints</b>	<b>Certificates will be issued to the general public to the customers all of the world. We don't consider any restriction at all.</b>
Root Cert URL	<a href="https://bugzilla.mozilla.org/attachment.cgi?id=8410206">https://bugzilla.mozilla.org/attachment.cgi?id=8410206</a>
SHA1 Fingerprint	3E:5D:35:8F:28:3A:0F:64:7C:1C:92:7F:FB:AA:D4:85:2D:99:72:56
Valid From	2011-10-06
Valid To	2046-10-06
Certificate Version	3
Certificate Signature Algorithm	SHA-512
Signing key parameters	4096 Bits

Test Website URL (SSL)	<a href="https://valid-certum-ctncav2.certificates.certum.pl/">https://valid-certum-ctncav2.certificates.certum.pl/</a> <a href="https://revoked-certum-ctncav2.certificates.certum.pl/">https://revoked-certum-ctncav2.certificates.certum.pl/</a> <a href="https://expired-certum-ctncav2.certificates.certum.pl/">https://expired-certum-ctncav2.certificates.certum.pl/</a>
CRL URL	<a href="http://crl.certum.pl/evca2.crl">http://crl.certum.pl/evca2.crl</a> <a href="http://crl.certum.pl/ctnca2.crl">http://crl.certum.pl/ctnca2.crl</a>
OCSP URL	<a href="http://evca2.ocsp.certum.pl">http://evca2.ocsp.certum.pl</a> <a href="http://subca.ocsp-certum.com">http://subca.ocsp-certum.com</a> OCSP maximum expiration time? OCSP response is valid for 7 days. When answer is "unknown" there is no nextUpdate field in the response (RFC 6960 4.2.2.1. "If nextUpdate is not set, the responder is indicating that newer revocation information is available all the time.")
Requested Trust Bits	Websites (SSL/TLS) Email (S/MIME) Code Signing
SSL Validation Type	DV, OV, and EV
EV Policy OID(s)	1.2.616.1.113527.2.5.1.1 Please perform the EV test as described here <a href="https://wiki.mozilla.org/PSM:EV_Testing_Easy_Version">https://wiki.mozilla.org/PSM:EV_Testing_Easy_Version</a> And attach screenshot of successful EV treatment to the bug.
Non-sequential serial numbers and entropy in cert	CERTUM uses 16 bytes random serial numbers.

### CA Hierarchy information for each root certificate

CA Hierarchy	<p>Currently there are 3 intermediates under this root:</p> <ul style="list-style-type: none"> <li>- class 1 - will be used only for test certificates (for now won't be available for customers, only for internal usage) - <a href="https://repository.certum.pl/c12.cer">https://repository.certum.pl/c12.cer</a></li> <li>- code signing - will be used to issue code signing certificates including Microsofts kernel mode certificates - <a href="https://repository.certum.pl/csca2.cer">https://repository.certum.pl/csca2.cer</a></li> <li>- extended validation - will be used for EV SSL certificates - <a href="https://repository.certum.pl/evca2.cer">https://repository.certum.pl/evca2.cer</a></li> </ul> <p>CPS section 1.3.1.1: Certum Trusted Network CA renders certification services to:</p> <ul style="list-style-type: none"> <li>☑ itself (issues and renews self-certificates),</li> <li>☑ Certum Extended Validation CA, Certum Code Signing CA, <b>Certum Class 1 CA authorities and other certification authorities</b> which will be registered in certification domain ctnDomena,</li> <li>☑ entities delivering services of on-line certificate status verification (OCSP) and other entities rendering services of non-repudiation (e.g. time-stamping service).</li> </ul> <p>CPS section 1.3.1.2: Only two authorities can issue certificates to other certification authorities: Certum Level I CA (test certification authorities) and Certum Global Services CA (commercial certification authorities).</p>
Externally Operated SubCAs	All intermediates are controlled by CERTUM.
Cross-Signing	For now there are no cross-certificates with this certificate. In the future we plan to cross certify this root with 2 older ones.

