Bugzilla ID: 937589
Bugzilla Summary: Add Certinomis G3 (SHA256) 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	Certinomis SA
Website URL	http://www.certinomis.fr
Organizational type	Commercial CA, operated by a private company held by a public company (La Poste).
Primark Market / Customer Base	Certinomis is a commercial CA serving a global client base, active in both the markets for SSL and End User Certificates with a focus on digital signatures. The company is a Qualified Certification Services Provider in France, and an issuer of eID for both enterprises and individuals.
Impact to Mozilla Users	Certinomis is a commercial CA that delivers certificates to the general public in France, and is the Certificate Service Provider of "La Poste" the French Postal Service.
Inclusion in other major browsers	Yes, the Certinomis Root Certificates are widely distributed.
CA Primary Point of Contact (POC)	Direct E-mail : franck.leroy@certinomis.fr CA Email Alias: politiquecertification@certinomis.com CA Phone Number: +33 (0)1 56 29 72 48 Title / Department: Franck Leroy – Chief Technical Officer

Technical information about each root certificate

Certificate Name	Certinomis - Root CA G3
Certificate Issuer Field	CN = Certinomis - Root CA OU = 0002 433998903 O = Certinomis C = FR
Certificate Summary	This SHA256 root will eventually replace the "Certinomis - Autorité Racine" G2 root certificate that was included in NSS via Bugzilla Bug #545614.
Root Cert URL	http://www.certinomis.fr/publi/cer/AC_Racine_G3.cer
SHA1 Fingerprint	9D:70:BB:01:A5:A4:A0:18:11:2E:F7:1C:01:B9:32:C5:34:E7:88:A8
Valid From	2013-10-21
Valid To	2033-10-21
Certificate Version	3
Certificate Signature Algorithm	SHA-256
Signing key parameters	4096

Test Website URL (SSL) Example Certificate (non-SSL)	https://w3-test.certinomis.fr/ I imported the root cert, but got the following error when I browsed to the test website: "w3-test.certinomis.fr uses an invalid security certificate. The certificate is not trusted because no issuer chain was provided. (Error code: sec_error_unknown_issuer)" Intermediate CA certificates are expected to be distributed to the certificate subjects (the holders of the private keys) together with the subjects' own certificates. Those subject parties (e.g. SSL servers) are then expected to send out the intermediate CA certificates together with their own certificates whenever they are asked to send out their certificates. That is required by SSL/TLS. Certificate authorities MUST advise their subscribers that all intermediate certificates should be installed in the servers containing the dependent subscriber certificates.
CRL URL	http://crl.igc-g3.certinomis.com/INSTANCE_SHA2/crl/AC_AGENTS-crl-1.crl http://crl.igc-g3.certinomis.com/INSTANCE_SHA2/crl/AC_EASY-crl-1.crl http://crl.igc-g3.certinomis.com/INSTANCE_SHA2/crl/AC_PRIME-crl-1.crl http://crl.igc-g3.certinomis.com/INSTANCE_SHA2/crl/AC_STANDARD-crl-1.crl NextUpdate: 7 days max, but a fresh CRL every 24h and after each revocation
OCSP URL	http://igc-g3.certinomis.com/INSTANCE_SHA2/ocsp/OCSP_AC_AGENTS http://igc-g3.certinomis.com/INSTANCE_SHA2/ocsp/OCSP_AC_EASY http://igc-g3.certinomis.com/INSTANCE_SHA2/ocsp/OCSP_AC_PRIME http://igc-g3.certinomis.com/INSTANCE_SHA2/ocsp/OCSP_AC_STANDARD
Requested Trust Bits	Websites (SSL/TLS)
SSL Validation Type	OV
EV Policy OID(s)	Not Applicable. Not requesting EV treatment.
Non-sequential serial numbers and entropy in cert	Please confirm that non-sequential serial numbers are used. http://www.mozilla.org/projects/security/certs/policy/MaintenancePolicy.html "9. We expect CAs to maintain current best practices to prevent algorithm attacks against certificates. As such, the following steps will be taken: … - all new end-entity certificates must contain at least 20 bits of unpredictable random data (preferably in the serial number)." The purpose of adding entropy is to help defeat a prefix-chosen collision for non collision resistant hash functions. Using SHA256 without entropy isn't a problem in a near future. However, the Mozilla Policy doesn't say that; the entropy is mandatory for all new certificates, the used hash function isn't taken into consideration. This isn't a blocker for an inclusion request if SHA1 is forbidden in the CA hierarchy. However, the CP/CPS must clearly state that SHA1 isn't an acceptable hash algorithm for certificates in this hierarchy.

