

Belgique/België (Belgium): Trusted List

Scheme name

BE:Trusted list including information related to the qualified trust service providers which are supervised by the issuing Member State, together with information related to the qualified trust services provided by them, in accordance with the relevant provisions laid down in Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC.

Legal Notice

The applicable legal framework for the present trusted list is Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC.

Scheme territory BE

Scheme status EUappropriate

*determination
approach*

Scheme type <http://uri.etsi.org/TrstSvc/TrustedList/schemerules/EUcommon>
community rules <http://uri.etsi.org/TrstSvc/TrustedList/schemerules/BE>

Issue date 2016-12-14T00:00:00.000Z

Next update 2017-05-09T00:00:00.000Z

*Historical information
period* 65535 days

Sequence number 29

*Scheme information
URIs* <https://tsl.belgium.be/>

Scheme Operator

*Scheme operator
name* FOD Economie, KMO, Middenstand en Energie - Kwaliteit en Veiligheid

*Scheme operator
street address* NG III - Koning Albert II-laan 16

*Scheme operator
postal code* 1000

*Scheme operator
locality* Brussels

*Scheme operator
state* Brussels

*Scheme operator
country* BE

*Scheme operator
contact* <http://economie.fgov.be>
<mailto:be.sign@economie.fgov.be>

Trust Service Providers

Certipost n.v./s.a.

Service provider trade name VATBE-0475396406

Information URI <http://repository.eid.belgium.be>
<http://www.certipost.be/dpsolutions/en/e-certificates-legal-info.html>

Service provider street address Muntcentrum

Service provider postal code 1000

Service provider locality Brussels

Service provider state Brussels

Service provider country BE

CN=Belgium Root CA, C=BE

Type CA/QC

Status withdrawn

Status starting time 2016-09-06T00:00:00.000Z

Service digital identity (X509)

Version 3

Serial number 117029288888937864350596520176844645968

Signature algorithm SHA1withRSA

Issuer CN=Belgium Root CA, C=BE

Valid from Sun Jan 26 23:00:00 UTC 2003

Valid to Sun Jan 26 23:00:00 UTC 2014

Subject CN=Belgium Root CA, C=BE

Public key Sun RSA public key, 2048 bits
modulus:
2532727247174242475310876111302551541350771290487408393990707355
3139389403581555633427000903307438065008396155423372038139338001
1292283973874375661691461475691011321537351475763725785500152445
9884908283374968661826239871065222401938973133495715806769163244
2561241462450868417538609485432931629806056877222374520561111218
9904505418533484099385023144445138975351025575749503679547226381
0313002138087279503333496722494200200493483881237347138441152657
9026650775354589375802255665011941485467556333747329602589496041
6159860774175448506963241118776049541934983183035608916277217984
30948172071644141969017225065301229219951
public exponent: 65537

Subject key identifier 10f00c569b61ea573ab635976d9fddb9148edbe6

Authority key identifier 10f00c569b61ea573ab635976d9fddb9148edbe6

Key usage keyCertSign
cRLSign

Basic constraints CA=true; PathLen=unlimited

SHA1 Thumbprint dfdfac8947bdf75264a9233ac10ee3d12833dacc

SHA256 Thumbprint 7c7ed4240bb253bb35c376e12e00b027f1659df9d8267422a93eed75edc7adfb

Extension (critical: true)

Additional service information

RootCA-QC

Extension (critical: true)

Qualifications

Qualifier: QCQSCDStatusAsInCert

Assert: atLeastOne

Policy OID: 2.16.56.1.1.1.2.1

Policy OID: 2.16.56.1.1.1.7.1

Extension (critical: true)

Additional service information

ForeSignatures

The decoded certificate:

```
[
[
Version: V3
Subject: CN=Belgium Root CA, C=BE
Signature Algorithm: SHA1withRSA, OID = 1.2.840.113549.1.1.5

Key: Sun RSA public key, 2048 bits
modulus:
25327272471742424753108761113025515413507712904874083939907073553139389403581555633427000903307438065008396155423372038139338001129228397387437566169146147569101132153735147
57637257855001524459884908283374968661826239871065222401938973133495715806769163244256124146245086841753860948543293162980605687722237452056111121899045054185334840993850231
44445138975351025575749503679547226381031300213808727950333349672249420020049348388123734713844115265790266507753545893758022556650119414854675563337473296025894960416159860
774175448506963241118776049541934983183035608916277217984309481720716444141969017225065301229219951
public exponent: 65537
Validity: [From: Sun Jan 26 23:00:00 UTC 2003,
To: Sun Jan 26 23:00:00 UTC 2014]
Issuer: CN=Belgium Root CA, C=BE
SerialNumber: [ 580b056c 5324dbb2 5057185f f9e5a650]

Certificate Extensions: 6
[1]: ObjectId: 2.5.29.35 Criticality=false
AuthorityKeyIdentifier [
KeyIdentifier [
0000: 10 F0 0C 56 9B 61 EA 57 3A B6 35 97 6D 9F DD B9 ...V.a.W:.5.m...
0010: 14 8E DB E6 ....
]
]

[2]: ObjectId: 2.5.29.19 Criticality=true
BasicConstraints:[
CA:true
PathLen:2147483647
]

[3]: ObjectId: 2.5.29.32 Criticality=false
CertificatePolicies [
[CertificatePolicyId: [2.16.56.1.1.1]
[PolicyQualifierInfo: [
qualifierID: 1.3.6.1.5.5.7.2.1
qualifier: 0000: 16 20 68 74 74 70 3A 2F 2F 72 65 70 6F 73 69 74 . http://reposit
0010: 6F 72 79 2E 65 69 64 2E 62 65 6C 67 69 75 6D 2E ory.eid.belgium.
0020: 62 65 be
]] ]
]

[4]: ObjectId: 2.5.29.15 Criticality=true
KeyUsage [
Key_CertSign
CrL_Sign
]

[5]: ObjectId: 2.16.840.1.113730.1.1 Criticality=false
NetscapeCertType [
SSL CA
S/MIME CA
Object Signing CA]
]
```

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```
[6]: ObjectId: 2.5.29.14 Criticality=false
SubjectKeyIdentifier [
KeyIdentifier [
0000: 10 F0 0C 56 9B 61 EA 57 3A B6 35 97 6D 9F DD B9 ...V.a.W:.5.m...
0010: 14 8E DB E6 .....
]
]
]
Algorithm: [SHA1withRSA]
Signature:
0000: C8 6D 22 51 8A 61 F8 0F 96 6E D5 20 B2 81 F8 C6 .m"Q.a...n. ....
0010: DC A3 16 00 DA CD 6A E7 6B 2A FA 59 48 A7 4C 49 .....j.k*.YH.LI
0020: 37 D7 73 A1 6A 01 65 5E 32 BD E7 97 D3 D0 2E 3C 7.s.j.e^2.....<
0030: 73 D3 8C 7B 83 EF D6 42 C1 3F A8 A9 5D 0F 37 BA s.....B.?.].7.
0040: 76 D2 40 BD CC 2D 3F D3 44 41 49 9C FD 5B 29 F4 v.@...?.DAI...[]).
0050: 02 23 22 5B 71 1B BF 58 D9 28 4E 2D 45 F4 DA E7 .#[q..X.(N-E...
0060: B5 63 45 44 11 0D 2A 7F 33 7F 36 49 B4 CE 6E A9 .cED.*.3.6I..n.
0070: 02 31 AE 5C FD C8 89 BF 42 7B D7 F1 60 F2 D7 87 .l.\....B....`
0080: F6 57 2E 7A 7E 6A 13 80 1D DC E3 D0 63 1E 3D 71 .w.z.j.....c.=q
0090: 31 B1 60 D4 9E 08 CA AB F0 94 C7 48 75 54 81 F3 l.`.....HuT...
00A0: 1B AD 77 9C E8 B2 8F DB 83 AC 8F 34 68 E8 BF C3 ..w.....4k...
00B0: D9 F5 43 C3 64 55 EB 1A BD 36 86 36 BA 21 8C 97 ..C.dU...6.6.!..
00C0: 1A 21 D4 EA 2D 3B AC BA EC A7 1D AB BE B9 4A 9B .!...;.....J.
00D0: 35 2F 1C 5C 1D 51 A7 1F 54 ED 12 97 FF F2 6E 87 5/\..Q..T.....n.
00E0: 7D 46 C9 74 D6 EF EB 3D 7D E6 59 6E 06 94 04 E4 .F.t...=.Yn....
00F0: A2 55 87 38 28 6A 22 5E E2 BE 74 12 B0 04 43 2A .U.8(j"^..t...C*
```

]

The certificate in PEM format:

```
-----BEGIN CERTIFICATE-----
MIIDLDCCAnygAwIBAgIQWAsFbFMk27JQVxhf+eWmUDANBgkqhkiG9w0BAQUFADAN
M0swCQYDVQQGEwJCRTEYMBYGA1UEAxMPQmVsZ21lLmB5S290IENBMB4XDTEyMDEy
NjIzMDAwMFoXDTEyMDEyNjIzMDAwMFowZELMAKGA1UEBMCQXGDAWBgNVBAMT
D0JlbGdwdW0gUm9vdCBDQTCASiWdQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEB
AMi.hcekCRKJ5eHFvna6pqqKsot03HIOswkVp19eLSz8hMFJhCWK3HEcVAQGa+X0S
J4fpn0VxTiIIs0RIYqjBeoiG52bv/9nTrMQHn035Y5EWTXaJqAFPrSjmcPpLHXZB
MFjqvNlL2Jq0i0tJRLlf0lMVdssUXRLJsw9q09P9vMI7EU/CT9YvzvZU7wCMgTVy
v/cY6pZ1f5sofxVsY9LKyn0FmhtB20yvmi4BUCuVJhWPmbxM0jvxKuTXgfeMo8S
dKpbNCNuwOpszv42kqgJF+qhLc9s44Qd3ocuMws8d0IhUDiVLlZg5cYx+dtA+mqh
pIqTm6chBocdJ9PEocLmsG8CAwEAa0BuzCBuDA0BgNVHQ8BAf8EBAMCAQYwDwYD
VR0TAQH/BAUwAwEB/zBCBgNVHSAE0zASMDcGBW4AAQEBMC4wLAYIKwYBBQUHAgEw
IGh0dHA6Ly9yZXBvc2l0b3J3JmVpZC51ZWxnaXVtLmJlMB0GA1UdDgQWBQ08Axw
m2HqVzq2Nzdt925FI7b5jARBglghkgBhvhCAQEEBAMCAAcwHwYDVR0jBBgwFoAU
EPAMVpth6l.c6tjWxbZ/duRS02+YwDQYJKoZIhvcNAQEFBQADggEBAMhtILGKYfgP
lm7VILKB+MbcxYA2s1q52sq+llIp0xJN9dzoWbZV4yveeX09AuPHPTjHuD79ZC
wT+oqV0PN7p20kC9zC0/00RBSZz9Wyn0A1M1w3EbV1jZKE4tRfTa57VjRU0RD5p/
M3825bT0bqkCMA5c/ciJv0J71/Fg8teH9Lcuen5qE4Ad30PQYx49cTGxYNSeCMqr
8JTHSHVUgFmbrXec6lKP240sjzRr6L/D2FVdW2RV6x9NoY2u1GMLxoh10ot06y6
7Kcdq765Sps1LxxCHVGNHITtEpf/8m6HfubJdNbv6z1951luBpQE5KJVhzgoaiJe
4r50ErAE0yo=
-----END CERTIFICATE-----
```

CN=Belgium Root CA2, C=BE

Type	CA/QC
Status	granted
Status starting time	2016-07-01T00:00:00.000Z

Service digital identity (X509)

Version	3
Serial number	3098404661496965511
Signature algorithm	SHA1withRSA
Issuer	CN=Belgium Root CA2, C=BE
Valid from	Thu Oct 04 10:00:00 UTC 2007
Valid to	Wed Dec 15 08:00:00 UTC 2021
Subject	CN=Belgium Root CA2, C=BE

Public key Sun RSA public key, 2048 bits
modulus:
2505202035897286929802442931365977782136110157856742564234839581
6436795380283967224876983130034020316820575216355360416605004533
4718830407023741150537135469000352360279650474826843696574001315
5524363953296559605768293726462748683867807979476223046936921095
0088797578757728341339292333654654510981797643030670179357915156
5262158435123606358334230710497624432217765218126527057253528859
3688668361490384043063624052887014382463758810568004079588144865
4643858460532713400822409146679502714797245542101554942867836639
3080491585356622044306227220916440412947986826263456222477031966
11536459503012648921426461410998536799349
public exponent: 65537

Subject key identifier 858aebf4c5bbbe0e590394ded6800115e3109c39

Authority key identifier 858aebf4c5bbbe0e590394ded6800115e3109c39

Key usage keyCertSign
cRLSign

Basic constraints CA=true; PathLen=unlimited

SHA1 Thumbprint 51cca0710af7733d34acdc1945099f435c7fc59f

SHA256 Thumbprint 9f9744463be13714754e1a3becf98c08cc205e4ab32028f4e2830c4a1b2775b8

Extension (critical: true)

Additional service information

RootCA-QC

Extension (critical: true)

Qualifications

Qualifier: QCQSCDStatusAsInCert

Assert: atLeastOne

Policy OID: 2.16.56.9.1.1.2.1

Policy OID: 2.16.56.9.1.1.7.1

Extension (critical: true)

Additional service information

ForeSignatures

The decoded certificate:

```
[
[
Version: V3
Subject: CN=Belgium Root CA2, C=BE
Signature Algorithm: SHA1withRSA, OID = 1.2.840.113549.1.1.5

Key: Sun RSA public key, 2048 bits
modulus:
25052020358972869298024429313659777821361101578567425642348395816436795380283967224876983130034020316820575216355360416605004533471883040702374115053713546900035236027965047
4826843696574001315524363953296559605768293726462748683867807979476223046936921095008879757875772834133929233365465451098179764303067017935791515652621584351236063583342307
10497624432217765218126527057253528859368866836149038404306362405288701438246375881056800407958814486546438584605327134008224091466795027147972455421015549428678366393080491
58535662204430622722091644041294798682626345622247703196611536459503012648921426461410998536799349
public exponent: 65537
Validity: [From: Thu Oct 04 10:00:00 UTC 2007,
To: Wed Dec 15 08:00:00 UTC 2021]
Issuer: CN=Belgium Root CA2, C=BE
SerialNumber: [ 2affbe9f a2f0e987]

Certificate Extensions: 6
[1]: ObjectId: 2.5.29.35 Criticality=false
AuthorityKeyIdentifier [
KeyIdentifier [
0000: 85 8A EB F4 C5 BB BE 0E 59 03 94 DE D6 80 01 15 .....Y.....
0010: E3 10 9C 39 ...9
]
```

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```
]

[2]: ObjectID: 2.5.29.19 Criticality=true
BasicConstraints: [
  CA:true
  PathLen:2147483647
]

[3]: ObjectID: 2.5.29.32 Criticality=false
CertificatePolicies [
  [CertificatePolicyId: [2.16.56.9.1.1]
  [PolicyQualifierInfo: [
    qualifierID: 1.3.6.1.5.5.7.2.1
    qualifier: 0000: 16 20 68 74 74 70 3A 2F 2F 72 65 70 6F 73 69 74 . http://reposit
0010: 6F 72 79 2E 65 69 64 2E 62 65 6C 67 69 75 6D 2E ory.eid.belgium.
0020: 62 65 be
]] ]

[4]: ObjectID: 2.5.29.15 Criticality=true
KeyUsage [
  Key_CertSign
  Crl_Sign
]

[5]: ObjectID: 2.16.840.1.113730.1.1 Criticality=false
NetscapeCertType [
  SSL CA
  S/MIME CA
  Object Signing CA
]

[6]: ObjectID: 2.5.29.14 Criticality=false
SubjectKeyIdentifier [
  KeyIdentifier [
0000: 85 8A EB F4 C5 BB BE 0E 59 03 94 DE D6 80 01 15 .....Y.....
0010: E3 10 9C 39 ...9
]
]

]
Algorithm: [SHA1withRSA]
Signature:
0000: 51 D8 85 DD BB 57 6F CC A0 6C B5 A3 20 9C 53 09 Q...Wo...l...S.
0010: F3 4A 01 0C 74 BF 2B B3 9A 9A BA 18 F2 0B 88 AC .J..t.+.....
0020: 1C B3 33 AF CE E5 13 01 27 92 84 58 9A 10 B9 F7 ..3.....'.X....
0030: CC 14 92 6B 74 16 8A 96 E8 51 EF BF FA 4A 25 A7 ...kt...Q...J%.
0040: 89 B6 63 2B 50 94 58 D1 CF 11 72 B6 1E B9 39 41 ..c+).X...r...9A
0050: 16 40 29 BC 35 53 0B DA DE 8E 0E CD A9 95 77 25 .M).5S.....w%
0060: CA 94 5A E9 B2 69 AE D8 C0 13 BE 98 FC 96 9C 84 ..Z..i.....
0070: 7F 55 13 E6 3C 87 E3 BC 20 A4 A4 36 68 6B 4D 60 .U.<...6hkM'
0080: 66 1C F9 BF AC 80 94 66 2E B9 41 8A D3 65 D3 84 f.....f..A..e..
0090: 80 02 EF 50 1D 5E 46 DC F7 C9 BA B5 34 7C 2A F3 ...P.^F.....4.*.
00A0: C6 D8 5F 5F 54 9D DB 4D CD 11 E7 FD 14 02 83 66 ...T..M.....f
00B0: 5E C8 A6 00 12 A0 5F BE CE 14 FE BB 1F A7 61 F7 ^.....a.
00C0: AB 4A F1 06 14 9F CA 49 42 C2 A9 BC ED 85 B1 AB .J.....IB.....
00D0: 81 41 E6 0D C5 42 69 53 87 39 9D 4C 1F 00 0E 3E .A...BiS.9.L...>
00E0: 07 0D 75 57 44 A8 53 B4 36 76 64 99 DC 6E EB 3D ...uWD.S.6vd..n.=
00F0: 46 6E 14 5D 5E 47 53 8D 78 4D E0 27 BB 8E 85 76 Fn..^GS.xM.'...v

]

```

The certificate in PEM format:

```
-----BEGIN CERTIFICATE-----
MIIDjjCCAnagAwIBAgIIVKv++n6Lw6YcwDQYJKoZIhvcNAQEFBQAwKDELMakGA1UE
BHMCOkUxGTAxBG9NBAMTEEEJLbGdpdW0gUm9vCBDDQTIwHhcNMDCxMDA0MTA0MDAw
WhcNMjExMDgwMDAwMjE0MjE1MjE1MjE1MjE1MjE1MjE1MjE1MjE1MjE1MjE1MjE1
bSBSb290IENBMjE1MjE1MjE1MjE1MjE1MjE1MjE1MjE1MjE1MjE1MjE1MjE1MjE1
/3UPi790hqC/7bIYLS2X+an7mEoj39WN4IzGMhwLQdC1i22bi+n9fzGhYJdld61
IgdMqFNA68KNaJ6x+HK92AQZw6nUHMxU5wfIp8MXW+2QbyM69odRr2nLL/zGsvU
+400HjPILtfsjFPekx40Hop0cSZYf3CiInaYnkJIT/e1wEYnm7hLHADBGXvmAYr
XR5i3FVr/mZkIV/4L+HXmymvb82fqqxG0YjFnaKVn6w/Fa7yYd/vw2uaItgscf1Y
HewApDgg1VrH1Tdjuk+bqv5WR15j2Qsj1Yr6tSPwiRuhFA0m2khw0I8w7QUmecFL
TqG4f1V50mLGHUCAwEAa0BuzCBuDA0BgnVHQ8BAF8EBAMCAQYwDwYDVR0TAQH/
BAUwAwEB/zCBG9NVHSAE0zA5MDcGBWA4COEBMCAwLAYIKwYBBQUHAgEWIGhdHA6
Ly9yZXBvc2l0b3J5LmVpZC51ZWxnaXVtLmJlM0GA1UdDgQWBBSFiuuv0xbu+dLk0
LN7WgAEV4xcccOTARBg1ghkgBhvCAQEEBAMCAAcwHwYDVR0jBBgwFoAUhYrr9MM7
vg5ZA5Te1oABFeM0NdKwDQYJKoZIhvcNAQEFBQADggEBAFHYhd27V2/MoGy1oyCc
UwnzSgEMdL8rs5qauhjyC4isHLMzr87LEwEnkoRYmhCS98wUkmt0F0qW6FHvv/pK
JaeJtmMrXZRY0c8RcrYeuTLBFk0pvDVTc9rejj7NqZV3JcquWumyaa7YwB0+mPyW
nIR/VRPmPIfjvCCKpDZoa01gZhz5v6yALGYuuUGK02XThIAC71AdXkbc98m6tTR8
KvPG2F9fJ3bTc0R5/0UAoNmXsImABKgX770FP67H6d96tK8QYUn8pJQsKpv02F
sauB0eYXUjU4c5nUwFAA4+Bw11V0S0U7Q2dmS23G7rPUZuFF1eR10NeE3gJ7u0
hXY=
-----END CERTIFICATE-----

```

CN=Belgium Root CA3, C=BE

Type CA/QC
Status granted
Status starting time 2016-07-01T00:00:00.000Z

Service digital identity (X509)