Technical Constraints on Third-party Issuers	We don't have any third parties that have direct access to certificate issuance.
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### Verification Policies and Practices

Policy Documentation	<p>Document Repository (English): <a href="http://www.certum.pl/repository">http://www.certum.pl/repository</a></p> <p>CP:  <a href="http://certum.pl/servlet/pl.id.sys.servlets.FileDownloadServlet?filename=/upload_module/downloads/certum/dokumenty/polityka_certyfikacji/Certum_CP_v3_3.pdf">http://certum.pl/servlet/pl.id.sys.servlets.FileDownloadServlet?filename=/upload_module/downloads/certum/dokumenty/polityka_certyfikacji/Certum_CP_v3_3.pdf</a></p> <p>CPS:  <a href="http://certum.pl/servlet/pl.id.sys.servlets.FileDownloadServlet?filename=/upload_module/downloads/certum/dokumenty/kodeks_postepowania_certyfikacyjnego/Certum_CPS_v3_4.pdf">http://certum.pl/servlet/pl.id.sys.servlets.FileDownloadServlet?filename=/upload_module/downloads/certum/dokumenty/kodeks_postepowania_certyfikacyjnego/Certum_CPS_v3_4.pdf</a></p> <p><b>EV CPS: Get error "No permission to view"</b>  <a href="http://www.certum.eu/upload_module/wysiwyg/certum/cert_doc/cps/Certum_CPS_v3_6_en.pdf">http://www.certum.eu/upload_module/wysiwyg/certum/cert_doc/cps/Certum_CPS_v3_6_en.pdf</a></p> <p>If CPS is updated older versions are no longer available hence "No permission to view" error</p> <p>CPS an CP are available on <a href="http://www.certum.eu/certum/313016.xml">http://www.certum.eu/certum/313016.xml</a>  You can always access it by entering <a href="http://www.certum.eu">www.certum.eu</a> and choosing "repository" at the bottom of the page.</p> <p>Keep in mind that there are also documents for our qualified CA at the top of the documents list.</p>
Audits	<p>Auditor: Ernst &amp; Young, <a href="http://www.ey.com/pl">http://www.ey.com/pl</a></p> <p>Audit Type: Baseline Requirements  Audit Report: <a href="https://cert.webtrust.org/ViewSeal?id=1699">https://cert.webtrust.org/ViewSeal?id=1699</a> (2014.07.09)</p> <p>Audit Type: WebTrust CA  Audit Report: <a href="https://cert.webtrust.org/ViewSeal?id=1697">https://cert.webtrust.org/ViewSeal?id=1697</a> (2014.07.09)</p> <p>Audit Type: WebTrust EV  Audit Report: <a href="https://cert.webtrust.org/ViewSeal?id=1698">https://cert.webtrust.org/ViewSeal?id=1698</a> (2014.07.09)</p>
Baseline Requirements (SSL)	CPS v3.6 page 11 second paragraph
SSL Verification Procedures	Verification procedures for "Certum Class 1 CA" are the same as for "Certum Level I CA". Domain ownership is verified, not identity. For "Certum Level III CA" SSL certs are both DV and OV.

	<p>CPS section 3.2.2: A registration authority is committed to verify the correctness and truthfulness of all data provided in an application. In the case of EV SSL certificates additional procedure set out in Appendix 3 shall be applied.</p> <p>CPS section 3.2.2: In the case of certificates issued for devices, authentication may be accomplished by verifying access to the domain placed in the certificate request. CERTUM may verify the subscriber's right to use the domain name and email address by using one of the following methods:  <input checked="" type="checkbox"/> domain verification – when a verification element indicated by CERTUM is placed on destination server  <input checked="" type="checkbox"/> email address verification – when the Subscriber is required to be able to answer an email sent by CERTUM to his/her/its address.</p> <p>CPS section 3.2.2: registration authority operator may – in doubtful cases – verify the registration of the domain in publicly available WHOIS services.</p> <p>CPS section 4.2.2.3: Certificate issuance denial can occur: ... the subscriber cannot prove his/her rights to proposed DN,</p> <p>EV CP  14. and 15. Verification of Applicant's Legal Existence and Identity  16. Verification of Applicant's Physical Existence  17. Verification of Applicant's Operational Existence  18. Verification of Applicant's Domain Name</p>
<p>Organization Verification Procedures</p>	<p>CPS Table 1.5:  Certum Level I CA and Certum Class 1 CA – DV only. Identity of subscriber not verified. Only domain name ownership via email exchange. Can only be used for testing with a private SSL server.  Certum Level II CA – Signs certs used for S/MIME, and DV SSL not for code signing.  Certum Level III CA – Signs certs for use with enterprise SSL servers. Also signs certs for code signing and S/MIME.  Certum Level IV CA -- for the certification authorities, non-repudiation authorities and global network-based electronic transaction systems.  Certum Extended Validation CA – Signs EV SSL certs</p> <p>Organizational verification is performed for Levels III, IV, and EV.  Section 3.2 of the CPS describes the procedures for authenticating the identity of the certificate subscriber and verifying the existence and identity of the organization.</p>
<p>Email Address Verification Procedures</p>	<p>CPS section 3.2.2: In the case of email certificates, registration authority verifies an email address. The aim of this action is to receive by the subscriber an authentication data sent to the address which has previous placed in the certification request.</p> <p>CPS section 3.2.2: CERTUM may verify the subscriber's right to use the domain name and email address by using one of the following methods:</p>

