

# Generating a request for a subsequent certificate User Guide

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# 1. Introduction

This document serves as a guide on how to proceed when generating a subsequent certificate request through the website.

# 2. Software requirements

The computer on which the certificate request will be generated must meet the following requirements:

- 2.1. installed and running operating system:
  - Windows 7 ServicePack 1
  - Windows 8.1 (April 2014 update)
  - Windows 10
  - Windows 11

2.2. The supported browsers are:

- Microsoft Edge
- Chrome
- Firefox
- Opera

2.3. Javascript scripting support enabled in the internet browser, support for storing cookies.

2.4. I.CA PKIService host component and extension installed

2.5. I.CA SecureStore Card Manager (only when generating a request for a smart card)

# 3. The Process of Generating a Request for a Subsequent Certificate

The procedure for generating a request for a subsequent certificate is divided into several steps:

- 1. System Test
- 2. Verification
- 3. Recapitulation
- 4. Signing a Request
- 5. Finalization





### 1.1. Software Test

To make it easier to check if your computer is ready to generate a request, a check page is displayed when you start generating the request to verify that key software components are present.

| <b>1</b> . System Test | <b>2.</b> Verification | 3. Recapitulation    | <b>4</b> . Signing a Request | 5. Finalization |
|------------------------|------------------------|----------------------|------------------------------|-----------------|
|                        |                        |                      |                              |                 |
|                        |                        |                      |                              |                 |
|                        |                        | Continue             |                              |                 |
|                        | SYSTEM TEST            |                      |                              |                 |
|                        |                        | <u>ن</u>             |                              |                 |
|                        | ln p                   | progress test your ( | computer                     |                 |

In the absence of the component and the **I.CA PKIService Host** extension, an error message appears, see below.

| <b>1.</b> System Test   | 2. Verification   | <b>3.</b> Recapitulation   | <b>4.</b> Signing a Request        | 5. Finalization |  |  |  |  |
|-------------------------|---|--|------------------------------------|-----------------|--|--|--|--|
|                         |   |  |                                    |                 |  |  |  |  |
|                         |   | Test ended in er   | ror                                |                 |  |  |  |  |
| Description             |   | Details  |                                    |                 |  |  |  |  |
| Browser extension       |   | Extension is not installed. Inst   | all the missing <b>Extension</b> . |                 |  |  |  |  |
|                         | Copyright I.CA All Rights Reserved   První certifikační autorita, a.s.   Contacts   9.16.00 |  |                                    |                 |  |  |  |  |
| <b>1.</b> System Test   | 2. Verification   | <b>3.</b> Recapitulation   | <b>4.</b> Signing a Request        | 5. Finalization |  |  |  |  |
|                         |   | Test ended in er   | ror                                |                 |  |  |  |  |
| Description             |   | Details  |                                    |                 |  |  |  |  |
| I.CA PKIServiceHost cor | nponent   | Component I.CA PKIServiceHost not installed on your computer. Install the missing component<br>I.CA PKIServiceHost |                                    |                 |  |  |  |  |
|                         |   | Continue   |                                    |                 |  |  |  |  |

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Click on the highlighted "**I.CA PKIServiceHost**" and "**Extension**" to install the necessary components to generate the request on the PC. After successful installation, restart the browser.

# AUTHORITY

If you have a certificate stored on your smart card, you may receive an error for the **SecureStore** application you download and install.

The page will test the computer, if no problems are detected, it will automatically proceed to the actual creation of the subsequent certificate request.

If an error occurs during the check, you cannot proceed with the creation of the subsequent certificate request. First, you must resolve the error that prevents the certificate request from being created. The meaning of the error messages is given in the following sections.

### 3.1.1. Unsupported Operating System

To generate a request, you must use one of the operating systems listed in Chapter 2.

### 3.1.2. Unsupported Internet Browser

To generate a request, you must use one of the browser versions listed in Chapter 2.