Version 3
Serial number 4260689877497748905
Signature algorithm SHA1withRSA
Issuer CN=Belgium Root CA3, C=BE
Valid from Wed Jun 26 12:00:00 UTC 2013
Valid to Fri Jan 28 12:00:00 UTC 2028
Subject CN=Belgium Root CA3, C=BE
Public key Sun RSA public key, 4096 bits
modulus:
6892368425204007372930073294443554123229459767731895868437789352
7489331012499470148015728120971091408928778599011263917331397388
7322735841404218927092481342245128960306942910996978037963366658
7487677438166762048712847334427499268969797276699412687279269161
8545497053924331052069875135564437218371995289927129772075947532
4004770387044092331280439040222928977901876514295420628487235605
7207547181546555365474067211993745122880348947938978158987337436
1336080842299846657331444909264877243429847318212868757946477794
3923944626874903980284954943444633165097044418808053302806567480
3973101653181735709840274950639311977298375764568509245075873047
9725560212981580096389424844703793712327092036866308035191942506
8313464980278629369152701697759736384202776541620591588545291932
4663214995529533375563259732378154805928106136809503809799800229
2920617503904475332163393814047794956959421382197572947310250836
6454723047943333937457964148701121644586439773493445613256431505
4516896008070464718986221218972698235178969696880747332055597346
5056144482367929251906090063565458141797098055228581790278906951
4772158596504768735853434600634865427052445967408799471479389419
0325164983453802445254424012949618662017893008747941892318218022
78084190173776931
public exponent: 65537

Subject key identifier b8bc6c008f5b19859d25019cf019dc408ed0382b

Authority key identifier b8bc6c008f5b19859d25019cf019dc408ed0382b

Key usage keyCertSign
cRLSign

Basic constraints CA=true; PathLen=unlimited

SHA1 Thumbprint fd6b835c99b99e6ff84fcd0e6266a3610786a717

SHA256 Thumbprint a8d14e945e3e5156bcae5e39737cf6a1b1f51028bbbf982f50ce5f4c05568b4d

Extension (critical: true)

Additional service information

RootCA-QC

Extension (critical: true)

Qualifications

Qualifier: QCQSCDStatusAsInCert

Assert: atLeastOne

Policy OID: 2.16.56.10.1.1.2.1

Policy OID: 2.16.56.10.1.1.7.1

Extension (critical: true)

Additional service information

ForeSignatures

The decoded certificate:

```
[
[
Version: V3
Subject: CN=Belgium Root CA3, C=BE
Signature Algorithm: SHA1withRSA, OID = 1.2.840.113549.1.1.5

Key: Sun RSA public key, 4096 bits
modulus:
68923684252040073729300732944435541232294597677318958684377893527489331012499470148015728120971091408928778599011263917331397388732273584140421892709248134224512896030694291
09969780379633666587487677438166762048712847334427499268969797276699412687279269161854549705392433105206987513556443721837199528992712977207594753240047703870440923312804390
40222928977901876514295420628487235605720754718154655536547406721199374512288034894793897815898733743613360808422998466573314449092648772434298473182128687579464777943923944
62687490398028495494344463316509704441880805330280656748039731016531817357098402749506393119772983757645685092450758730479725560212981580096389424844703793712327092036866308
0351919425068313464980278629369152701697759736384202776541620591588545291932466321499552953375563259732378154805928106136809503809799800229292061750390447533216339381404779
49569594213821975729473102508366454723047943333937457964148701121644586439773493445613256431505451689600807046471898622121897269823517896969688074733205559734650561444823679
2925190609006356545814179709805522858179027890695147721585965047687358534346006348654270524459674087994714793894190325164983453802445244240129496186620178930087479418923182
1802278084190173776931
public exponent: 65537
Validity: [From: Wed Jun 26 12:00:00 UTC 2013,
To: Fri Jan 28 12:00:00 UTC 2028]
Issuer: CN=Belgium Root CA3, C=BE
SerialNumber: [ 3b2102de 965b1da9]

Certificate Extensions: 6
[1]: ObjectId: 2.5.29.35 Criticality=false
AuthorityKeyIdentifier [
KeyIdentifier [
0000: B8 BC 6C 00 8F 5B 19 85 9D 25 01 9C F0 19 DC 40 ...[...%.....@
0010: 8E D0 38 2B ..8+
]

[2]: ObjectId: 2.5.29.19 Criticality=true
BasicConstraints:[
CA:true
PathLen:2147483647
]

[3]: ObjectId: 2.5.29.32 Criticality=false
CertificatePolicies [
[CertificatePolicyId: [2.16.56.10.1.1]
[PolicyQualifierInfo: [
qualifierID: 1.3.6.1.5.5.7.2.1
qualifier: 0000: 16 20 68 74 74 70 3A 2F 2F 72 65 70 6F 73 69 74 . http://reposit
0010: 6F 72 79 2E 65 69 64 2E 62 65 6C 67 69 75 6D 2E ory.eid.belgium.
0020: 62 65 be
]] ]

[4]: ObjectId: 2.5.29.15 Criticality=true
KeyUsage [
Key_CertSign
CrL_Sign
]

[5]: ObjectId: 2.16.840.1.113730.1.1 Criticality=false
NetscapeCertType [
SSL CA
S/MIME CA
Object Signing CA]

[6]: ObjectId: 2.5.29.14 Criticality=false
SubjectKeyIdentifier [
KeyIdentifier [
0000: B8 BC 6C 00 8F 5B 19 85 9D 25 01 9C F0 19 DC 40 ...[...%.....@
0010: 8E D0 38 2B ..8+
]

]
Algorithm: [SHA1withRSA]
Signature:
0000: 45 62 3B FF 98 A5 FE 55 CC B1 11 A7 1C 92 0C 78 Eb;...U.....x
0010: 2F C5 EF 16 42 05 3D 7C E3 12 70 E7 02 D0 82 91 /...B.=...p.....
0020: 13 94 FE 4E 67 D6 38 D5 2B E3 83 3A 7F 90 E2 42 ...Ng.8.+...B
0030: 60 E8 D7 7B 2B 8E FE CD 35 DC AD 27 B5 B4 1D A0 '...+...S.'.....
0040: 54 CB 32 68 23 7D B1 CC B8 A6 12 D7 D6 A4 F8 F2 T.2h#.....
0050: C4 E1 0A 35 2D A2 8C 5F 22 84 72 72 97 65 7F 5E ...5-...".rr.e.^
0060: 07 71 43 C2 62 50 12 4C 26 A9 65 4D 0C 9C 06 F3 .qc.bP.L&.eM....
```


Public key Sun RSA public key, 4096 bits
modulus:
6224115906824122031433393414467734255795749661242697041972796971
3589761663492552027516102528196645068474513261170454526640944182
0354245698609366890086847476742643168250121823522568805311895801
3272845856830766072936328678029599339864160757582078179782933477
1277758427264740541256591774911244974410560636250890042978670882
3655369589600664996359169269749224840725363125898523192670130240
3094481995663975256487988599594079751375649124722315558398958459
8625577661561495707877863985269083424382019627610669355576767590
3287437086963541879185923650029046515083278917967647521237597009
7723059779987931314312946138958009529327069795639742850540854481
1668100588053087190204290004659595000540204476361567140374287384
5557572387796136829835237636572157056930341887317395041724077153
2738123406566311692859096140881485975714355900153034684151459890
4885138299612865991395755715162815883415449288903178308408884400
9310182142365979807396066210319470759450039107508536195377707761
0756884183843432860457151575734269893011244632427230932999271471
6298828392876694701362548042681113710329345462526205188173283210
4879637264017398565292090224855096446539393723135313244013015486
7925044711328249031368163390477454073402140822040781939631335114
29055306278731837
public exponent: 65537

Subject key identifier 67e8f14e4fb3b5f3076f089c0c83d97ad95be749

Authority key identifier 67e8f14e4fb3b5f3076f089c0c83d97ad95be749

Key usage keyCertSign
cRLSign

Basic constraints CA=true; PathLen=unlimited

SHA1 Thumbprint cd4186bcd938ca5c19610f74c762b23acf07a564

SHA256 Thumbprint c3fbf37259af0954eeee4282dd1c7226a54e7150f7c29a2c495ba34dbfe09ca0

Extension (critical: true)

Additional service information

RootCA-QC

Extension (critical: true)

Qualifications

Qualifier: QCQSCDStatusAsInCert

Assert: atLeastOne

Policy OID: 2.16.56.12.1.1.2.1

Policy OID: 2.16.56.12.1.1.7.1

Extension (critical: true)

Additional service information

ForeSignatures

The decoded certificate:

```
[  
  [  
    Version: V3  
    Subject: CN=Belgium Root CA4, C=BE  
    Signature Algorithm: SHA256withRSA, OID = 1.2.840.113549.1.1.11  
  
    Key: Sun RSA public key, 4096 bits  
    modulus:  
622411590682412203143339341446773425579574966124269704197279697135897616634925520275161025281966450684745132611704545266409441820354245698609366890086847476742643168250121823522568805311895801327284585683076607293632867802959933986416075758207817978293347712777584272647405412565917749112449744105606362508900429786708823655369589600664996359169269749224840725363125898523192670130240309448199566397525648798859959407975137564912472231555839895845986255776615614957078778639852690834243820196276106693555767675903287437086963541879185923650029046515083278917967647521237597009772305977998793131431294613895800952932706979563974285054085448116681005880530871902042900046595950005402044763615671403742873845557572387796136829835237636572157056930341887317395041724077153273812340656631169285909614088148597571435590015303468415145989048851382996128659913957557151628158834154492889031783084088844009310182142365979807396066210319470759450039107508536195377707761075688418384343286045715157573426989301124463242723093299927147162988283928766947013625480426811137103293454625262051881732832104879637264017398565292090224855096446539393723135313244013015486792504471132824903136816339047745407340214082204078193963133511429055306278731837
```