	<p>* domain verification – when a verification element indicated by CERTUM is placed on destination server</p> <p>* email address verification – when the Subscriber is required to be able to answer an e-mail sent by CERTUM to his/her/its address.</p> <p>CP of CERTUM's Non-Qualified Certification Services</p> <p>Section 2.1, Level I Certificates: In most cases email address, address data and name and surname of the private entity or the representative of the legal entity are subjected to verification.</p> <p>Section 2.2, Level II Certificates: Operators of Certum Level II CA verify the information provided by the requesters during the certification process. Detailed information on identity verification requirements are described in dedicated document (Identity verification instruction).</p> <p>Section 2.3, Level III Certificates: These certificates are intended mainly for securing electronic correspondence, securing binary objects against forgery and protecting data transmission on the basis of SSL and TLS protocol. Operators of Certum Level III CA verify the information provided by the requesters during the certification process. Detailed information on identity verification requirements are described in dedicated document (Identity verification instruction).</p>
Code Signing Subscriber Verification Procedures	We don't have specific section regarding code signing certificates. All information about Identification and authentication are in chapter 3 of CPS.
Multi-factor Authentication	We confirm that two factor authentication is required for all accounts capable of directly causing certificate issuance.
Network Security	We confirm that we performed all the actions.

**Response to Mozilla's CA Recommended Practices ([https://wiki.mozilla.org/CA:Recommended\\_Practices](https://wiki.mozilla.org/CA:Recommended_Practices))**

<a href="#">Publicly Available CP and CPS</a>	See above
<a href="#">CA Hierarchy</a>	See above
<a href="#">Audit Criteria</a>	See above
<a href="#">Document Handling of IDNs in CP/CPS</a>	We don't have such information in CPS yet (we are working on newer version of CPS that will have such information). We make reasonable checks if provided domain is not similar to popular domains and our verification staff is trained to catch this kind of cases. Additionally it is being check during ongoing self-audits of issued certificates.
<a href="#">Revocation of Compromised Certificates</a>	CPS v3.6 chapter 4.9.1
<a href="#">Verifying Domain Name Ownership</a>	See above
<a href="#">Verifying Email Address Control</a>	See above
<a href="#">Verifying Identity of Code Signing Certificate Subscriber</a>	See above
<a href="#">DNS names go in SAN</a>	All domains are placed in SAN.
<a href="#">Domain owned by a Natural Person</a>	For Natural Person we issue only DV certificates.
<a href="#">OCSP</a>	See above

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

<a href="#">Long-lived DV certificates</a>	CERTUM issue and issued certificates valid for maximum 36 months.
<a href="#">Wildcard DV SSL certificates</a>	CERTUM issue DV Wildcard certificates. We do make additional verification for popular domains.
<a href="#">Email Address Prefixes for DV Certs</a>	CERTUM uses only those email addresses when performing email verification: admin@domain, administrator@domain, webmaster@domain, hostmaster@domain, postmaster@domain
<a href="#">Delegation of Domain / Email validation to third parties</a>	CERTUM doesn't delegate such duties to third parties.
<a href="#">Issuing end entity certificates directly from roots</a>	No. See above.
<a href="#">Allowing external entities to operate subordinate CAs</a>	No. All intermediates are operated by CERTUM.
<a href="#">Distributing generated private keys in PKCS#12 files</a>	No.
<a href="#">Certificates referencing hostnames or private IP addresses</a>	CERTUM don't issue certificates for internal names and reserved IP addresses.
<a href="#">Issuing SSL Certificates for Internal Domains</a>	CERTUM don't issue certificates for internal domains.
<a href="#">OCSP Responses signed by a certificate under a different root</a>	No. See above.
<a href="#">CRL with critical CIDP Extension</a>	
<a href="#">Generic names for CAs</a>	No. See above.
<a href="#">Lack of Communication With End Users</a>	CERTUM always respond to any communication that we are aware of.
<a href="#">Backdating the notBefore date</a>	Our proprietary CA software doesn't allow to backdate end-user certificates.