

NETLOCK KFT  
CA hierarchy

## Tartalom

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## 1 Introduction

This document describes the Netlock CA hierarchy.

## 2 SHA1 CA hierarchy

### 2.1 General description

The Netlock at the end of 2012 stopped the issuance of SHA1 based certificates, and started using its SHA256 based CA infrastructure.

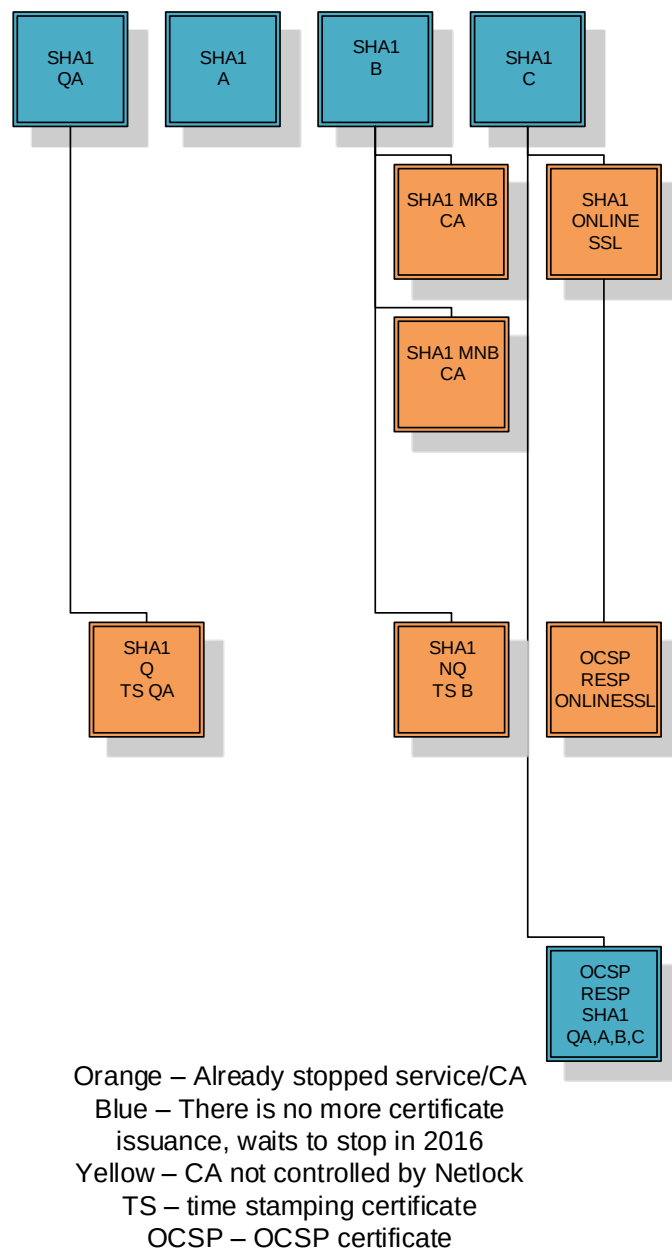
From the old SHA1 structure only OCSP responder certificates are issued for revocation checking, no enduser certificates are issued.

These roots are subjects to remove them from Root programs.

### 2.2 Issued certificate types

It issues only OCSP certificates for revocation checks.

