



Approved signature certificates

When submitting a properly formatted eBill (PDF file with embedded attachment) to the eBill infrastructure, the following certificates are permitted for digital signatures:

- qualified electronic signatures
- qualified time stamps

Certificates issued by the following providers (exhaustive list) can be used for signing the PDF file:

Qualified Organizational Certificates

| Issuer | Swisscom | SwissSign | QuoVadis | BIT |
|--|-----------------------|---------------------------|---|----------------------------------|
| Issuing CA* | Swisscom Diamant CA 4 | No offering at the moment | QuoVadis Swiss Regulated CA G2x QuoVadis Swiss Regulated CA G3 | Swiss Government Regulated CA 02 |
| * Example only; not an exhaustive list | | | | |

Qualified Timestamps¹

| Issuer | Swisscom | SwissSign | QuoVadis | BIT |
|--|---------------------|--|--|----------------------------------|
| Issuing CA* | Swisscom TSS CA 4.1 | SwissSign Qualified TSA ICA 2021 - 1 SwissSign TSA Platinum CA 2017 - G22 | QuoVadis Time-Stamping Authority CA G1 | Swiss Government Regulated CA 02 |
| * Example only; not an exhaustive list | | | | |

¹ Deployment possible in April 2022



Client certificates for web server authentication - approved authentication certificates²

Banks must use client certificates when accessing the eBill and DD platform.

SIX accepts client certificates from several issuers (certificate authorities):

| Issuer | DigiCert | SwissSign | QuoVadis |
|------------|---|---------------------------------------|-------------------------------|
| Issuing CA | DigiCert SHA2 Secure Server CA | SwissSign Personal Gold CA 2008 - G2 | QuoVadis Swiss Advanced CA G3 |
| | RapidSSL RSA CA 2018 | SwissSign Personal Gold CA 2014 - G22 | QuoVadis Global SSL ICA G3 |
| | DigiCert SHA2 Assured ID CA | SwissSign EV Gold CA 2014 - G22 | QuoVadis Global SSL ICA G2 |
| | DigiCert SHA2 Extended Validation Server CA | SwissSign RSA TLS Root CA 2021 - 1 | |
| | Thawte TLS RSA CA G1 | SwissSign RSA TLS EV ICA 2021 - 1 | |

Companies that intend to use either certificates from other third-party providers or the bank's own certificates should contact SIX in advance. In order to guarantee a high level of security, the certificates must meet the following conditions at a minimum:

- Validity of the user certificate: not expired; new applications must be valid for another nine months
- Validity of the root certificate: not expired; new applications must be valid for another five years
- Standard: X.509 V3
- Signature algorithm: sha2RSA
- Key length: at least 2048 bit
- Key usage: client authentication, digital signature

² Deployment possible in April 2022; mandatory from October 2022