CA Hierarchy information for each root certificate

CA Hierarchy	The root has signed 4 subordinates CA for issuing end-entity certificates http://www.certinomis.fr/publi/cer/AC_AGENTS.cer http://www.certinomis.fr/publi/cer/AC_EASY.cer http://www.certinomis.fr/publi/cer/AC_PRIME.cer http://www.certinomis.fr/publi/cer/AC_STANDARD.cer

Externally Operated SubCAs	None Does the G2 root have external subCAs that will be transitioned to this new root? Does the CP/CPS allow for external subCAs?
Cross-Signing	At present, we do not expect to have any cross-certificates for the Certinomis G3 Root Certificate. However, if we need to start using the G3 Root before it has achieved a sufficient level of distribution amongst the installed base of various software products, we may elect to issue cross-certificates to the new root from the existing Certinomis G2 root.
Technical Constraints on Third-party Issuers	Describe the technical constraints that are in place for all third-parties (CAs and RAs) who can directly cause the issuance of certificates. See #4 of https://wiki.mozilla.org/CA:Information_checklist#CA_Hierarchy_information_for_each_root_certificate

Verification Policies and Practices

Policy Documentation	Certificate Policies (French) CP Root: http://www.certinomis.com/publi/rgs/DT-FL-1310-001-PC-RACINE-1.0.pdf CP Organization: http://www.certinomis.com/publi/rgs/DT-FL-1310-010-PC-ORGA-1.0.pdf CP Particulier: http://www.certinomis.com/publi/rgs/DT-FL-1310-100-PC-PART-1.0.pdf **CP Server:** http://www.certinomis.com/publi/rgs/DT-FL-1310-020-PC-SERV-1.0.pdf CP Agents: http://www.certinomis.com/publi/rgs/DT-FL-1310-030-PC-AGENTS-1.0.pdf CP Aurtorite: http://www.certinomis.com/publi/rgs/DT-FL-1310-040-PC-AA-1.0.pdf Additional CP document: http://www.certinomis.com/publi/rgs/DT-FL-1310-002-PC-PROFILS-1.0.pdf **CPS**: http://www.certinomis.com/publi/rgs/PR_AE_OpC_110075.pdf RA Procedures Document – PROC (French): http://www.certinomis.com/publi/rgs/FC_AE_OPC_JUSTIFS_110207.pdf
Audits	LSTI performs the audits according to the ETSI TS101 456 criteria. When the websites (SSL/TLS) trust bit is enabled the audit criteria must be equivalent to - Clause 7, "Requirements on CA practice", in ETSI TS 102 042 V2.3.1 or later version, Policy requirements for certification authorities issuing public key certificates (as applicable to the "EVCP" and "EVCP+" certificate policies, DVCP and OVCP certificate policies for publicly trusted certificates - baseline requirements, and any of the "NCP", "NCP+", or "LCP" certificate policies); or - WebTrust "Principles and Criteria for Certification Authorities 2.0" or later and "SSL Baseline Requirements Audit Criteria V1.1" (as applicable to SSL certificate issuance) in WebTrust Program for Certification Authorities; The current ETSI certificate is valid until 2015.04.29, and is posted on the LSTI website at http://www.lsti-certification.fr/ ETSI list : http://www.lsti-certification.fr/images/liste_entreprise/ETSI.pdf
Baseline Requirements (SSL)	Please tell me where in the CP Server and the CPS I may find the "Commitment to Comply" with the CA/Browser Forum Baseline Requirements, as per BR #8.3. https://www.cabforum.org/Baseline_Requirements_V1_1_5.pdf