### 3.1.3. Javascript Support

The pages used to generate the certificate request require JavaScript scripting support. If this check fails, it most likely means that scripting support is disabled in the browser settings. Enable JavaScript scripting support in your browser.

### 3.1.4. I.CA PKIService Host

The site requires the **I.CA PKIService Host** component installed for its functionality. Make sure you have it installed. If you don't have the component installed on your computer, use the highlighted name I.CA PKIService Host to download it, after installation it is necessary to restart the browser.

### 3.1.5. Extension (Add-on) I.CA PKIService Host

It is also necessary to have a browser extension installed and enabled. Clicking on the highlighted name of the Extension will redirect you to the settings where you can find and install the extension, after installation it is necessary to refresh the page.

### 3.1.6. Storing Cookies

In order for the request generation pages to work properly, your browser must allow the site to store cookies. If you have disabled the storage of cookies, please enable it.



## 1.2. Selecting a Certificate to Create a Subsequent Certificate Request

If the checking process is error-free, the page displays a form where you select a valid certificate for which you want to issue a subsequent certificate.

| <b>1.</b> System Test   | <b>2.</b> Verification | 3. Recapitulation   | <b>4.</b> Signing a Request                             | 5. Finalization |  |  |
|---|------------------------|---|---|-----------------|--|--|
|   |                        |   |   |                 |  |  |
|   | Choose W               | <b>/here is your certificate s</b><br>al certificate store in Windows | tored (registered)<br>Other storage (eg I.CA smart card | )               |  |  |
| Select the certificate for which you want to issue a renewal certificate. |                        |   |   |                 |  |  |
|   | [2023-03-20]           |   |   | ¥               |  |  |
|   |                        | Continue  |   |                 |  |  |

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If your certificate is stored in the **Windows certificate storage**, leave "**The personal certificate store in windows**" selected. If your certificate is on an I.CA smart card, select "**Other storage**" (e.g. I.CA smart card).

Depending on your previous selection, you are presented with a list of certificates for which a subsequent certificate can be issued. If you have selected **Other storage**, you must have a card reader connected and a smart card inserted.

A subsequent certificate can only be issued for certificates that have not expired and are not placed on the CRL!

If you receive an email notifying you that your certificate is about to expire, the email contains a URL where you can create a request for a subsequent certificate. The URL also includes the serial number of the certificate.

If you enter this URL in your browser, the certificate is selected automatically.





#### 1.3. Recapitulation

1. System Test

2. Verification

3. Recapitulation

5. Finalization

4. Signing a Request

| Data overview  |  |  |  |  |  |
|--|--|--|--|--|--|
| Certificate sent in the ZIP format                   | Yes                                      |  |  |  |  |
| Period of validity                                   | 365                                      |  |  |  |  |
| Key Repository Type (CSP)                            | Operating System Windows                 |  |  |  |  |
| Algorithm thumbnails / Key length                    | sha256Algorithm / 2048                   |  |  |  |  |
| Allow exporting the key                              | Yes                                      |  |  |  |  |
| Allow the strong key protection                      | Yes                                      |  |  |  |  |
| Extended usage setting key of qualified certificate  | id-kp-emailProtection                    |  |  |  |  |
| Extended usage setting key of commercial certificate | id-kp-clientAuth / id-kp-emailProtection |  |  |  |  |
| certifica  | te settings                              |  |  |  |  |
| Full name  | Full name                                |  |  |  |  |
| Given name   | Given name                               |  |  |  |  |
| Surname  | Surname                                  |  |  |  |  |
| Organization   | Organization                             |  |  |  |  |
| E-mail in the certificate extensions                 | E-mail in the certificate extensions     |  |  |  |  |
| IK MPSV  | IK MPSV                                  |  |  |  |  |
| Country  | Country                                  |  |  |  |  |
| SN ICA   | SN ICA                                   |  |  |  |  |
| SN ICA   | SN ICA                                   |  |  |  |  |
| The data   | are still valid?                         |  |  |  |  |
| YES, the data are valid                              | NO, the data have changed                |  |  |  |  |

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If the entries in the certificate are up to date, continue by clicking "YES, the data are valid" to start generating the certificate request.

