

# Guide Certificate Administration

Swish Certificate Management

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2018-12-05	1.4	Magnus Lageson	Removal of bgid

# 1. Swish Certificate Management

## 1.1. Background

There is a merchant commerce solution to provide possibility for consumers to pay with Swish in store or in e-commerce. A merchant can integrate to this solution directly, or by using a Technical Supplier (referred to as **TS** in this document) who does the integration.

A merchant is enrolled by his bank and will get a Swish Alias starting with 123. A Technical Supplier is enrolled by Getswish and will get a Swish Alias starting with 987.

In order to integrate a merchant commerce solution with Swish API the merchant or the TS needs to get a client TLS certificate from Swish Certificate Management and install it on their server. The certificate will be used for client authentication of TLS communication with Swish API.

The Swish server is set up with a TLS server certificate, which needs to be verified when initiating TLS from a merchant web server to Swish.

More information about Swish certificate handling is available in the **Merchant Guide Swish API** and **Technical Supplier Guide Swish API**.

## 1.2. Certificate Administration

Persons who are authorised by a merchant/TS as Certificate Point of Contacts (CPOC) can administrate a merchant's/TS's certificates by logging in to the Swish Certificate Management which is available at <https://comcert.getswish.net/>.

The following functions are provided:

- Log-in and Log-out
- List all certificates that the CPOC is authorised to administer
- Download the certificate chain for the Swish-server TLS certificate that is used for authentication of the Swish server.
- Download previously issued client certificates for the Merchant/TS
- Ordering a new certificate for the Merchant/TS
- Revoke certificates for the Merchant/TS

# 2. Functions

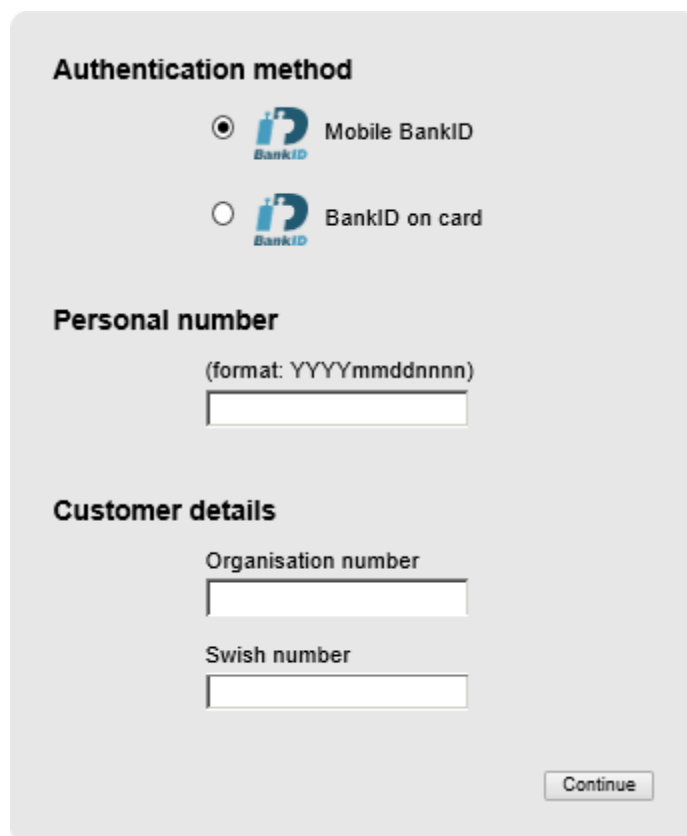
## 2.1. Log in

A person that has been registered by a merchant's bank to represent the merchant can log in to Swish Certificate Management by providing organisation number and the Swish number that is to be administered. For TS, the person has been registered by Getswish.

If the person uses a BxID it is the person's identity number instead of the personal number that is provided.

A person can authenticate his or her identity using Mobile BankID or BankID on card (or BxID).

If the person uses Mobile BankID he or she will also have to provide his or her Personal number. Only the certificates related to one specific Swish number can be administered at a time.



The form is titled 'Authentication method' and contains two radio button options: 'Mobile BankID' (selected) and 'BankID on card'. Below this is a section for 'Personal number' with a text input field and a format hint '(format: YYYYmmddnnnn)'. The 'Customer details' section includes two more text input fields for 'Organisation number' and 'Swish number'. A 'Continue' button is located at the bottom right of the form.