SSL Verification Procedures	Please translate section 2.1 of the CPS and section 3.2 of the CP Server into English. Domain verification begins with using WHOIS to check the link between FQDN and Organisation Name. Then the domain contact is notified (a phone call to the organization main phone number and asking to talk to the domain contact) for checking the domain name recording. The domain contact is asked about the FQDN value in order to avoid mistake on sub-domain value. During the phone call to the domain owner, the RA ask if he agrees the certificate creation. This is good, but I need to be able to find it in the CP/CPS documentation.
Organization Verification Procedures	Certinomis confirms that the organization exists, then Certinomis verifies that the applicant is authorized to represent the organization in question. This is done by requiring national ID cards and an authorization document signed by both the organization representative and the certificate agent. The authorization document contains the FQDN of the certificate and names the certificate manager (the person who will receive the certificate). The certificate manager must also provide a copy of the national ID card and another signed document. Certinomis confirms that the representative is who he claims to be as follows. When the subscriber creates an account on the Certinomis web site. Certinomis uses the INSEE database to check the name and the activity of the organization: http://avis-situation-sirene.insee.fr/avisitu/jsp/avis.jsp Tthe identity of the certificate subscriber is verified by using the ID card and the extrait K-bis from the Trade Registry. Note that K-bis are printed on a specific paper (with watermark) that cannot be photocopied. Depending on the kind of policy, the identity of the certificate subscriber is verified by a face-to-face meeting as described in section 3.2.3.3 of the ORAGNISATION CP.
Email Address Verification Procedures	Not applicable; not requesting the email trust bit.
Code Signing Subscriber Verification Procedures	Not applicable; not requesting the code signing trust bit.
Multi-factor Authentication	Multi-factor authentication (smartcard) is required for all accounts capable of directly causing certificate issuance. Please tell me where in the CP/CPS documentation I may find this.
Network Security	Certinomis confirms the following: • Maintain network security controls that at minimum meet the CA/B Forum Network and Certificate System Security Requirements. • Check for mis-issuance of certificates, especially for high-profile domains. • Review network infrastructure, monitoring, passwords, etc. for signs of intrusion or weakness. • Ensure Intrusion Detection System and other monitoring software is up-to-date. • Able to shut down certificate issuance quickly if we are alerted of intrusion.

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

Publicly Available CP and CPS	Yes
CA Hierarchy	Yes
Audit Criteria	See above.
Document Handling of IDNs in CP/CPS	IDN certificates are not issued.

Revocation of Compromised Certificates	Yes, see Section 4.9.1 of CP documents.
Verifying Domain Name Ownership	Yes, see above.
Verifying Email Address Control	N/A
Verifying Identity of Code Signing Certificate Subscriber	N/A
DNS names go in SAN	Yes
Domain owned by a Natural Person	No
OCSP	Yes

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

Long-lived DV certificates	SSL certificates are OV.
Wildcard DV SSL certificates	SSL certificates are OV.
Email Address Prefixes for DV Certs	SSL certificates are OV.
Delegation of Domain / Email validation to third parties	Domain validation is performed by Certinomis. Please tell me where I can find this in the CP/CPS documentation.
Issuing end entity certificates directly from roots	NA – Certinomis always issues from an intermediate Issuing CA.
Allowing external entities to operate subordinate CAs	No
Distributing generated private keys in PKCS#12 files	The passwords are generated by a Secure Module (same as for French credit card). That password is 12 char long and used to encrypt the .p12 file for delivery. The p12 file is burned on a mini-cdrom and send to the holder by postal mail. The password is printed on a secure mail and send the day after from another geographic area. Is this relevant to SSL certificates?
Certificates referencing hostnames or private IP addresses	Under this new CA hierarchy Certinomis doesn't issue SSL certificates with Internal Server Names and/or Reserved IP Addresses.
Issuing SSL Certificates for Internal Domains	Yes. Certinomis SSL issuance systems filter against an internal database of approved TLDs that are eligible to be used for domains in certificates, and that list is manually updated. The RA also alerts security officer when certificates are applied for high risk domains.
OCSP Responses signed by a certificate under a different root	OCSP signing certificates are issued by the CA served by the OCSP.
CRL with critical CIDP Extension	Certinomis CRL CIDP are not marked critical.
Generic names for CAs	Certinomis uses meaningful CN and OU in its CA certificates.
Lack of Communication With End Users	Certinomis is contactable on policy related issues at politiquecertification@certinomis.com. In addition, our website include contact forms as well as certificate problem reporting and revocation request forms that are routed to the appropriate Support teams for prompt action.