### 2.3 Structure



## 2.4 CA certificates and CRLs

| Short name in structure | Full name                                                 | CA availability                                                                                    | CRL availability                                                                                     |
|-------------------------|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| SHA1 QA                 | Netlock Minositett Kozjegyzoi (Class QA) Tanusitvanykiado | <a href="http://www.netlock.hu/index.cgi?ca=mshea">www.netlock.hu/index.cgi?ca=mshea</a>           | <a href="http://www.netlock.hu/index.cgi?crl=mshea">www.netlock.hu/index.cgi?crl=mshea</a>           |
| SHA1 A                  | Netlock Kozjegyzoi (Class A) Tanusitvanykiado             | <a href="http://www.netlock.hu/index.cgi?ca=kozjegyzoi">www.netlock.hu/index.cgi?ca=kozjegyzoi</a> | <a href="http://www.netlock.hu/index.cgi?crl=kozjegyzoi">www.netlock.hu/index.cgi?crl=kozjegyzoi</a> |
| SHA1 B                  | Netlock Uzleti (Class B) Tanusitvanykiado                 | <a href="http://www.netlock.hu/index.cgi?ca=uzleti">www.netlock.hu/index.cgi?ca=uzleti</a>         | <a href="http://www.netlock.hu/index.cgi?crl=uzleti">www.netlock.hu/index.cgi?crl=uzleti</a>         |
| SHA1 C                  | Netlock Expressz (Class C) Tanusitvanykiado               | <a href="http://www.netlock.hu/index.cgi?ca=expressz">www.netlock.hu/index.cgi?ca=expressz</a>     | <a href="http://www.netlock.hu/index.cgi?crl=expressz">www.netlock.hu/index.cgi?crl=expressz</a>     |
| SHA1 MKB                | Netlock controlled CA for MKB Bank, Hungary               | already archived                                                                                   | already archived                                                                                     |
| SHA1 MNB                | Netlock controlled CA for MNB Bank, Hungary               | already archived                                                                                   | already archived                                                                                     |
| SHA1 OnlineSSL          | Netlock OnlineSSL Hitelesito Alegysegi                    | already archived                                                                                   | already archived                                                                                     |

## 3 SHA256 CA hierarchy

### 3.1 General description

The Netlocks SHA256 hierarchy started at the end of 2012 when the SHA1 roots are stopped.

Following the new standards it was chained under the root Netlock Arany (Gold)

The changes were:

- signer and non-signer purposes were separated by CA, for the signer CA-s only signer certificates were allowed to issue,
- the same identification levels were introduced, so the transition was seamless for the users (signer cert issued by a signer iCA, encryption cert issued by a non-signer iCA)
- Netlocks got cross certification from Microsoft on its roots for Kernel Mode Code Signing

## 3.2 Issued certificate types

### 3.2.1 Roots

They are issuing only iCA and OCSP certificates.

These are:

- NetLock Arany (Class Gold) Főtanúsítvány  
It's the actual root of the structure
- NetLock Platina (Class Platinum) Főtanúsítvány  
It's the planned root of the EV and EV Codesigning line, but it was hard to find audit partner for this previously in Hungary.

### 3.2.2 Qualified CAs

They are issuing signer certificates, applicable normalized policy is: NCP+

These are:

- NetLock Minősített Eat. (Class Q Legal) Tanúsítványkiadó  
It's only issues qualified signer certificates for natural person on SSCD  
It's also issues the Time Stamping certificates too for NetLock's time stamping service.
- NetLock Minősített Eat. (Class Q Legal S) Tanúsítványkiadó  
It's only issues qualified signer certificates on a security device

### 3.2.3 Non qualified Signer CAs

They are issuing signer end entity certificates only, applicable normalized policies are: NCP, NCP+

These are:

- NetLock Közjegyzői Eat. (Class A Legal) Tanúsítványkiadó
- NetLock Üzleti Eat. (Class B Legal) Tanúsítványkiadó
- NetLock Expressz Eat. (Class C Legal) Tanúsítványkiadó
- MNB Eat. Tanúsítványkiadó
- KELER Eat. Tanúsítványkiadó
- MKB Tanúsítványkiadó

### 3.2.4 Non qualified Non-signer CAs

They are issuing authentication, encryption, and OV SSL certificates, applicable normalized policies are: NCP, NCP+, OVCP

These are:

- NetLock Közjegyzői (Class A) Tanúsítványkiadó
- NetLock Üzleti (Class B) Tanúsítványkiadó
- NetLock Expressz (Class C) Tanúsítványkiadó