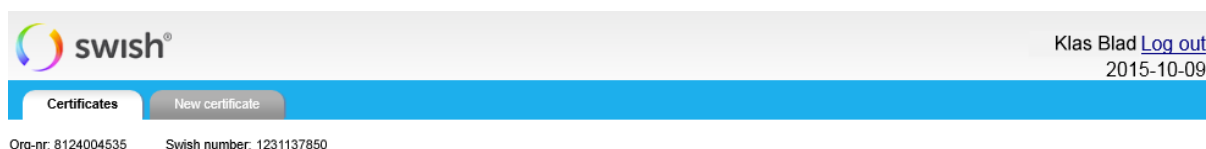
If a person represents more than one merchant/TS, or if one merchant/TS has more than one Swish number, and the person needs to administer the certificates related to another Swish number, the person must log out and log in again by providing the new information.

## 2.2. General functionality

The name of the person that is logged in and the date is displayed at the top right corner of the page.

The merchant's/TS's organisation number and the Swish number that is administered are always displayed under the top menu.

Through tabs on the top menu the person can choose to display a list of certificates issued for the merchant/TS and the Swish number that is administered, or to request a new certificate.








## 2.3. List all Certificates

A list of certificates issued for the merchant/TS and the Swish number that is administered is displayed by default when logging in.

Above the list is a link through which it is possible to download the certificate chain for the Swish server TLS certificate.

#### Certificate list

[Download Swish server TLS certificate](#)

Issued (GMT)	Valid through (GMT)	Issuer	Requested by	Status	Download	Revoke
2015-09-09 22:00:00	2017-09-09 21:59:59	BGABSESS	197908089274	VALID	<a href="#">Download</a>	
2015-09-01 22:00:00	2017-09-01 21:59:59	BGABSESS	197908089274	VALID	<a href="#">Download</a>	
2015-08-12 22:00:00	2017-08-12 21:59:59	BGABSESS	198001139297	VALID	<a href="#">Download</a>	
2015-08-12 22:00:00	2017-08-12 21:59:59	BGABSESS	196705053723	VALID	<a href="#">Download</a>	
2015-08-11 22:00:00	2017-08-11 21:59:59	BGABSESS	196705053723	REVOKED	<a href="#">Download</a>	

The list of certificates contains the following information:

Column	Description
Issued (GMT)	The date and time when the certificate was issued.
Valid through (GMT)	The date and time when the certificate expires.
Issuer	The BIC of the bank that issued the certificate.
Requested by	The person number (or identity number) of the person that requested the certificate.
Status	The status of the certificate. The status can be either “Valid”, “Expired”, or “Revoked”.
Download	Link through which it is possible to download the certificate.
Revoke	Link through which it is possible to revoke a certificate.

## 2.4. Download Swish Server TLS Certificate

In order to download the certificate chain for the Swish server TLS certificate copy the text in the text area and save it to a file. The text represents the certificate chain of the Swish server TLS certificate, i.e. the Swish Root CA certificate and the Intermediate CA certificate in PEM format.

### Download certificate

#### Swish server TLS certificate

To download, copy to clipboard:

(Format: PEM)

```
-----BEGIN CERTIFICATE-----
MIIFrjCCB5agAwIBAgIIEclBF0nNX3UwDQYJKoZIhvcNAQENBQAwWzEUMBIGA1UE
CgwLR2V0c3dpY2ggQUl4HjAcBgNVBAsMFUN3aXNoIEI1bWJlciBCYW5rcyBDQTEj
MCEGA1UEAwwVGVzZCBTd21saCBzS290IENBIHYxIFRlczQwHhcNMjUwNTI1MTM1
NDU5Fw0cMjUwNTI1NDU5FjBbMRQwEgYDVQQKDAthMjZXRzd21saCBzS290IENBIHYx
A1UECwwVU3dpY2ggTWFtYmVtIEJhbmVtIENENEM3MwIQYDVQQDBpU2XN0IFN3aXNo
IFJvb3QgQ00EgdjEgVGVzZDCCAiIwDQYJKoZIhvcNAQEBBQADggIPADCCAgoCggIB
AL1HS8jTaFkVCF2nx1Jjvt17CP+9eKGHhmXx75/sKRTtCTtJx2OxZtKCs0onQ24d
3x2Tfy1g1oJMyAT1bFcEC5OuCge2IuMGVgtQs9b2ZHL72u0FCbRZoOHwke2sv60d
QQ9AapKX/Dx5J0nybqFCxg6EtfCvUP9eY/ViAs/RuIvy1GfPwqresEq+32mJQWqB
u06h+1Fv3WuLk11Zxk58AKsVgsGI93+thpQUHHOD1M6t5xBUtObKRx0q4x0EX5D
ofuTdhFw6HQqQRWAMI7iK65XkR9Ce29FidJBqTGVemeVqaLjwB6CI2Tj0b4VhS
JCGOnE830qVyyNk1Kb2YBU70/krbg4S9A/26MwArWJeOtyQW39CGxVcX/w+OvP8
E1qOTM2GV2UX4WtecrPPW6C1GFpKDPW/tt1+LCtJUaA0WygU8jSadtW/MXd81k0qj
9Y9a/Us3RE76VsWdMtIlsZLFi9DP5aSiSbrg/fkMbw763t6DDvnaTi4N/it1bP
E31y0aJa11teqh5WWGt+HHDWoZydHOasBk28Rq5HV6Xr7mvrRm34y8Py8M+o+ITV
KYogpLXcR9T+Ab1PTa+Bf/NAJWEMaMKiWMB/E+978aB6wBLEP9fSLPAN3YxegjZUC
cHGcRQM50A5sIpAxpEKxjV0mXpSKf5R0no+T5DcHHWG3AgMBAAGjZjB0MB0GA1Ud
DgQWBQZaH13VskneJrYkTgk97a6S/0GjAPBgNVHRMBAf8EBTADAQH/MB8GA1Ud
IwQYMBaAFBZ1oEXdWysd4mtiRMaT3trpL/QaMBEGA1UdIAQKMAgwBgYEKqMEBTAQ
BgNVHQ8BAf8EBAMCAQYwDQYJKoZIhvcNAQENBQADggIBAHH/NnOCk+k+QRieltgEKR
vyNp/1w/nPn98GuhdSr6dypMDovMxpH9Pvqr+Izn7pnW7WnEUM3gaupJmimUWBS
```

On the merchant/TS web server, choose to trust Swish Root CA (o=Getswish AB, ou=Swish Member CA, cn=Swish Root CA v1). For details on how to perform this consult the web solution documentation or the web solution supplier.

## 2.5. Download Client Certificate

It is possible to download all certificates that have been issued for the merchant/TS and the Swish number that is administered.

If a certificate has expired or has been revoked an information message is displayed if a person tries to download it.

In order to download a certificate, copy the text in the text area and save it to a file on the merchant web server. The text represents the certificate together with the certificate chain, i.e. the Swish Root CA certificate and two intermediate bank CA certificates, in either PEM or PKCS#7 format.



## 2.6. Order a new Certificate

In order to request a new certificate, paste the text content of a Certificate Signing Request (CSR), (PKCS#10 with 4096-bit RSA key), in the text area. Then choose the desired format of the certificate, i.e. PEM or PKCS#7, and the BIC of the bank that should issue the certificate and click the “Generate” button.

### New certificate

Paste CSR (PKCS #10 with 2048-bit RSA key):

Certificate format:

PKCS #7

PEM

BIC:

(Choose one) ▼

Generate

In order to download the generated certificate, copy the text in the text area and save it to a file. The text represents the certificate together with the certificate chain, i.e. the Swish Root CA certificate and two intermediate bank CA certificates, in either PEM or PKCS#7 format.

## 2.7. Revoke Certificate

Before a certificate is revoked a warning is displayed together with information about the certificate, and the person must confirm that the certificate should be revoked.

Revoking a certificate is irreversible and will lead to discontinuation of the Swish service for the merchant/TS if that specific certificate is being used.

### Revoke certificate

#### Warning!

You are about to revoke the following certificate:

*Organisation number: 5510071250*

*Swish number: 1234567889*

*Issued (GMT): 2018-04-26 17:41:50*

*Valid through (GMT): 2020-04-26 17:41:50*

*Issuer: SWEDSESS*

*Requested by: 198812311234*

*Status: VALID*

Revoking a certificate is irreversible and will lead to discontinuation of the Swish service for the merchant.

Revoke

## 2.8. Logout

A person can log out by clicking on the “Log out” link at the top right corner of the page.

If a person is inactive for a more than 15 minutes he or she will be logged out automatically.