

Mozilla - CA Program

Case Information

Case Number	00000083	Case Record Type	CA Owner/Root Inclusion Request
CA Owner/Certificate Name	Shanghai Electronic Certification Authority Co., Ltd. (SHECA)	Request Status	In Detailed CP/CPS Review

Additional Case Information

Subject	Include SHECA Roots	Case Reason
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Bugzilla Information

Link to Bugzilla Bug	https://bugzilla.mozilla.org/show_bug.cgi?id=1309797
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General information about CA's associated organization

CA Email Alias 1			
CA Email Alias 2			
Company Website	https://www.sheca.com/repository	Verified?	Verified
Organizational Type	Commercial Organization	Verified?	Verified
Organizational Type (Others)		Verified?	Not Applicable
Geographic Focus	China	Verified?	Verified
Primary Market / Customer Base	SHECA issues certificates to business corporations, government agencies, and individuals in China, Hong Kong, Macau and Taiwan.	Verified?	Verified
Impact to Mozilla Users	A large proportion of our customers are using Firefox as a daily browser	Verified?	Verified

Required and Recommended Practices

Recommended Practices	https://wiki.mozilla.org/CA/Required_or_Recommended_Practices	Recommended Practices Statement	I have reviewed Mozilla's list of Recommended Practices, and confirm that we follow those practices, with exceptions and clarifications noted in the text box below.
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CA's Response to Recommended Practices

1. Publicly Available CP and CPS: Yes
2. Audit Criteria: CP/CPS section 8
3. Revocation of Compromised Certificates: CP/CPS section 4.9.1
4. Verifying Domain Name Ownership: CP/CPS section 3.2
5. Verifying Email Address Control: CP/CPS section 3.2
6. DNS names go in SAN: Yes
7. OCSP: CP/CPS section 7.3
8. Network Security Controls: CP/CPS section 6.7

Verified? Verified**Forbidden and Potentially Problematic Practices****Potentially Problematic Practices**

https://wiki.mozilla.org/CA/Forbidden_or_Problematic_Practices

Problematic Practices Statement

I have reviewed Mozilla's list of Potentially Problematic Practices, and confirm that we do not do those practices, with exceptions and clarifications noted in the text box below.

CA's Response to Problematic Practices

1. Long-lived Certificates: CP/CPS sections 6.3.2, 6.3.3
2. Non-Standard Email Address Prefixes for Domain Ownership Validation: CP/CPS section 3.2
3. Issuing End Entity Certificates Directly From Roots: CP/CPS section 1.1.2
4. Distributing Generated Private Keys in PKCS#12 Files: CP/CPS section 3.2.1
5. Certificates Referencing Local Names or Private IP Addresses: CPS sections 3.2.5, 3.2.6
6. Issuing SSL Certificates for .int Domains: CP/CPS section 3.2
7. OCSP Responses Signed by a Certificate Under a Different Root: No
8. Issuance of SHA-1 Certificates: CPS Appendix.2 "Cryptographic Algorithms and Key Strengths"
9. Delegation of Domain / Email Validation to Third Parties: CP/CPS section 1.3.2

Verified? Verified**Root Case Record # 1****Root Case Information****Root Certificate Name**

UCA Global G2 Root

Root Case No

R00000123

Request Status

In Detailed CP/CPS Review

Case Number

00000083

Certificate Data

Certificate Issuer Common Name	UCA Global G2 Root
O From Issuer Field	UniTrust
OU From Issuer Field	
Valid From	2016 Mar 11
Valid To	2040 Dec 31
Certificate Serial Number	5ddfb1da5aa3ed5dbe5a6520650390ef
Subject	CN=UCA Global G2 Root, OU=null, O=UniTrust, C=CN
Signature Hash Algorithm	sha256WithRSAEncryption
Public Key Algorithm	RSA 4096 bits
SHA-1 Fingerprint	28:F9:78:16:19:7A:FF:18:25:18:AA:44:FE:C1:A0:CE:5C:B6:4C:8A
SHA-256 Fingerprint	9B:EA:11:C9:76:FE:01:47:64:C1:BE:56:A6:F9:14:B5:A5:60:31:7A:BD:99:88:39:33:82:E5:16:1A:A0:49:3C
Certificate ID	32:B9:15:B5:8C:BF:59:C7:21:C6:8E:35:BC:D2:37:F5:43:02:0B:A7:57:6D:27:2E:52:32:22:1E:EE:A1:21:72
Certificate Version	3