Belgique/België (Belgium): Trusted List

```
08696354187918592365002904651508327891796764752123759700977230597799879313143129461389580095293270697956397428505408544811668100588053087190204290004659595000540204476361567
1403742873845557572387796136829835237636572157056930341887317395041724077153273812340656631169285909614088148597571435590015303468415145989048851382996128659913957551516281
5883415449288903178308408884400931018214236597980739606621031947075945003910750853619537707761075688418384343286045715157573426989301124463242723093299927147162988283928766
9470136254804268113710329345462526205188173283210487963726401739856529209022485509644653939372313531324401301548679250447113282490313681633904774540734021408220407819396313
3511429055306278731837
public exponent: 65537
Validity: [From: Wed Jun 26 12:00:00 UTC 2013,
           To: Fri Jan 28 12:00:00 UTC 2028]
Issuer: CN=Belgium Root CA4, C=BE
SerialNumber: [ 4f33208c c594bf38]
```

```
Certificate Extensions: 6
[1]: ObjectID: 2.5.29.35 Criticality=false
AuthorityKeyIdentifier [
KeyIdentifier [
0000: 67 E8 F1 4E 4F B3 B5 F3 07 6F 08 9C 0C 83 D9 7A g..NO....o.....z
0010: D9 5B E7 49 .[.I
]
```

```
[2]: ObjectID: 2.5.29.19 Criticality=true
BasicConstraints:[
CA:true
PathLen:2147483647
]
```

```
[3]: ObjectID: 2.5.29.32 Criticality=false
CertificatePolicies [
[CertificatePolicyId: [2.16.56.12.1.1]
[PolicyQualifierInfo: [
qualifierID: 1.3.6.1.5.5.7.2.1
qualifier: 0000: 16 20 68 74 74 70 3A 2F 2F 72 65 70 6F 73 69 74 . http://reposit
0010: 6F 72 79 2E 65 69 64 2E 62 65 6C 67 69 75 6D 2E ory.eid.belgium.
0020: 62 65 be
]
```

```
] ]
]
```

```
[4]: ObjectID: 2.5.29.15 Criticality=true
KeyUsage [
Key_CertSign
Crl_Sign
]
```

```
[5]: ObjectID: 2.16.840.1.113730.1.1 Criticality=false
NetscapeCertType [
SSL CA
S/MIME CA
Object Signing CA]
]
```

```
[6]: ObjectID: 2.5.29.14 Criticality=false
SubjectKeyIdentifier [
KeyIdentifier [
0000: 67 E8 F1 4E 4F B3 B5 F3 07 6F 08 9C 0C 83 D9 7A g..NO....o.....z
0010: D9 5B E7 49 .[.I
]
```

```
]
Algorithm: [SHA256withRSA]
Signature:
0000: 25 89 3C AB 51 CB A6 8F D8 75 21 12 99 34 82 A5 %<.Q....u!..4..
0010: B7 68 40 C8 D5 B5 8D D9 18 CF E7 C9 E7 B3 C3 3A .h@.....:
0020: AB 69 B2 F9 9F A1 99 AE 3F EE AB 49 B8 43 8B 52 .i.....?.I.C.R
0030: 7D A5 F8 BB 61 CF 5F 20 3C 31 1B 07 E4 88 F2 40 ....a_<1.....@
0040: 89 10 65 D5 AC 5D B6 99 E4 A0 03 04 73 14 28 9C ..e..].....s.(.
0050: B9 F1 32 24 BA FE 7E A7 42 A2 17 A5 BD 0E DF 86 ..2$....B.....
0060: 00 60 03 49 9F 92 EE 8D DE 55 F4 8F A2 BF 9A EB .`I.....U.....
0070: CD 78 EF 71 93 CD C6 01 01 DF 1E 9F 25 DA 55 6A .x.q.....%.Uj
0080: 96 E8 92 18 2B 0E B8 35 83 B5 EA 11 8F 89 62 22 ....+.5.....b"
0090: 4F 9A FE DD 5C 8C E1 67 A9 4D DB D7 E8 07 3A 22 0...\.g.M....:
00A0: 93 5A 3A 5A 9E 14 9C 2E 14 B0 54 E0 C7 F8 4D E7 .Z:Z.....T...M.
00B0: A7 23 91 D5 CC 09 1F 49 1D 03 16 99 C0 B3 92 4D .#. ....I.....M
00C0: 99 50 DD 92 3D 82 F5 E3 12 B7 74 21 C0 74 F7 25 .P.=.....t!.t.%
00D0: 9A 35 68 51 26 68 C9 71 28 1C CD 78 15 3B D5 D4 .5hQ&h.q(...;...
00E0: E7 5E D5 40 89 07 F1 04 D2 5F 4C F0 74 1A A5 55 .^.@....._L.t...U
00F0: C8 52 14 A6 A8 ED 51 F8 0D D1 0F C7 2F 8C FF 4F .R.....Q...../.0
0100: E4 50 E8 C4 29 9E 19 3A EA 71 72 88 8F 5A 96 B3 .P.)...:qr..Z..
0110: B8 2C AD 76 74 C8 30 AC EC 7C 92 4F 9F E8 33 E1 .,vt.0....0...3.
0120: 90 F4 E2 E1 53 DC 2B 1F 87 0C C1 6F 0D B0 E4 72 ....S+....o...r
0130: 0A A6 6A 7A 08 52 6D DE 61 13 E0 25 9A 3E 12 9B .jz.Rm.a.%>...
0140: 18 CF 86 DE E4 AE D4 17 44 67 9B 7F 9A 3A AB E4 .....Dg.....:
0150: 4B 1D 79 C5 0B 30 6D A8 97 80 E9 4E 80 A6 BD 52 K.y..0m....N...R
0160: AD 2B C4 A6 43 97 2C 85 6C DA 7B 7C A3 F6 29 02 .+.C.,,l.....).
0170: 85 0C C4 EA F0 3D 1C 1B 8E A7 E5 D1 45 12 E8 8B .....E...
0180: CA 66 10 0B 78 C0 5E E8 6B D7 A4 C8 93 AA 69 6D .f.x.^k.....im
0190: 6B B7 03 D7 7C 8A 25 00 40 BF 3B 84 DD 02 4C 3D k.....%.;...L=
01A0: 8D 17 02 2B 3A 09 60 37 CD 45 5B CE 7B 90 D9 5B ...+..'.7.E[....[
01B0: 64 D0 C0 6D 95 01 1B FB 0D CE B1 48 78 78 88 3F d..m.....Hxx.?
01C0: 02 43 8D 27 8F F6 E0 01 5F 3B 39 25 98 1E E4 F7 .C.'.....;9%....
01D0: 7B 7B 5D AF D8 B9 55 9B F2 0A 37 EF 0B 6A FC 0F ...U...7...j..
01E0: 47 BC 58 9E 22 6B AE B1 F8 21 67 A1 14 F6 9B D4 G.X."k...!g.....
01F0: 3E 62 FA D8 D3 D8 E7 88 3E 9C 59 B6 A8 CB 4C 59 >b.....>.Y...LY
```

1

The certificate in PEM format:

-----BEGIN CERTIFICATE-----
MIIFjjCC3agAwIBAgIITzGjMjMwUvzgwDQYJKoZIhvcNAQELBQAwKDELMkA1UEEh
BHMCMQKUGTAXBgNVBAMTEEJlbgdwdW0gUm9vdCBDQ0QwHhcNMTMwNjE2MTIwMDAw
WhcNMjg0MTI4MTIwMDAwWjAoMQswCQYDVQ0GQWJCRTEZMBCCGA1UEAxMQQmVsZ211
bSB5b290IENBNDCCAiIwDQYJKoZIhvcNAQEBBQADggIPADCCAgCggIBAJiQrvrH
Hm+04AU6syN4TNHwL91PFsY6E9euwVmL5NAWTdw9p2mcnEOYGx424jFLpSQVNxx
xoh3LsIpdWUMRQfuiDqzvZx/4dCBaeKl/AMRJuL1d6wU73XKSkdR5uH6H2Yf19z
SiU0m2x4k3aNLyT+VryF11b1Prp67CBk630BmG0WUaB+ExtBHOkfPaHRHFA04Mig
oVft3gLQRgh1V+H1rm1hydTz6dzp0JHp3ujWD4r4kLCrxVfV0QZ44usvAPLhKoe
cF0feiktegS1p5+FjGHA9S85yxZknEV8N6bbK5YP7kgNLDDCNFJ6G7Mmpf8MEyG
WMB+WrynTetWnIV6jTzZA1RmaZuqmIMDvMTA7JNkiDJQ0JBWQ3Ehp+Vn7Li1MCIj
XLEDYJ2wRmcRZQ0bsUzaM/V3p+Q+j853osma3Pc6+dDzXL+Og/LnRnLdDapXx28X
B9urUR5H030zm77B9/mYgIeM8Y1XntLCCLEBeuJeEYJUqc0FsGxWnwjsBtRoZ4dv
a1rvzkXmjJuNIR4YILg8G4kLhr9JDrtYckvI9Xm8GDjQIJJ2KpQiJHBLJA0gKxL
Yem8CS0/an3A0xqTNzjWbQx6E320PB/rsu28Ldadi9c8yeRyXLWpUF4Ghjyoc40d
rAkXmLjnkzLMC459xGL8gj6Lynb6UzX0eYA9AgMBAAGjgbswgbgwDgYDVR0PAQH/
BAQDAgEMAG8A1UdEwEB/wQFMAMBAf8wQgYDVR0gBDswOTA3BgVgOwBATAUwCwG
CCsGAQUFBwIBFiBodHRwOi8vcmlvb3NpdG9yeS51aWQwYmVsZ211bSB5b290IENBN
HQ4EfgQUZ+jxTk+ztfMhwiCdIPZetLb50kwEQYJYIZIAyb40gEBBAQDAgAHMB8G
A1UdIwQYBAAFGfo8U5Ps7XzB28InAyD2XrZw+dJMA0GCsG5Ib3DQEBCCUAA4IC
AQA1iTyrcumj9h1IRKZNIKl2hAynW1jdykYz+fJ57PD0qtpsvmfoZmuP+6rSbhd
i1J9pfi7Yc9fIDwxGwfkjPJAiRBL1axdtpnkoAMEcxQonLnxMiS6/n6nQqIXpb00
34YAYANJn5Lujd5V9I+iv5r rzXjvcZPNxgEB3x6fJdpVapbokhgrDrg1g7XqEY+J
Y1Jpmv7dXizhZ6Lm29foBzoiKlo6Wp4UnC4UsFTgx/hN56cjkdXMC9JHQMMmcCz
kk2ZUN2SPYL14xK3dCHAdPcLmjVoUsZoyXEOHM14FTvV10deIUCJB/EE0L9M8H0a
pVLIUhsMq01R+A3RD8cvjP9P5FDoxCmeGTrcXKIj1qW57srxZ0yDCs7HyST5/o
M+GQ90Lhu9wrH4cMw8Ns0RyCqZqeghSbd5hE+ALmj45mxjPh7krtQXRgeb5o6
q+RLHXnFCzBtqJea6U6Apr15rSvEpk0XLIVs2nt8o/YpAoUMx0rwrPRwbjql0UUS
6IvKZHALeMB66vXpMiTqmlta7cd13yKJQBavzuE3QJMPY0XAis6CWA3zUVbznuQ
2Vtk0MBtLQEb+w30sU4eTg/AkONJ4/24AFf0zkLm87k93t7Xa/YuVwB8go37wtq
/A9HvFieImuusfghZ6EU9pvUPmL62NPy54g+nFm2qMtMwQ=
-----END CERTIFICATE-----

CN=Certipost Public CA for Qualified Signatures, O=Certipost n.v./s.a., C=BE

Type CA/QC
Status withdrawn
Status starting time 2016-12-14T22:00:00.000Z

Service digital identity (X509)