### 3.2.5 Non qualified SMIME Encryption CAs

They are issuing encryption certificates, applicable normalized policies are: NCP, NCP+

These are:

- MNB Tanúsítványkiadó
- KELER Tanúsítványkiadó

### 3.2.6 Online SSL CA (OLSSLGCA)

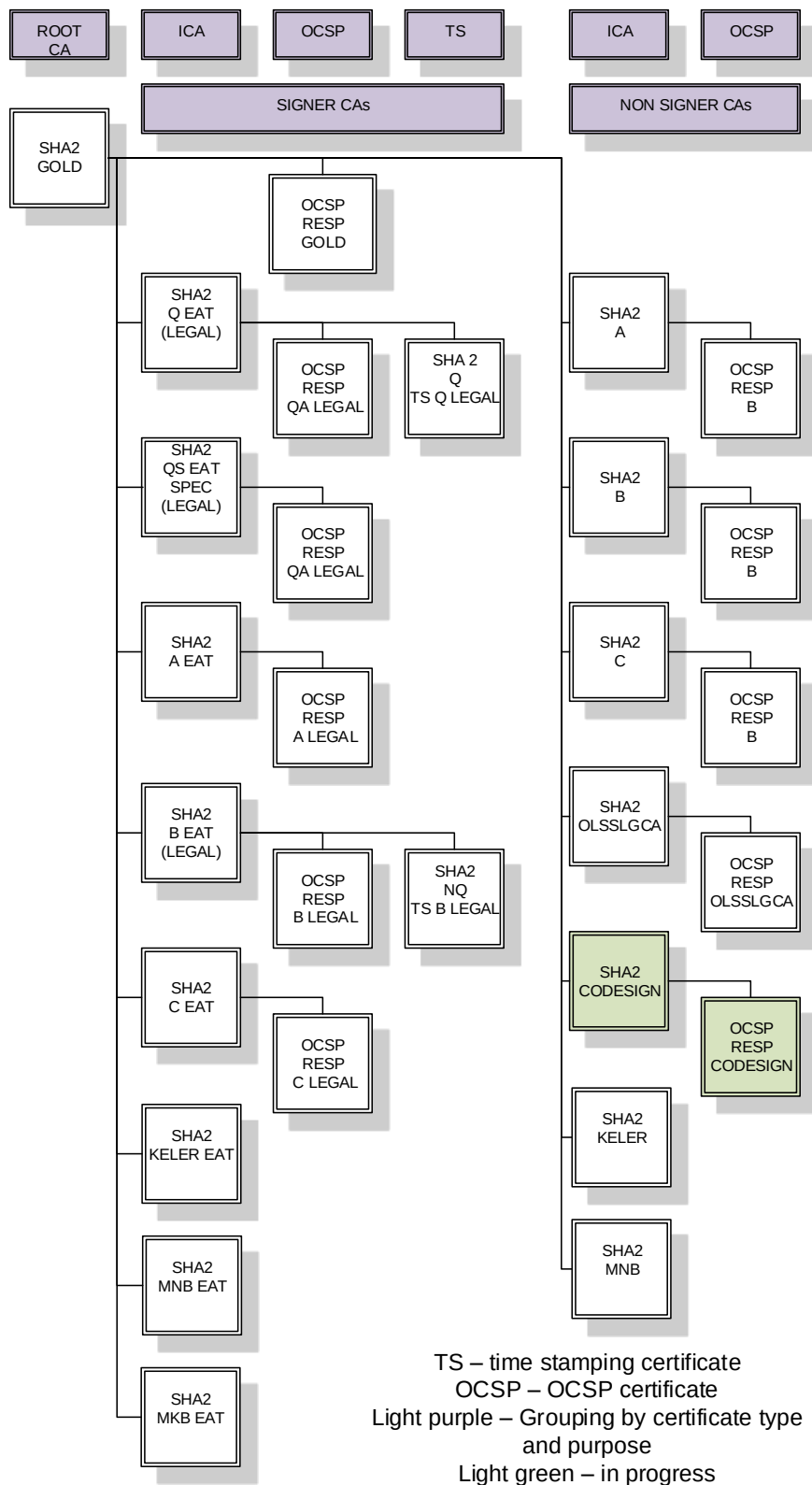
It issues DV SSL certificates only, applicable normalized policies are: DVCP