Technical Information about Root Certificate

Certificate Summary	There are two subordinate CAs signed by "UCA Global G2 Root" issuing SSL certificates and code signing certificates. - SHECA Global G3 SSL - SHECA Global G3 Code Signing	Verified?	Verified
Root Certificate Download URL	https://bugzilla.mozilla.org/attachment.cgi?id=8962973	Verified?	Verified
CRL URL(s)	http://ldap2.sheca.com/root/ucaglobalg2.crl http://ldap2.sheca.com/CA10011/RA12050100/CRL23844.crl CP section 4.9.7, CPS section 4.9.8. 24 hours for EE CRL.	Verified?	Verified
OCSP URL(s)	http://ocsp3.sheca.com/ucaglobalg2root/ucaglobalg2root.ocsp	Verified?	Verified

<http://ocsp3.sheca.com/ocsp/sheca/sheca.ocsp>

CPS section 4.9.11

Mozilla Trust Bits	Email; Websites	Verified?	Verified
SSL Validation Type	OV	Verified?	Verified
Mozilla EV Policy OID(s)	Not EV	Verified?	Not Applicable
Root Stores Included In	Microsoft	Verified?	Verified
Mozilla Applied Constraints	None	Verified?	Verified

Test Websites or Example Cert

Test Website - Valid	https://ef-gb.wwwtrust.org	Verified?	Verified
Test Website - Expired	https://ex-gb.wwwtrust.org		
Test Website - Revoked	https://re-gb.wwwtrust.org		
Example Cert			
Test Notes			

Test Results (When Requesting the SSL/TLS Trust Bit)

Revocation Tested	https://certificate.revocationcheck.com/ef-gb.wwwtrust.org OK	Verified?	Verified
CA/Browser Forum Lint Test	https://crt.sh/?caid=36110&opt=cablint,zlint,x509lint&minNotBefore=2016-03-12 OK	Verified?	Verified
Test Website Lint Test	See above	Verified?	Verified
EV Tested	N/A	Verified?	Not Applicable

CA Hierarchy Information

CA Hierarchy	CP/CPS section 1.1.2 This root has two internally-operated subCAs.	Verified?	Verified
Externally Operated SubCAs	None	Verified?	Verified
Cross Signing	None	Verified?	Verified

Technical
Constraint on 3rd
party Issuer

CPS section 1.3.2: SHECA does
not allow external RAs to issue
SSL certs.

Verified?

Verified

Verification Policies and Practices

Policy
Documentation

Documents are in Chinese, and
some are translated into English.

Verified?

Verified

The SHECA repository website cert
chains up to the UCA Extended
Validation Root cert, so must
import that root first:

<https://bugzilla.mozilla.org/attachment.cgi?id=8962974>

Also, I ran into problems accessing
the CP/CPS documents directly
from the links below, but I was able
to access the documents by going
to the repository page and clicking
the links from there.

CA Document
Repository

<https://www.sheca.com/repository>

Verified?

Verified

CP Doc Language

English

CP

<https://assets-cdn.sheca.com/documents/unitrust-certificate-policy-en-v1.2.pdf>

Verified?

Verified

CP Doc Language

English

CPS

<https://assets-cdn.sheca.com/documents/sheca-certificate-practice-statement-en-v3.5.pdf>

Verified?

Verified

Other Relevant
Documents

Verified?

Not Applicable

Auditor (New)

[PwC - PricewaterhouseCoopers International Limited](#)

Verified?

Verified

Auditor Location
(New)

[China](#)

Verified?