Version 3
Serial number 904
Signature algorithm SHA256withRSA
Issuer CN=Verizon Global Root CA, OU=OmniRoot, O=Verizon Business, C=US
Valid from Wed Jan 11 19:45:06 UTC 2012
Valid to Tue Jan 11 19:44:34 UTC 2022
Subject CN=Certipost Public CA for Qualified Signatures, O=Certipost n.v./s.a., C=BE
Public key Sun RSA public key, 2048 bits
modulus:
2058370808117806886719567856147320061945292190592796129179327367
1328005822028265845465542836756717140506081882114668638826442932
4840744781703307017746497136667158332106505285154357277431791645
6871430942741492265542773700746837231916763966290548158739950199
2029174676515494584699514099891322542890739713299134792579834056
6654074619687706565029583663340264770269856720101489447350341548
9667917131633966990337885540161539197154038478640639231113106791
3663589486493118066042504737642498346914368670309047269922309076
6138772412256664686136790625895780242652401177074998149327839849
23682396679386042809154363424543342942381
public exponent: 65537
Subject key identifier 0e3733c7286ebfce5fe62ae698908bacc1e62844
CRL distribution points http://cdp1.public-trust.com/CRL/Omniroot2034.crl

Authority key identifier 4c3811b898005b5a2b703eaa78e4d5676767a77e

Key usage keyCertSign
cRLSign

Basic constraints CA=true; PathLen=0

SHA1 Thumbprint 05e88c57c47c3b510aed61a8c9d427ffe2925c01

SHA256 Thumbprint 4671a19c0fb1e221aeda10c7d745b7e5bf4faaffafc63fc2e2f8add187adab69

Extension (critical: true)

Additional service information

ForeSignatures

The decoded certificate:

```
[
[
Version: V3
Subject: CN=Certipost Public CA for Qualified Signatures, O=Certipost n.v./s.a., C=BE
Signature Algorithm: SHA256withRSA, OID = 1.2.840.113549.1.1.11

Key: Sun RSA public key, 2048 bits
modulus:
20583708081178068867195678561473200619452921905927961291793273671328005822028265845465542836756717140506081882114668638826442932484074478170330701774649713666715833210650528
51543572774317916456871430942741492265542773700746837231916763966290548158739950199202917467651549458469951409989132254289073971329913479257983405666540746196877065650295836
63340264770269856720101489447350341548966791713163396699033788554016153919715403847864063923111310679136635894864931180660425047376424983469143686703090472699223090766138772
41225666468613679062589578024265240117707499814932783984923682396679386042809154363424543342942381
public exponent: 65537
Validity: [From: Wed Jan 11 19:45:06 UTC 2012,
To: Tue Jan 11 19:44:34 UTC 2022]
Issuer: CN=Verizon Global Root CA, OU=OmniRoot, O=Verizon Business, C=US
SerialNumber: [ 0388]

Certificate Extensions: 6
[1]: ObjectID: 2.5.29.35 Criticality=false
AuthorityKeyIdentifier [
KeyIdentifier [
0000: 4C 38 11 B8 98 00 5B 5A 2B 70 3E AA 78 E4 D5 67 L8....[Z+p>.x..g
0010: 67 67 A7 7E gg..
]
]

[2]: ObjectID: 2.5.29.19 Criticality=true
BasicConstraints:[
CA:true
PathLen:0
]

[3]: ObjectID: 2.5.29.31 Criticality=false
CRLDistributionPoints [
[DistributionPoint:
[URIName: http://cdpl.public-trust.com/CRL/Omniroot2034.crl]
]]

[4]: ObjectID: 2.5.29.32 Criticality=false
CertificatePolicies [
[CertificatePolicyId: [2.5.29.32.0]
[PolicyQualifierInfo: [
qualifierID: 1.3.6.1.5.5.7.2.1
qualifier: 0000: 16 24 68 74 74 70 73 3A 2F 2F 77 77 77 2E 63 65 .shttps://www.ce
0010: 72 74 69 70 6F 73 74 2E 63 6F 6D 2F 73 68 6F 77 rtipost.com/show
0020: 70 6F 6C 69 63 79 policy
]] ]
]

[5]: ObjectID: 2.5.29.15 Criticality=true
KeyUsage [
Key_CertSign
CrL_Sign
]

[6]: ObjectID: 2.5.29.14 Criticality=false
SubjectKeyIdentifier [
KeyIdentifier [
0000: 0E 37 33 C7 28 6E BF CE 5F E6 2A E6 98 90 8B AC .73.(n...*......
0010: C1 E6 28 44 ..(D
]
]

]
]
Algorithm: [SHA256withRSA]
Signature:
0000: 73 F0 57 07 07 F3 34 DE 48 53 1E 3E 0A 88 33 07 s.w...4.HS.>..3.
```


Public key Sun RSA public key, 2048 bits
modulus:
2198165027276639742335246370299919491834299685174947076499863829
7101984511083629850948734739259892644517804066934196324549964291
3192950780187748886826305662589231481198165241013890789999605732
7037799082855868763511239453871155320357733059447691386874174245
6351418525550214828297591584323227847019805029382183516476456072
1350350984913304723496042939229874921930931967750335049019790482
8017572130561815887751919653650932481620948873902322540903538293
2017480465444929903218227769334668958530404811571842689601047281
9175682817566553198501338089830997047280971197474917236039149732
00214236187812432050305807187505398614653
public exponent: 65537

Subject key identifier f078f9077710bbdc1ea1ae79fb3010dbc634f817

Key usage keyCertSign
cRLSign

Basic constraints CA=true; PathLen=unlimited

SHA1 Thumbprint 742cdf1594049cbf17a2046cc639bb3888e02e33

SHA256 Thumbprint 058a40323ec8c46262c3052a5d357b91ac24d3da26351b3ff4407e99f7a4e9b4

Extension (critical: true)

Additional service information

RootCA-QC

Extension (critical: true)

Qualifications

Qualifier: NotQualified

Assert: atLeastOne

Policy OID: 0.3.2062.7.1.1.112.1

Policy OID: 0.3.2062.7.1.1.140.1

Policy OID: 0.3.2062.7.1.1.111.1

Extension (critical: true)

Additional service information

ForeSignatures

The decoded certificate:

```
[
  [
    Version: V3
    Subject: CN=Certipost E-Trust Primary Qualified CA, O=Certipost s.a./n.v., C=BE
    Signature Algorithm: SHA1withRSA, OID = 1.2.840.113549.1.1.5

    Key: Sun RSA public key, 2048 bits
    modulus:
    21981650272766397423352463702999194918342996851749470764998638297101984511083629850948734739259892644517804066934196324549964291319295078018774888682630566258923148119816524
    10138907899996057327037799082855868763511239453871155320357733059447691386874174245635141852555021482829759158432322784701980502938218351647645607213503509849133047234960429
    39229874921930931967750335049019790482801757213056181588775191965365093248162094887390232254090353829320174804654449299032182277693346689585304048115718426896010472819175682
    81756655319850133808983099704728097119747491723603914973200214236187812432050305807187505398614653
    public exponent: 65537
    Validity: [From: Tue Jul 26 10:00:00 UTC 2005,
              To: Sun Jul 26 10:00:00 UTC 2020]
    Issuer: CN=Certipost E-Trust Primary Qualified CA, O=Certipost s.a./n.v., C=BE
    SerialNumber: [ 04000000 00010552 64c425]

Certificate Extensions: 5
[1]: ObjectID: 2.5.29.19 Criticality=true
BasicConstraints:[
  CA:true
  PathLen:2147483647
]

[2]: ObjectID: 2.5.29.32 Criticality=false
CertificatePolicies [
```


Service provider postal code 1310
Service provider locality La Hulpe
Service provider state Brussels
Service provider country BE

SWIFTNet PKI Certification Authority

Type CA/QC
Status granted
Status starting time 2016-07-01T00:00:00.000Z

Service digital identity (X509)

Version 3
Serial number 1007235709
Signature algorithm SHA1withRSA
Issuer O=SWIFT
Valid from Sat Jun 15 11:51:47 UTC 2002
Valid to Wed Jun 15 12:21:47 UTC 2022
Subject O=SWIFT
Public key Sun RSA public key, 2048 bits
modulus:
2713489144953666367009133891636460566719364721268361046536591993
4994474903020635584331677653228200210928489182501819079634477925
8492233590999837413051645081782463444435029313072619678324503388
6132455060944963076820096698396937698650371176940421592482842807
5011899626639351963633260617226195373584394852072888957304178117
5313510569711163457668946603482121013634442930239281415342850090
7026386418520436427134899300324073409253701773263117431279842284
8480577617459936682837566698589952098721105585848777111378534843
5966527642400898111594497598591390136982490646196185727187396856
39915967136410239131574955455289383883587
public exponent: 65537
Subject key identifier 3e30b33b359757fff140db1b4501382e15a79eb2
Authority key identifier 3e30b33b359757fff140db1b4501382e15a79eb2
Key usage keyCertSign

cRLSign
Basic constraints CA=true; PathLen=unlimited
SHA1 Thumbprint d9a235c88c875b171174d1076b596af9e0a0363d
SHA256 Thumbprint cfa61bf3895cfe4244fbe684aedc88feadd14d6aa3c73f5688f2c1e52c9a604

Extension (critical: true)

Qualifications

Qualifier: NotQualified
Assert: atLeastOne
Policy OID: 1.3.21.6.3.10.200.3

Extension (critical: true)