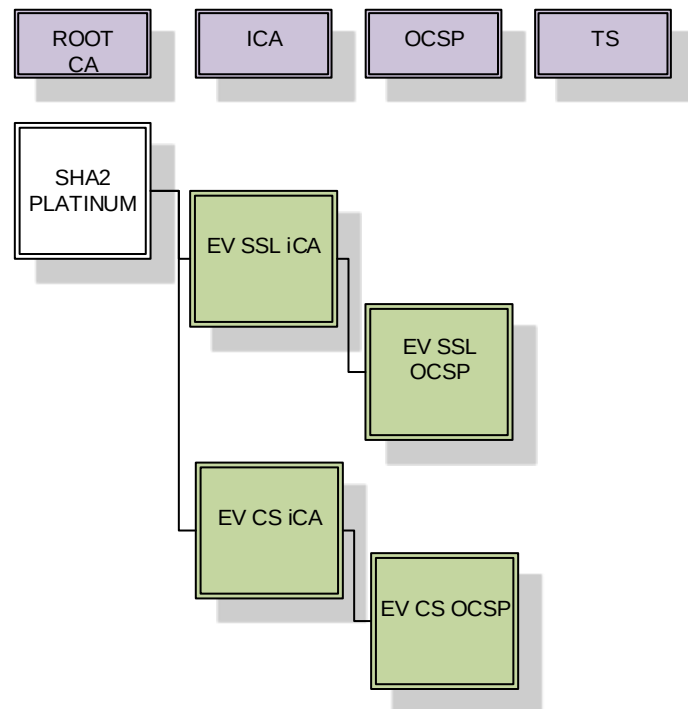
### 3.2.7 Codesign CA

It is an under progress CA, to move the CodeSign certificate issuance to a different CA because Root Program Changes before the end of 2015. Applicable normalized policy: NCP, NCP+



### 3.3 Structure





TS – time stamping certificate  
OCSP – OCSP certificate  
Light purple – Grouping by certificate type  
and purpose  
Light green – in progress