Verified

Standard Audit

<https://cert.webtrust.org/SealFile?seal=2262&file=pdf>

Verified?

Verified

Standard Audit
Type

WebTrust

Verified?

Verified

Standard Audit
Statement Date

6/16/2017

Verified?

Verified

BR Audit

<https://cert.webtrust.org/SealFile?seal=2263&file=pdf>

Verified?

Verified

BR Audit Type

WebTrust

Verified?

Verified

BR Audit
Statement Date

6/16/2017

Verified?

Verified

EV SSL Audit	N/A	Verified?	Not Applicable
EV SSL Audit Type		Verified?	Not Applicable
EV SSL Audit Statement Date		Verified?	Not Applicable
BR Commitment to Comply	CPS section 1.1, CP section 1.	Verified?	Verified
BR Self Assessment	https://bugzilla.mozilla.org/attachment.cgi?id=8872017	Verified?	Verified
SSL Verification Procedures	CPS sections 3.2.5, 3.2.6, 3.2.7 CP section 3.2.3	Verified?	Verified
EV SSL Verification Procedures	N/A	Verified?	Not Applicable
Organization Verification Procedures	CPS sections 3.2.2, 3.2.3, 3.2.4, 3.2.11 CP sections 3.2.2, 3.2.3, 3.2.5	Verified?	Verified
Email Address Verification Procedures	CPS section 3.2.8 CP section 3.2.3	Verified?	Verified
Code Signing Subscriber Verification Pro	Mozilla is no longer accepting requests to enable the Code Signing trust bit.	Verified?	Not Applicable
Multi-Factor Authentication	CP/CPS section 5	Verified?	Verified
Network Security	CP/CPS section 6.7	Verified?	Verified

Root Case Record # 2

Root Case Information

Root Certificate Name	UCA Extended Validation Root	Root Case No	R00000135
Request Status	In Detailed CP/CPS Review	Case Number	00000083

Certificate Data

Certificate Issuer Common Name	UCA Extended Validation Root
O From Issuer Field	UniTrust
OU From Issuer Field	
Valid From	2015 Mar 13

Valid To	2038 Dec 31
Certificate Serial Number	4fd22b8ff564c8339e4f345866237060
Subject	CN=UCA Extended Validation Root, OU=null, O=UniTrust, C=CN
Signature Hash Algorithm	sha256WithRSAEncryption
Public Key Algorithm	RSA 4096 bits
SHA-1 Fingerprint	A3:A1:B0:6F:24:61:23:4A:E3:36:A5:C2:37:FC:A6:FF:DD:F0:D7:3A
SHA-256 Fingerprint	D4:3A:F9:B3:54:73:75:5C:96:84:FC:06:D7:D8:CB:70:EE:5C:28:E7:73:FB:29:4E:B4:1E:E7:17:22:92:4D:24
Certificate ID	FD:EE:D5:B2:F5:81:8F:96:D7:9C:0E:6A:FD:BB:B6:90:2B:5E:E6:E3:88:38:62:6A:E6:3D:0D:9E:4F:1F:3C:05
Certificate Version	3

Technical Information about Root Certificate

Certificate Summary	There are two subordinate CAs signed by "UCA Extended Validation Root" issuing SSL certificates and code signing certificates.	Verified?	Verified
Root Certificate Download URL	https://bugzilla.mozilla.org/attachment.cgi?id=8962974	Verified?	Verified
CRL URL(s)	http://ldap2.sheca.com/root/ucaevsub.crl http://ldap2.sheca.com/CA81/RA12050100/CRL28438.crl CP section 4.9.7, CPS section 4.9.8. 24 hours for EE CRL.	Verified?	Verified
OCSP URL(s)	http://ocsp3.sheca.com/evroot/ev.ocsp http://ocsp3.sheca.com/ocsp/sheca/sheca.ocsp CPS section 4.9.11	Verified?	Verified
Mozilla Trust Bits	Websites	Verified?	Verified
SSL Validation Type	EV	Verified?	Verified
Mozilla EV Policy OID(s)	2.23.140.1.1	Verified?	Verified
Root Stores Included In	Microsoft	Verified?	Verified

Mozilla Applied
Constraints

None

Verified?