Additional service information

ForeSignatures

The decoded certificate:

```
[
[
Version: V3
Subject: O=SWIFT
Signature Algorithm: SHA1withRSA, OID = 1.2.840.113549.1.1.5

Key: Sun RSA public key, 2048 bits
modulus:
2713489144953666367009133891636460566719364721268361046536591993499447490302063584331677653228200210928489182501819079634477925849223350099983741305164508178246344443502931
30726196783245033886132455060944963076820096698396937698650371176940421592482842807501189962663935196363326061722619537358439485207288895730417811753135105697111634576689466
03482121013634442930239281415342850090702638641852043642713489930032407340925370177326311743127984228484805776174599366828375666985899520987211055858487771113785348435966527
64240089811159449759859139013698249064619618572718739685639915967136410239131574955455289383883587
public exponent: 65537
Validity: [From: Sat Jun 15 11:51:47 UTC 2002,
To: Wed Jun 15 12:21:47 UTC 2022]
Issuer: O=SWIFT
SerialNumber: [ 3c09327d]

Certificate Extensions: 8
[1]: ObjectID: 1.2.840.113533.7.65.0 Criticality=false
Extension unknown: DER encoded OCTET string =
0000: 04 10 30 0E 1B 08 56 35 2E 30 3A 34 2E 30 03 02 ..0...V5.0:4.0..
0010: 04 90 ..

[2]: ObjectID: 2.5.29.35 Criticality=false
AuthorityKeyIdentifier [
KeyIdentifier [
0000: 3E 30 B3 3B 35 97 57 FF F1 40 DB 1B 45 01 38 2E >0.;5.W..@..E.8.
0010: 15 A7 9E B2 ....
]

]

[3]: ObjectID: 2.5.29.19 Criticality=false
BasicConstraints:[
CA:true
PathLen:2147483647
]

[4]: ObjectID: 2.5.29.31 Criticality=false
CRLDistributionPoints [
[DistributionPoint:
[CN=CRL1, O=SWIFT]
]]

[5]: ObjectID: 2.5.29.15 Criticality=false
KeyUsage [
Key_CertSign
Crl_Sign
]

[6]: ObjectID: 2.16.840.1.113730.1.1 Criticality=false
NetscapeCertType [
SSL CA
S/MIME CA
Object Signing CA]

[7]: ObjectID: 2.5.29.16 Criticality=false
PrivateKeyUsage: [
From: Sat Jun 15 11:51:47 UTC 2002, To: Wed Jun 15 12:21:47 UTC 2022]

[8]: ObjectID: 2.5.29.14 Criticality=false
SubjectKeyIdentifier [
KeyIdentifier [
0000: 3E 30 B3 3B 35 97 57 FF F1 40 DB 1B 45 01 38 2E >0.;5.W..@..E.8.
0010: 15 A7 9E B2 ....
]

]

]
Algorithm: [SHA1withRSA]
Signature:
0000: BE CD 22 54 79 F9 BF D6 7E E7 EC 99 A5 E3 63 18 .."Ty.....c.
0010: 80 CB 07 4E 87 4E A5 CD AD F3 D7 9E ED CB B3 78 ...N.N.....x
0020: CE FD 20 2C C3 D5 F1 F3 1B 1A 42 CB 8B 62 A7 9B ..,.....B..b..
0030: A3 D1 34 D6 C3 92 5F 03 1C 1D 39 5C FB D0 34 53 ..4.....9\..45
0040: CF 93 5A 36 6D 15 D4 8B 3A 0E CB F6 B2 3F 97 02 ..Z6m.....?..
0050: 1A DA 39 12 49 40 9B CC 5B 51 92 33 38 A5 54 4E ..9.I@[Q.38.TN
0060: C3 06 09 4E 77 70 E0 88 B3 93 32 AC C1 A4 8A F2 ...Nwp....2....
0070: D9 D7 C7 F7 AB 0F 71 B8 D7 AE E5 01 37 D6 E4 4F .....q.....7..0
0080: 42 A2 DE D6 16 DD FF 81 03 17 6C 5C 7E F5 C2 C6 B.....\....
0090: 86 57 8E C7 D7 44 91 BA 09 5D 05 5D 87 1E F3 86 .W...D...].]....
00A0: BB F3 E7 3E 9C 55 53 B9 4A 18 49 01 2B 21 3D 55 ...>.US.J.I.+!=U
```

00B0: E3 31 DA B3 B5 62 42 00 2B 1D 55 0A CE 8B 2B 83 .1...bB.+...U...+.
00C0: D9 46 A0 B5 17 BA 4E 66 88 33 07 0D E2 31 CD BA .F...Nf.3...1..
00D0: 7B AD ED 45 C1 DA C1 A8 FE 86 7E BC 82 40 E4 D4 ...E.....@..
00E0: 2E AC 78 80 91 FE C3 28 ED 42 F6 47 7C 6B 7C E0 ...X....(.B.G.k..
00F0: CA 50 B5 C3 7E 4B 39 AF 70 97 86 79 CB 0C 9E 09 ...P...K9.p.y....

]

The certificate in PEM format:

-----BEGIN CERTIFICATE-----
MIIDkDCCAnigAwIBAgIEPakyFTANBgkqhkiG9w0BAQUFADAQMq4wDAYDVQQKEwVTV0lGVDAeFw0wMjA2MTUxMTUxNDdaFw0yMjA2MTUxMTUxNDdaMBAXDjAMBGNVBAOTBVNXSUZUMIIBIjANBgkqhkiG9w0BAQEFAAQCAQ8AMIIBCgKCAQEAIvMie2UrDYQj2yk3+hjuqq5c8br8qtzXHsB7Zt99PenOdTFAsAnFyshdMVIgwmYJb8X3QpFEJnh6is3o+JrHfKdPs07ISroFc9LAD7TEGQEnfiCMNjNJRH80ce0bLkMbFqv/Gwrsp/SZRzFULJu+PILZaZ3uwVuxQ1ZLkKWLQVGSQJudNhh2qeWU3D3S5sRBNS37d4h5zg3ZV3nmdWuQb0K866KRjiYRRY7rau/amjUYegKJe3bhK18yRlYprz25AS3XWL7az0pKv9obTQINRgg/wNwNdwqSF2rZLt/bZg8UnLomKwq7MTQfN/cHniG00bfNtINLMb1H5aTQwIDAQABo4HxMIHuMBEGCWCsAGG+EIBAQQEAWIABzAyBgNVHR8EKzApMcegJaAjpCEwHzEOMAwGA1UEChMFU1dJRlQxDALBgNVBAMTBENSTDEwKwYDVR0QBCQwIoAPMjAwMjA2MTUxMTUxNDdag08yMDIyMDYxNTEyMjE0LowCwYDVR0PBAQDAgEGB8GA1UdIwQYMBaAFD4wszsl1lf/8UDbG0UBOC4Vp56yMB0GA1UdG0NBBO+MLM7NzdX//FA2xtFATguFaeesjAMBGNVHRMEBTADAQH/MB0GCSqGSIs2fQdBAAQMA4bCFY1LjA6NC4wAwIEKdANBgkqhkiG9w0BAQUFAAQEAvs0iVHn5v9Z+5+ypeNjGIDLBO6HTqXnrFPXnu3Ls3j0/SAsw9Xx8xsaQsulYqebo9E01s05XwMcHTLc+9A0U8+TWjZtFdSl0g7L9rI/lwIa2jkSSUCbzFtrKjM4pVR0wYJtndw4IizkzKswaSK8tnXx/erD3G4167LATfW5E9Cot7Wft3/gQMx6F+9cLGHle0x9dEkboJXQVd hx7zhrvz5z6cVV055hhJASshPVXjMdzTtWJCAcsdVQr0Iyud2UagtRe6TmaIMwcn4jHNunut7UXB2sGo/aZ+vIJA5NQRHIAkf7DK01C9kd8a3zgyLC1w35L0a9wL4Z5ywyecQ==
-----END CERTIFICATE-----

QuoVadis Trustlink BVBA

Service provider trade name VATBE-0537698318

Information URI https://www.quovadisglobal.be/~media/Files/Repository/QV_RCA1_RCA3_CPCP_S_V4_16.ashx

Service provider street address Capittelstraat 35

Service provider postal code 3201

Service provider locality Aarschot

Service provider state Vlaams-Brabant

Service provider country BE

QuoVadis BE PKI Certification Authority

Type CA/QC

Status granted

Status starting time 2016-07-01T00:00:00.000Z

Service digital identity (X509)

Version 3

Serial number 609679183321230578642917563116990405939188292251

Signature algorithm SHA256withRSA

Issuer CN=QuoVadis Root Certification Authority, OU=Root Certification Authority, O=QuoVadis Limited, C=BM

Valid from Tue Jan 28 13:31:54 UTC 2014

Valid to Wed Mar 17 18:33:33 UTC 2021

Subject CN=QuoVadis Belgium Issuing CA G1, O=QuoVadis Trustlink BVBA, C=BE

Public key Sun RSA public key, 4096 bits
modulus:
9783964049937508596233198438506646025473388060525664736390216073
2102443656154852856590692595277855257563778420931571542568909508
0978631883136821438467859677425505518925295946478935536215699720
9060563934601356099502572088165523220585654567621525989833435792
4120716735302131104382354616099502334946581973200139342601423705
2576853073064817439203850489307475026119919108600127180985930937
5722743791909993240230489806096355723483588160724849940671702693
9421288570479403288803182697829361690097956484101520823731103609
3100150818512233246331732587859059076124798706288556894310123901
0972920078194075368441656229441331564718831935659177163391354589
2011373776362193636814506011844368620196727006732532805298830422
9507472040779971787788316999945970815156831404655445754634094522
5619263559926007219454491737036392400734256628057595967019737484
9640740113884793702843399591566693810287179450856046582198319405
9528341619175314034894163206925073632423415715700412910266907296
1997392759148097836830663187572932975564250918605529635852688494
1903040727077418799850545935706025465473291910192906070443650070
8759110395706076167863573384978712251913079970430814716559994884
9072838313070703058851956878669387044135529569895785662937077766
97029462522370343
public exponent: 65537

Subject key identifier f80f651c7a6319aabf446fa6491221f37a5de30d

CRL distribution points <http://crl.quovadisglobal.com/qvrca.crl>

Authority key identifier 8b4b6dedd329b90619ec3939a9f097846acbefdf

Key usage keyCertSign
cRLSign

Basic constraints CA=true; PathLen=0

SHA1 Thumbprint 89c89b25fa25bafa839fbd9fc1d29caf6481bf28

SHA256 Thumbprint 27ebacd86dd3bf86143da4342861031a57cf3fa414d40a86e669c3f4f1d8cf24

Extension (critical: true)

Additional service information

ForeSignatures

The decoded certificate:

```
[
[
Version: V3
Subject: CN=QuoVadis Belgium Issuing CA G1, O=QuoVadis Trustlink BVBA, C=BE
Signature Algorithm: SHA256withRSA, OID = 1.2.840.113549.1.1.11

Key: Sun RSA public key, 4096 bits
modulus:
97839640499375085962331984385066460254733880605256647363902160732102443656154852856590692595277855257563778420931571542568909508097863188313682143846785967742550551892529594
64789355362156997209060563934601356099502572088165523220585654567621525989833435792412071673530213110438235461609950233494658197320013934260142370525768530730648174392038504
89307475026119919108600127180985930937572274379190999324023048980609635572348358816072484994067170269394212885704794032888031826978293616900979564841015208237311036093100150
81851223324633173258785905907612479870628855689431012390109729200781940753684416562294413315647188319356591771633913545892011373776362193636814506011844368620196727006732532
80529883042295074720407799717877883169999459708151568314046554457546340945225619263559926007219454491737036392400734256628057595967019737484964074011388479370284339959156669
38102871794508560465821983194059528341619175314034894163206925073632423415715700412910266907296199739275914809783683066318757293297556425091860552963585268849419030407270774
18799850545935706025465473291910192906070443650070875911039570607616786357338497871225191307997043081471655999488490728383130707030588519568786693870441355295698957856629370
7776697029462522370343
public exponent: 65537
Validity: [From: Tue Jan 28 13:31:54 UTC 2014,
To: Wed Mar 17 18:33:33 UTC 2021]
Issuer: CN=QuoVadis Root Certification Authority, OU=Root Certification Authority, O=QuoVadis Limited, C=BM
SerialNumber: [ 6acaf5c9 85274c50 27ba2928 3006d6e4 c4f15a9b]

Certificate Extensions: 7
[1]: ObjectId: 1.3.6.1.5.5.7.1.1 Criticality=false
AuthorityInfoAccess [
[
accessMethod: 1.3.6.1.5.5.7.48.1
accessLocation: URIName: http://ocsp.quovadisglobal.com,
accessMethod: 1.3.6.1.5.5.7.48.2
accessLocation: URIName: http://trust.quovadisglobal.com/qvrca.crt]
```