### 3.4 CA certificates and CRLs

| Short name in structure | Full name                                                  | CA availability                                                                                | CRL availability                                                                                 |
|-------------------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| SHA2 GOLD               | NetLock Arany (Class Gold) Főtanúsítvány                   | <a href="http://www.netlock.hu/index.cgi?ca=gold">www.netlock.hu/index.cgi?ca=gold</a>         | <a href="http://www.netlock.hu/index.cgi?crl=gold">www.netlock.hu/index.cgi?crl=gold</a>         |
| SHA2 PLATINUM           | NetLock Platina (Class Platinum) Főtanúsítvány             | <a href="http://www.netlock.hu/index.cgi?ca=platinum">www.netlock.hu/index.cgi?ca=platinum</a> | <a href="http://www.netlock.hu/index.cgi?crl=platinum">www.netlock.hu/index.cgi?crl=platinum</a> |
| SHA2 Q EAT              | NetLock Minősített Eat. (Class Q Legal) Tanúsítványkiadó   | <a href="http://www.netlock.hu/index.cgi?ca=cqlca">www.netlock.hu/index.cgi?ca=cqlca</a>       | <a href="http://www.netlock.hu/index.cgi?crl=cqlca">www.netlock.hu/index.cgi?crl=cqlca</a>       |
| SHA2 QS EAT             | NetLock Minősített Eat. (Class Q Legal S) Tanúsítványkiadó | <a href="http://www.netlock.hu/index.cgi?ca=cqlsca">www.netlock.hu/index.cgi?ca=cqlsca</a>     | <a href="http://www.netlock.hu/index.cgi?crl=cqlsca">www.netlock.hu/index.cgi?crl=cqlsca</a>     |
| SHA2 A EAT              | NetLock Közjegyzői Eat. (Class A Legal) Tanúsítványkiadó   | <a href="http://www.netlock.hu/index.cgi?ca=calca">www.netlock.hu/index.cgi?ca=calca</a>       | <a href="http://www.netlock.hu/index.cgi?crl=calca">www.netlock.hu/index.cgi?crl=calca</a>       |
| SHA2 B EAT              | NetLock Üzleti Eat. (Class B Legal) Tanúsítványkiadó       | <a href="http://www.netlock.hu/index.cgi?ca=cblca">www.netlock.hu/index.cgi?ca=cblca</a>       | <a href="http://www.netlock.hu/index.cgi?crl=cblca">www.netlock.hu/index.cgi?crl=cblca</a>       |
| SHA2 C EAT              | NetLock Expressz Eat. (Class C Legal) Tanúsítványkiadó     | <a href="http://www.netlock.hu/index.cgi?ca=cclca">www.netlock.hu/index.cgi?ca=cclca</a>       | <a href="http://www.netlock.hu/index.cgi?crl=cclca">www.netlock.hu/index.cgi?crl=cclca</a>       |
| SHA2 A                  | NetLock Közjegyzői (Class A) Tanúsítványkiadó              | <a href="http://www.netlock.hu/index.cgi?ca=caca">www.netlock.hu/index.cgi?ca=caca</a>         | <a href="http://www.netlock.hu/index.cgi?crl=caca">www.netlock.hu/index.cgi?crl=caca</a>         |
| SHA2 B                  | NetLock Üzleti (Class B) Tanúsítványkiadó                  | <a href="http://www.netlock.hu/index.cgi?ca=cbca">www.netlock.hu/index.cgi?ca=cbca</a>         | <a href="http://www.netlock.hu/index.cgi?crl=cbca">www.netlock.hu/index.cgi?crl=cbca</a>         |
| SHA2 C                  | NetLock Expressz (Class C) Tanúsítványkiadó                | <a href="http://www.netlock.hu/index.cgi?ca=ccca">www.netlock.hu/index.cgi?ca=ccca</a>         | <a href="http://www.netlock.hu/index.cgi?crl=ccca">www.netlock.hu/index.cgi?crl=ccca</a>         |
| SHA2 MKB EAT            | MKB Tanúsítványkiadó                                       | <a href="http://crl.mkb.hu/CA4.crt">http://crl.mkb.hu/CA4.crt</a>                              | <a href="http://crl.mkb.hu/CA4.crl">http://crl.mkb.hu/CA4.crl</a>                                |
| SHA2 MNB EAT            | MNB Eat. Tanúsítványkiadó                                  | <a href="http://cdp.mnb.hu/LHSZ1.crt">http://cdp.mnb.hu/LHSZ1.crt</a>                          | <a href="http://cdp.mnb.hu/LHSZ1.crl">http://cdp.mnb.hu/LHSZ1.crl</a>                            |
| SHA2 KELER EAT          | KELER Eat. Tanúsítványkiadó                                | <a href="http://www.keler.hu/crl/lhsz2.crt">http://www.keler.hu/crl/lhsz2.crt</a>              | <a href="http://www.keler.hu/crl/lhsz2.crl">http://www.keler.hu/crl/lhsz2.crl</a>                |
| SHA2 MNB                | MNB Tanúsítványkiadó                                       | <a href="http://cdp.mnb.hu/LHSZ1.crt">http://cdp.mnb.hu/LHSZ1.crt</a>                          | <a href="http://cdp.mnb.hu/LHSZ1.crl">http://cdp.mnb.hu/LHSZ1.crl</a>                            |
| SHA2 KELER              | KELER Tanúsítványkiadó                                     | <a href="http://www.keler.hu/crl/lhsz2.crt">http://www.keler.hu/crl/lhsz2.crt</a>              | <a href="http://www.keler.hu/crl/lhsz2.crl">http://www.keler.hu/crl/lhsz2.crl</a>                |