If an item in the certificate has changed, continue by clicking "NO, the data have changed" and proceed to section 3.4 Adding and changing some data.



### 1.4. Additions and Changes to Certain Data

In this step, you can modify some of the information that your subsequent certificate will contain.

| 1. System Test 2. Verification     | <b>3.</b> Recapitulat   | ion <b>4.</b> Sign | ning a Request  | 5. Finalization  |
|------------------------------------|-------------------------|--------------------|-----------------|------------------|
|                                    |                         |                    |                 |                  |
|                                    |                         |                    |                 |                  |
| Revocation password                | Perocation password     |                    | 0               |                  |
|                                    | Revocation password     |                    |                 |                  |
| Key Repository Type (CSP)          | Operating System Window | /S                 | *               |                  |
| Certificate sent in the ZIP format | Allow export            | ing the key 🕐      | Allow the stron | g key protection |
| id-kp-clientAuth 2                 | id-kp-email             | Protection 🕜       | □ ms-SmartCardl | .ogon 🕜          |
| Edit the e-mail 🗌 Delete 🔲 Change  |                         |                    |                 |                  |
| TWIN qualified                     |                         |                    |                 |                  |
| IK MPSV 🕐 🗆 Delete 🗆 Change        |                         |                    |                 |                  |
| For issuance of a certifica        | te with correct data    | a, please contact  | I.CA´s techn    | ical support.    |
|                                    |                         |                    |                 |                  |
|                                    |                         |                    |                 |                  |
|                                    | Continue                | Exit guide         |                 |                  |

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### Password for invalidation:

If during the use of the certificate the private key is compromised, data is changed (change of name, residence...) or there are other reasons why the certificate should no longer be used, it is necessary to invalidate the certificate.

The certificate can be invalidated via the web interface. When you invalidate the certificate, you will be prompted to enter a password for invalidation.

If you do not enter a password, the password set for the current certificate will be used as the password to invalidate the certificate.

If you choose to enter a different password, it must be between 4 and 32 characters long. Only upper and lower case letters without diacritics and numbers are allowed.



### Key Storage Type (CSP):

For **Key Storage Type (CSP)**, select the Cryptographic Service Provider (CSP) module from the menu that generates your private key. All CSPs displayed here are installed on your computer.

### Send certificate in ZIP format

If you want to send the public part of the new certificates in ZIP format, leave the box checked.

### **Private Key Export:**

If your chosen key store type (CSP) supports private key exporting, you are offered the option to enable private key exporting. This option allows you to export the certificate including the private key. This will allow you to transfer the private key between storages. Key management requires extra care in this case due to the higher risk of key theft/misuse.

### Strong private key protection:

If your chosen key store type (CSP) supports strong private key protection, you are offered the option to enable strong private key protection. Before each use of your key, you will be notified that your key is being used.

You then have the option to choose between: **Medium** - you will only ever be notified by an informative message **Strong** - you will be required to enter a password before each use

### Editing your email:

If an email is included in an existing certificate, you have the option to remove it from subsequent certificates here. In this case please request a new certificate with corrected data.

After pressing the "**Continue**" button, you will see a recap of the data and the settings for the subsequent certificate.





### 1.5. Generating a Certificate Request

The following procedure varies slightly for each type of key storage system (CSP):

### 3.5.1. SecureStoreCSP – Smart Card I.CA

If you select SecureStoreCSP as the key storage type when filling in the requestor information, the procedure for generating the request is as follows:

You will first see the following dialog. At this point, your private key is generated. It may take a few tens of seconds to generate the private key.