6aj i2cYeetYh+QkGqCI0iYKLLXUx9ofM24Jq3mWqBP4QDgsWgoQ7L LLA+PwN0v9
Zov90NaYD6D0IMn/dV1E7EshLK9VZiW9W+DuPSKaCAucSSK7dU21nH5UtB30EGs6
0yy6hNG3J/VFc0uvu3uDJqI2TT5HD6hbN8JMK+z1s5edHE4=
-----END CERTIFICATE-----

QuoVadis BE PKI Certification Authority G2

Type CA/QC
Status granted
Status starting time 2016-07-01T00:00:00.000Z

Service digital identity (X509)

Version 3
Serial number 370861943658773060475449278572584178262799314517
Signature algorithm SHA256withRSA
Issuer CN=QuoVadis Enterprise Trust CA 1 G3, O=QuoVadis Limited, C=BM
Valid from Mon Jun 13 12:22:05 UTC 2016
Valid to Sat Jun 13 12:22:05 UTC 2026
Subject CN=QuoVadis Belgium Issuing CA G2, O=QuoVadis Trustlink BVBA,
OID.2.5.4.97=NTRBE-0537698318, C=BE
Public key Sun RSA public key, 4096 bits
modulus:
6230883699587823739890387754379070477215155351948503696284928928
6762659096876001348714059503980469058847658322816356034228132540
6918046605165432002116706169653521048417532557931231131550972290
0031197228268363040268982941023187957861042676034834020333070620
7190772580042983034615584070613386365952220836153439341384692657
8696826895714227903391959565967406530088771729767950440929656043
2163014585345898816172521920376840236723120805789115312645387870
9451857348024900006487730553140606594803912885436651803225622760
4949718044388445919353619902272978753999638960838408864058539228
3888884791066054654593043703817378828038101637553182828958483889
7693248294658177178000733919714925449994792299096725660826469141
5787505237699654446749444700012886783577363368972858974990045545
5319090699985484921038680916093288098301753746986699829404622404
8680718777040625727586310877882003632895696490807225717851431255
6578194457426406147650960292115572503249495434740454018843282749
6460397682941622995610157763156443595757370452444868333800151563
7063821029431865926779220502562502734300590316041110043579026517
8970118108782414636034722304625519061147374704385231750371749725
0927026791542693181089165688800622906042384672374815917738285418
78395623639261113
public exponent: 65537
Subject key identifier 87c9bc3197127a73bb7ec03d4551b401259551ab
CRL distribution points <http://crl.quovadisglobal.com/qventca1g3.crl>
Authority key identifier 6c26bd605529294e663207a0ff638b835a4b34c6
Key usage keyCertSign
cRLSign
Basic constraints CA=true; PathLen=0
SHA1 Thumbprint a8884570c16ec0337170e5058f960d74aaf67a78
SHA256 Thumbprint d90b40132306d1094608b1b9a2f6a9e23b45fe121fef514a1c9df70a815ad95c

Extension (critical: true)

Additional service information

ForeSignatures

The decoded certificate:

```
[
[
Version: V3
Subject: CN=QuoVadis Belgium Issuing CA G2, O=QuoVadis Trustlink BVBA, OID.2.5.4.97=NTRBE-0537698318, C=BE
Signature Algorithm: SHA256withRSA, OID = 1.2.840.113549.1.1.11

Key: Sun RSA public key, 4096 bits
modulus:
62308836995878237398903877543790704772151553519485036962849289286762659096876001348714059503980469058847658322816356034228132540691804660516543200211670616965352104841753255
79312311315509722900031197228268363040268982941023187957861042676034834020330706207190772580042983034615584070611338636595222083615343934138469265786968268957142279033919595
65967406530088771729767950440929656043216301458534589881617252192037684023672312080578911531264538787094518573480249000064877305531406065948039128854366518032256227604949718
0443884459193536199022729787539996389608384088640585392283888847910660546545930437038173788280381016375531828289584838897693248294658177178000733919714925449994792299096725
66082646914157875052376996544674944470001288678357736336897285897499004554531909069998548492103868091609328809836175374698669829404622404868071877704062572758631087788200
36328956964908072257178514312556578194457426406147650960292115572503249495434740454018843282749646039768294162299561015776315644359575737045244486833380015156370638210294318
6592677920502562502734300590316041110043579026517897011810878241463603472230462551906114737470438523175037174972509270267915426931810891656888006229060423846723748159177382
8541878395623639261113
public exponent: 65537
Validity: [From: Mon Jun 13 12:22:05 UTC 2016,
To: Sat Jun 13 12:22:05 UTC 2026]
Issuer: CN=QuoVadis Enterprise Trust CA 1 G3, O=QuoVadis Limited, C=BM
SerialNumber: [ 40f60653 43c04cb6 71e9c825 0e90ebd5 8dd86e55]

Certificate Extensions: 7
[1]: ObjectID: 1.3.6.1.5.5.7.1.1 Criticality=false
AuthorityInfoAccess [
accessMethod: 1.3.6.1.5.5.7.48.2
accessLocation: URIName: http://trust.quovadisglobal.com/qventcalg3.crt,
accessMethod: 1.3.6.1.5.5.7.48.1
accessLocation: URIName: http://ocsp.quovadisglobal.com]
]

[2]: ObjectID: 2.5.29.35 Criticality=false
AuthorityKeyIdentifier [
KeyIdentifier [
0000: 6C 26 BD 60 55 29 29 4E 66 32 07 A0 FF 63 8B 83 1&.U)Nf2...c..
0010: 5A 4B 34 C6 ZK4.
]
]

[3]: ObjectID: 2.5.29.19 Criticality=true
BasicConstraints:[
CA:true
PathLen:0
]

[4]: ObjectID: 2.5.29.31 Criticality=false
CRLDistributionPoints [
(DistributionPoint:
[URIName: http://crl.quovadisglobal.com/qventcalg3.crl]
)]

[5]: ObjectID: 2.5.29.32 Criticality=false
CertificatePolicies [
(CertificatePolicyId: [2.5.29.32.0]
[ ] ]
]

[6]: ObjectID: 2.5.29.15 Criticality=true
KeyUsage [
Key_CertSign
Crl_Sign
]

[7]: ObjectID: 2.5.29.14 Criticality=false
SubjectKeyIdentifier [
KeyIdentifier [
0000: 87 C9 BC 31 97 12 7A 73 BB 7E C0 3D 45 51 B4 01 ...1..zs...=EQ..
0010: 25 95 51 AB %Q.
]
]

Algorithm: [SHA256withRSA]
Signature:
0000: A7 67 CB E3 94 A6 46 5B 5D 0E 02 E9 B3 7E 64 CC .g....F[]....d.
0010: 5C EB A6 75 7C 27 5C 3E 8A 26 E9 9C 77 24 F3 C3 \.u.'\>.&.w$.
0020: E4 4D 3F 9C C6 30 C2 77 02 86 06 DB 5E 1E 28 82 .M?.0.w....^.(.
0030: 38 09 6F 65 27 C5 89 BA 58 5F 5A 9F 16 0C 5F 50 8.oe'...X_Z...P
0040: 13 A7 B1 19 61 C7 EE F7 44 92 68 A4 95 E7 66 80 ....a...D.k...f.
0050: 95 95 83 41 96 96 20 50 45 4B 09 83 52 3B EC C1 ...A.. PEK.:R;..
0060: BE 41 0A B1 3F 0A 80 DF 89 12 3E 17 3E 16 E9 DC .A..?.....>...
0070: 99 9A CF 26 0E 0E E6 AD C4 80 FB 79 71 B1 D2 14 ...&.....yq...
0080: 8F 4F C5 DF 17 C2 F4 2F 77 04 7A 9B 18 C3 56 43 .0...../w.z...VC
0090: B6 84 CD FA 32 1C 73 5C 6A 50 AB 10 BA 06 0E E7 ....2.s\jP.....
00A0: 9F 41 AB 7B 26 C0 0E 8E 20 BE 9A E2 18 91 18 1E .A.&.....
```


Zetes TSP PKI certification authority

Type CA/QC
Status granted
Status starting time 2016-07-01T00:00:00.000Z

Service digital identity (X509)

Version 3
Serial number 4044494821122691399
Signature algorithm SHA256withRSA
Issuer CN=ZETES TSP ROOT CA 001, SERIALNUMBER=001, O=ZETES SA (VATBE-0408425626), C=BE
Valid from Fri May 20 17:20:29 UTC 2016
Valid to Wed May 20 17:20:29 UTC 2026
Subject CN=ZETES TSP QUALIFIED CA 001, SERIALNUMBER=001, O=ZETES SA (VATBE-0408425626), C=BE
Public key Sun RSA public key, 4096 bits
modulus:
7966709637074040714320658184938038917028092405904624202903753477
4799458811320809970072905178541448482348252543587667311043751542
0735604726572971351905453910263879782247724079533201420434980906
1259652247308046066627990399768704035009312298881553170826145735
9470451717937201719785652613017682391030700889549269989627026410
5325707292486709403261729124934205264059173193364705541586249507
6834153593271925365257093421209559284118721797907404731583231496
2682519430355956122549300816146144079913741952460191615207765565
9687136786182992996855987043403957104672173646950330802423343213
5080733069825853601849667775813367604127913317656392038062824337
3652327925984793105172907246847023677094414821455351393962051121
8083182177840750610896383923573133536872261434818526596231169060
6550103273744647470280502580512087702608652531928666461230253981
6061426252073514311729869399272487087371248545460690134508722398
5476499537104029642559990594063568574302420354537223370647609793
5914070469296940194774706386473904559200906938983111873090308121
8392153063148362630958830429958529036243703457859882500465304738
4241045855121661319645975335646628176987427562630329145631982930
3457355499263101837014704295197539666915727491296546803494944852
83853717680609119
public exponent: 65537
Subject key identifier e2b4db5f6a0f025054d51defd27672722195462b
CRL distribution points <http://crl.tsp.zetes.com/ZETESTSPROOTCA001.crl>
Authority key identifier 38bc5c3054dce2bb20efee6f41a0316e5cfd8b75
Key usage keyCertSign
cRLSign
Basic constraints CA=true; PathLen=0
SHA1 Thumbprint 1698dc47f4f5ff956c560324e1965aa7ed38e29d
SHA256 Thumbprint d628417a992140d3bd98b310d6de33d04a91c49221841dbf0f52c81fd2fafab5

Extension (critical: true)