## 4 Cross certifications

The Netlock has only cross certifications from Microsoft. They are intended to use for Kernel Mode Code Signing certificate root, but now the Kernel Mode Signing is strongly tied to EV Rules, after the Webtrust for EV audit is possible to move forward.

|                          |                                                   |                                                                                                        |
|--------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| MCCA<br>SHA2<br>GOLD     | NetLock Arany (Class Gold)<br>Főtanúsítvány       | <a href="http://www.netlock.hu/index.cgi?ca=mccagold">www.netlock.hu/index.cgi?ca=mccagold</a>         |
| MCCA<br>SHA2<br>PLATINUM | NetLock Platina (Class Platinum)<br>Főtanúsítvány | <a href="http://www.netlock.hu/index.cgi?ca=mccaplatinum">www.netlock.hu/index.cgi?ca=mccaplatinum</a> |

## 5 CA certificates not covered by any root programs

### 5.1 SHA1 Governmental CA hierarchy

#### 5.1.1 General description

The Netlock has Intermediate certificates which are certified by the former governmental CA KGYHSZ in Hungary.

The Netlock at the end of 2012 stopped the issuance of SHA1 based certificates, and started using its SHA256 based CA infrastructure.

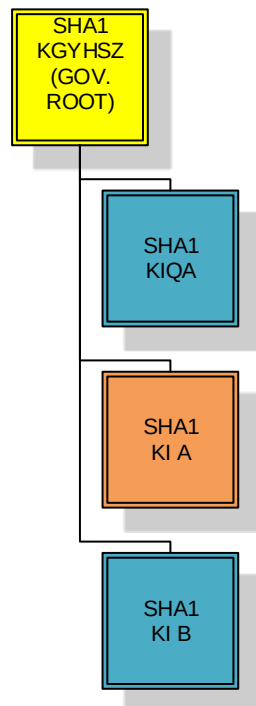
From the old SHA1 Governmental structure there is no certificate issuance.

These roots are not subjects any Root programs, they are in separated tree.

#### 5.1.2 Issued certificate types

Its not issuing any certificates.

#### 5.1.3 Structure



Orange – Already stopped service/CA

Blue – There is no more certificate issuance, waits to stop in 2016

Yellow – CA not controlled by Netlock

TS – time stamping certificate

OCSP – OCSP certificate

#### 5.1.4 CA certificates and CRLs

| Short name in structure | Full name                                                                                                | CA availability                                                                                               | CRL availability                                                                                              |
|-------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| SHA1 KGYHSZ             | KGYHSZ (Public Administration Root CA - Hungary)<br><br>Governmental root in Hungary, not Netlock owned. | <a href="http://www.kgyhsz.gov.hu/KGYHSZ_CA_20060719.cer">http://www.kgyhsz.gov.hu/KGYHSZ_CA_20060719.cer</a> | <a href="http://www.kgyhsz.gov.hu/KGYHSZ_CA_20060719.crl">http://www.kgyhsz.gov.hu/KGYHSZ_CA_20060719.crl</a> |
| SHA1 KIQA               | Netlock Minositett Kozjegyzoi (Class QA) Tanusitvanykiado                                                | <a href="https://www.netlock.hu/index.cgi?ca=mkozig">https://www.netlock.hu/index.cgi?ca=mkozig</a>           | <a href="https://www.netlock.hu/index.cgi?crl=mkozig">https://www.netlock.hu/index.cgi?crl=mkozig</a>         |
| SHA1 KI A               | NetLock (Class A) Közigazgatási Tanúsítványkiadó                                                         | already archived                                                                                              | already archived                                                                                              |
| SHA1 KI B               | (NetLock (Class B) Közigazgatási Tanúsítványkiadó)                                                       | <a href="https://www.netlock.hu/index.cgi?ca=bkozig">https://www.netlock.hu/index.cgi?ca=bkozig</a>           | <a href="https://www.netlock.hu/index.cgi?crl=bkozig">https://www.netlock.hu/index.cgi?crl=bkozig</a>         |