Verified

Test Websites or Example Cert

Test Website -
Valid

<https://ef-EV.sheca.com>

Verified?

Verified

Test Website -
Expired

<https://ex-EV.sheca.com>

Test Website -
Revoked

<https://re-EV.sheca.com>

Example Cert

Test Notes

Test Results (When Requesting the SSL/TLS Trust Bit)

Revocation Tested

<https://certificate.revocationcheck.com/ef-ev.sheca.com>
OK

Verified?

Verified

CA/Browser
Forum Lint Test

<https://crt.sh/?caid=36111&opt=cablint,zlint,x509lint&minNotBefore=2015-03-14>
OK

Verified?

Verified

Test Website Lint
Test

See above

Verified?

Verified

EV Tested

ev-checker exited successfully:
Success!

Verified?

Verified

CA Hierarchy Information

CA Hierarchy

CP/CPS section 1.1.2
This root has two internally-
operated subCAs.

Verified?

Verified

Externally
Operated SubCAs

None

Verified?

Verified

Cross Signing

None

Verified?

Verified

Technical
Constraint on 3rd
party Issuer

CP/CPS section 1.3.2: SHECA
does not allow external RAs to
issue EV certs.

Verified?

Verified

Verification Policies and Practices

Policy
Documentation

Documents are in Chinese, with
some translated into English

Verified?

Verified

The SHECA website cert chains up

to this UCA Extended Validation Root cert, so must import the root first:

<https://bugzilla.mozilla.org/attachment.cgi?id=8962974>

Also, I ran into problems accessing the CP/CPS documents directly from the links below, but I was able to access the documents by going to the repository page and clicking the links from there.

CA Document Repository	https://www.sheca.com/repository	Verified?	Verified
CP Doc Language	English		
CP	https://assets-cdn.sheca.com/documents/unitrust-ev-certificate-policy-en-v1.3.pdf	Verified?	Verified
CP Doc Language	English		
CPS	https://assets-cdn.sheca.com/documents/unitrust-ev-certificate-practice-statement-en-v1.3.pdf	Verified?	Verified
Other Relevant Documents		Verified?	Not Applicable
Auditor (New)	PwC - PricewaterhouseCoopers International Limited	Verified?	Verified
Auditor Location (New)	China	Verified?	Verified
Standard Audit	https://cert.webtrust.org/SealFile?seal=2262&file=pdf	Verified?	Verified
Standard Audit Type	WebTrust	Verified?	Verified
Standard Audit Statement Date	6/16/2017	Verified?	Verified
BR Audit	https://cert.webtrust.org/SealFile?seal=2263&file=pdf	Verified?	Verified
BR Audit Type	WebTrust	Verified?	Verified
BR Audit Statement Date	6/16/2017	Verified?	Verified
EV SSL Audit	https://cert.webtrust.org/SealFile?seal=2264&file=pdf	Verified?	Verified
EV SSL Audit Type	WebTrust	Verified?	Verified
EV SSL Audit Statement Date	6/16/2017	Verified?	Verified
BR Commitment to Comply	CPS section 1	Verified?	Verified
BR Self Assessment	https://bugzilla.mozilla.org/attachment.cgi?id=8872017	Verified?	Verified

SSL Verification Procedures	CPS sections 3.2.4, 3.2.5	Verified?	Verified
EV SSL Verification Procedures	CP/CPS section 3.2	Verified?	Verified
Organization Verification Procedures	CPS sections 3.2.2, 3.2.9 CP sections 3.2.2, 3.2.5	Verified?	Verified
Email Address Verification Procedures	CPS section 3.2.6	Verified?	Verified
Code Signing Subscriber Verification Pro	Mozilla is no longer accepting requests to enable the Code Signing trust bit.	Verified?	Not Applicable
Multi-Factor Authentication	CP/CPS section 5	Verified?	Verified
Network Security	CP/CPS section 6.7	Verified?	Verified