Additional service information

ForeSignatures

The decoded certificate:

```
[
[
Version: V3
Subject: CN=ZETES TSP QUALIFIED CA 001, SERIALNUMBER=001, O=ZETES SA (VATBE-0408425626), C=BE
Signature Algorithm: SHA256withRSA, OID = 1.2.840.113549.1.1.11

Key: Sun RSA public key, 4096 bits
modulus:
79670796370740407143206581849380389170280924059046242029037534774799458811320809970072905178541448482348252543587667311043751542073560472657297135190545391026387978224772407
95332014204349809061259652247308046066627990399768704035009312298881553170826145735947045171793720171978565261301768239103070088954926998962702641053257072924867094032617291
24934205264059173193364705541586249507683415359327192536525709342120955928411872179790740473158323149626825194303559561225493008161461440799137419524601916152077655659687136
78618299299685598704340395710467217364695033080242334321350807330698258536018496677758133676041279133176563920380628243373652327925984793105172907246847023677094414821455351
39396205112180831821778407506108963839235731335368722614348185256962311690606550103273744647470280502580512087702608652531928666461230253981606142625207351431172986939927248
70873712485454606901345087223985476499537104029642559990594063568574302420354537223370647609793591407046929694019477470638647390455920090693898311187309030812183921530631483
62630958830429958529036243703457859882500465304738424104585512166131964597533564662817698742756263832914563198293034573554992631018370147042951975396669157274912965468034949
4485283853717680609119
public exponent: 65537
Validity: [From: Fri May 20 17:20:29 UTC 2016,
To: Wed May 20 17:20:29 UTC 2026]
Issuer: CN=ZETES TSP ROOT CA 001, SERIALNUMBER=001, O=ZETES SA (VATBE-0408425626), C=BE
SerialNumber: [ 3820ee9c 74ecd147]

Certificate Extensions: 7
[1]: ObjectID: 1.3.6.1.5.5.7.1.1 Criticality=false
AuthorityInfoAccess [
[
accessMethod: 1.3.6.1.5.5.7.48.2
accessLocation: URIName: http://crt.tsp.zetes.com/ZETESTSPROOTCA001.crt,
accessMethod: 1.3.6.1.5.5.7.48.1
accessLocation: URIName: http://ocsp.tsp.zetes.com]
]

[2]: ObjectID: 2.5.29.35 Criticality=false
AuthorityKeyIdentifier [
KeyIdentifier [
0000: 38 BC 5C 30 54 DC E2 BB 20 EF EE 6F 41 A0 31 6E 8.\0T... ..oA.1n
0010: 5C FD 8B 75 \..u
]

]

[3]: ObjectID: 2.5.29.19 Criticality=true
BasicConstraints:[
CA:true
PathLen:0
]

[4]: ObjectID: 2.5.29.31 Criticality=false
CRLDistributionPoints [
[DistributionPoint:
[URIName: http://crl.tsp.zetes.com/ZETESTSPROOTCA001.crl]
]]

[5]: ObjectID: 2.5.29.32 Criticality=false
CertificatePolicies [
[CertificatePolicyId: [2.5.29.32.0]
[PolicyQualifierInfo: [
qualifierID: 1.3.6.1.5.5.7.2.1
qualifier: 0000: 16 20 68 74 74 70 73 3A 2F 2F 72 65 70 6F 73 69 . https://reposit
0010: 74 6F 72 79 2E 74 73 70 2E 7A 65 74 65 73 2E 63 tory.tsp.zetes.c
0020: 6F 6D om
], PolicyQualifierInfo: [
qualifierID: 1.3.6.1.5.5.7.2.2
qualifier: 0000: 30 2E 0C 2C 5A 45 54 45 53 20 54 53 50 20 43 50 0...ZETES TSP CP
0010: 53 20 66 6F 72 20 4E 43 50 2B 20 61 6E 64 20 51 S for NCP+ and Q
0020: 43 50 2B 20 63 65 72 74 69 66 69 63 61 74 65 73 CP+ certificates
]] ]

[6]: ObjectID: 2.5.29.15 Criticality=true
KeyUsage [
Key_CertSign
Crl_Sign
]

[7]: ObjectID: 2.5.29.14 Criticality=false
SubjectKeyIdentifier [
KeyIdentifier [
0000: E2 B4 DB 5F 6A 0F 02 50 54 D5 1D EF D2 76 72 72 ..._j...PT....vrr
0010: 21 95 46 2B !.F+
]

]

Algorithm: [SHA256withRSA]
Signature:
0000: A8 7C 4D 53 16 D5 F8 35 E4 4F F2 02 A7 B6 1C BC ..MS...5.0.....
0010: DF 47 85 B2 54 AC 53 8B 9A D1 2D 35 F3 70 56 75 ..G..T.S....-pVu
0020: 2F 8B CE EB 40 9B 34 00 EF ED A9 62 95 90 9A C5 /...@.4....b....
0030: 90 A3 1A 5C 04 7A 3C 53 6C 9E 87 E4 70 2B 36 64 ...\.z<Sl...+p6d
```

0040: D8 52 05 9C E5 10 79 7A EC B6 AD A4 00 60 F9 B8 .R...yz.....'..
0050: F3 F0 1B F4 C0 51 AA 80 13 B1 66 2A 2B 27 90 DFQ....f*+'..
0060: D1 60 7F D9 D0 0E ED A8 40 7A 52 4B 5F C3 A3 BE ..'.....@zRK<..
0070: 16 04 A8 90 1E 50 50 EA B7 C1 8E CC C5 12 D7 A6PP.....
0080: 12 0B 65 38 B2 3B AE 75 7F 18 27 C8 86 AD 2B 1D ..e8; ;u..'...+.
0090: 50 5D C6 10 11 79 5F 3F 52 C2 8B F7 26 E2 44 94 P]...y?R...&.D.
00A0: F5 66 4E EE B6 F6 6F 1C CE 28 E5 DF 86 E4 71 FC ..fF...o..(....q.
00B0: AC 78 A0 FB 45 F8 AA EE F6 FB 04 8D 59 C8 6E 98 ..x..E.....Y.n.
00C0: AD D4 3F CE 33 3C BF 98 26 FA 60 71 F7 F3 A6 64 ...?3<.&.`q...d
00D0: B7 8D C1 C5 04 E2 B0 6B 80 D7 3D DD 7C 79 67 F0k..=-.yg.
00E0: 10 DB F5 C4 F4 27 CE DC AD 4B 44 F3 83 C4 99 A6'.KD.....
00F0: 0B A7 04 9B B8 9E 8A C0 DA 32 86 80 F7 84 E9 5D2.....]
0100: 51 AC 7F 57 D1 95 A3 94 A1 66 B6 90 A7 45 71 A3 Q..W.....f...Eq.
0110: FA A9 09 68 55 53 12 81 0E D3 99 2A 2A 9E 56 47 ...hUS.....**..VG
0120: 5B 7D BF 4A B9 2C 9D 9D ED 0A 71 69 B8 45 62 50 [...J].....qi..EbP
0130: E8 72 6C 72 31 8F 45 68 D2 BD 5A 84 AD EC CB 2F ..rLrL.Eh..Z...../
0140: CF 21 A1 89 4B 7C 1B B9 E6 07 B8 33 D5 DF 20 8F !..K.....3...
0150: 78 56 3E 9A D7 FC 8E 1D 8A 50 09 AA 82 A6 A9 B4 xV>.....P.....
0160: 86 C4 3A AF 98 AF 3B 5D E9 AE 46 AA 19 60 2C 96;]..F..`..
0170: A8 67 A5 F7 B9 2E C3 E6 45 A0 8B BD ED 70 73 A4 .g.....E.....ps.
0180: E6 5D B8 FF 04 A7 A2 D6 93 5B 82 11 A9 94 03 66 .].....[.....f
0190: 62 F9 18 1C F5 BE F8 04 2A E0 E1 82 E6 0E FD 6C b.....*.....l
01A0: 08 45 C5 6B 7C 37 E9 10 7A 92 5A 3C 13 62 3F 78 .E.k.7..z.<b?x
01B0: B3 5A 85 1E 2E 45 3A 58 86 C2 B2 B8 4B 6C 64 E3 .Z...E:X...kLd.
01C0: F5 FB 4D 91 66 82 DB 5F B1 E6 64 1C 2B 6E F0 3C ..M.f...d.+n.<
01D0: 24 CA 74 49 99 24 B3 7C E1 4B F0 C8 CA 60 22 8A \$.t.I.\$...K...`..
01E0: 83 C4 3D C4 3D A8 CC 9B C2 4A 96 8D B6 E2 D1 81 ..=-.....J.....
01F0: E6 48 37 E2 B4 78 D6 C1 D5 D8 EC DB 28 0D 6A 3B .H7..x.....(.;

J

The certificate in PEM format:

-----BEGIN CERTIFICATE-----
MIIG5jCCBm6gAwIBAgIIOCDunHTS0UcwDQYJKoZIhvcNAQELBQAwYTELMakGA1UE
BHMCMQkxJDAiBgnVBAoMG1pFVEVtIFNBICChwVQRCSR0WNA4NDI1InjIZKTEMMaOg
A1UEBRMDMDAxMR4wHAYDVQQDDDBvRVFRUyBUU1AgUK9PVCBDQ0SAwMDEwHhcnMTYw
NTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUE
CgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYw
NTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUE
BgnVBAoMG1pFVEVtIFNBICChwVQRCSR0WNA4NDI1InjIZKTEMMaOgA1UEBRMDMDAx
MR4wHAYDVQQDDDBvRVFRUyBUU1AgUK9PVCBDQ0SAwMDEwHhcnMTYwNTWlMTcyMDI5
WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJ
FLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIw
MTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2
MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQ
swCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDV
QVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCR
TEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcn
MTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUEC
gwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcy
MDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZ
BVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYw
NTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0
MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5Wj
BmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQsw
CgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQ
GEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEw
HhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAI
UECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWl
MTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0
EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5Whcn
MjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0
MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI
5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQ
swCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYD
VQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwM
DEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMC
IAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwN
TWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWUR
VU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5Wh
cnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFL
TA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcy
MDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjY
wMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswC
QYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQV
FwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTE
KMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMT
YwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwb
WURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI
5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVE
JFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIw
MTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0Mj
U2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBm
MQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCg
YDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGE
JCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHh
cnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUEC
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MDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgG
ZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYw
NTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg
0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5W
jBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQsw
CgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQ
GEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEw
HhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAI
UECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWl
MTcyMDI5WhcnMjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0
EgGZBVEJFLTA0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5Whcn
MjYwNTIwMTcyMDI5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA
0MDg0MjU2MjYwMQswCgYDVQVFwMDEwHhcnMTYwNTWlMTcyMDI5WhcnMjYwNTIwMTcyMD
I5WjBmMQswCQYDVQGEJCRTEKMCIAIUECgwbWURVU0EgGZBVEJFLTA0MDg0MjU2MjYw
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-----END CERTIFICATE-----

The public key in PEM format:

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-----END PUBLIC KEY-----