## 5.2 SHA256 Governmental CA hierarchy

### 5.2.1 General description

The Netlock has Intermediate certificates which are certified by the SHA256 root of the governmental CA KGYHSZ.

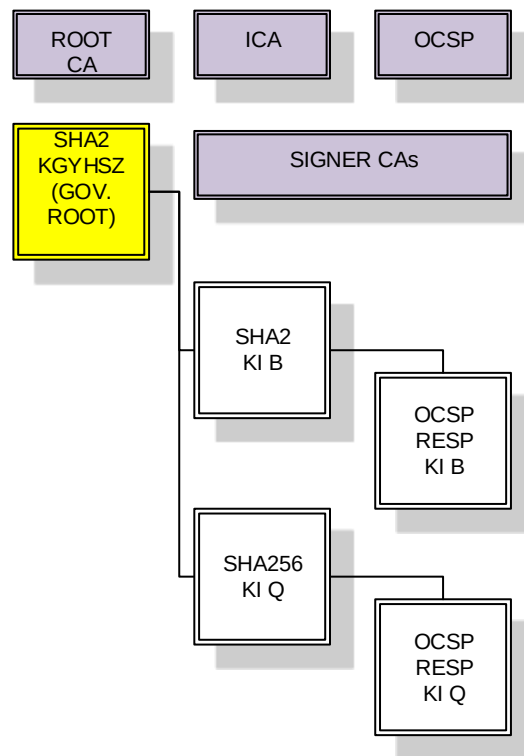
These roots are issuing singer certificates for public administration purposes

These roots are not subjects any Root programs, they are in separated tree.

### 5.2.2 Issued certificate types

From these iCAs singer and authentication certificates can be bought for public administration purposes.

### 5.2.3 Structure



Yellow – CA not controlled by Netlock  
TS – time stamping certificate  
OCSP – OCSP certificate  
Light purple – Grouping by certificate type  
and purpose

#### 5.2.4 CA certificates and CRLs

| Short name in structure | Full name                                                                                               | CA availability                                                                                               | CRL availability                                                                                              |
|-------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| SHA2 KGYHSZ             | KGYSZ (Public Administration Root CA - Hungary)<br><br>Governmental root in Hungary, not Netlock owned. | <a href="http://www.kgyhsz.gov.hu/KGYHSZ_CA_20091210.cer">http://www.kgyhsz.gov.hu/KGYHSZ_CA_20091210.cer</a> | <a href="http://www.kgyhsz.gov.hu/KGYHSZ_CA_20091210.crl">http://www.kgyhsz.gov.hu/KGYHSZ_CA_20091210.crl</a> |
| SHA2 KI Q               | NetLock Minősített Közigazgatási (Class Q) Tanúsítványkiadó                                             | <a href="https://www.netlock.hu/index.cgi?ca=mkozig256">https://www.netlock.hu/index.cgi?ca=mkozig256</a>     | <a href="https://www.netlock.hu/index.cgi?crl=mkozig256">https://www.netlock.hu/index.cgi?crl=mkozig256</a>   |
| SHA2 KI B               | NetLock Közigazgatási Üzleti (Class B) Tanúsítványkiadó                                                 | <a href="https://www.netlock.hu/index.cgi?ca=bkozig256">https://www.netlock.hu/index.cgi?ca=bkozig256</a>     | <a href="https://www.netlock.hu/index.cgi?crl=bkozig256">https://www.netlock.hu/index.cgi?crl=bkozig256</a>   |