Once the private key is created, you are prompted to enter the PIN for your card.

| PIN dialog                                      |       | ×   |  |  |  |  |  |  |  |
|---|-------|-----|--|--|--|--|--|--|--|
| K provedení operace je třeba zadat PIN.<br>PIN: |       |     |  |  |  |  |  |  |  |
| •••   | •••   |     |  |  |  |  |  |  |  |
| 1   | 2     | 3   |  |  |  |  |  |  |  |
| 4   | 5     | 6   |  |  |  |  |  |  |  |
| 7   | 8     | 9   |  |  |  |  |  |  |  |
|   | 0     | <<< |  |  |  |  |  |  |  |
| 0   | k Sto | rno |  |  |  |  |  |  |  |





### 3.5.2. Microsoft Enhanced RSA and AES Cryptographic Provider With Strong Private Key Protection

If you select Microsoft Enhanced RSA and AES Cryptographic Provider (or Microsoft Enhanced RSA and AES Cryptographic Provider /prototype/) and check the Enable strong key protection option, the application generation process is as follows:

| <b>1.</b> System Test | <b>2.</b> Verification      | <b>3.</b> Recapitula   |                     | <b>4.</b> Signing a Request | <b>5.</b> Finalization |
|-----------------------|-----------------------------|------------------------|---------------------|-----------------------------|------------------------|
|                       |                             |                        |                     |                             |                        |
|                       |                             |                        |                     |                             |                        |
|                       | Certificate :               | sent in the ZIP format | Yes                 |                             |                        |
|                       |                             | Period of validity     | 365                 |                             |                        |
|                       | Key                         | Repository Type (CSP)  | Operating Sy        | stem Windows                |                        |
|                       |                             | umbnails / Key length  | sha256Algor         | ithm / 2048                 |                        |
|                       | CREATING A REQUEST FOR A RE | NEWED CERTIFICAT       | E                   |                             |                        |
|                       | Discours it. Is an          | •                      | D                   |                             |                        |
|                       | Please wait, key gei        | neration and           | id-kp-emailP        |                             | gress.                 |
|                       | Extended usage setting      | ng a new RSA signature | key                 | ×                           |                        |
|                       |                             | An application i       | is creating a Prote | cted item.                  |                        |
|                       | _                           | CryptoAPI Priva        | ate Key             |                             |                        |
|                       | E-ma                        | Security level s       | et to Medium        | Set Security Level          |                        |
|                       |                             |                        |                     |                             |                        |
|                       |                             |                        |                     |                             |                        |
|                       |                             |                        | SN ICA              |                             |                        |
|                       |                             |                        |                     |                             |                        |
|                       |                             |                        |                     |                             |                        |
|                       |                             |                        |                     |                             |                        |
|                       |                             |                        |                     |                             |                        |



If you click on " Select a Security Level", you will be able to change the security level.



If you select the "**High**" security level, you will be prompted for a password. (You will need to enter this password whenever you use your issued certificate).

| Create a Password |                                      | >   | < |
|-------------------|--------------------------------------|---|---|
|                   | Create a password to                 | protect this item.                          |   |
|                   | Create a new passwo<br>Password for: | ord for this item.<br>CryptoAPI Private Key |   |
|                   | Password:<br>Confirm:                |   |   |
|                   | < Back                               | Finish Cancel                               | ) |

Clicking the "Finish" button will change the security level. Now click "OK".



In the next dialog, grant permissions by clicking "**Allow**". If you have chosen a "**high**" security level, you must also enter a password.

| Zabezpečení sy                         | ystému Windows   | $\times$ |
|--|--|----------|
| Jsou vyžac<br>Chcete-li této<br>heslo: | dovány přihlašovací údaje.<br>9 aplikaci povolit přístup ke svému privátnímu klíči, za | dejte    |
| Popis klíče : I                        | Privátní klíč CryptoAPI  |          |
| <b>G</b>                               | Heslo<br>Zadat heslo   |          |
|  | Povolit Nepov  | volovat  |

### 1.6. Signing and sending a request for a subsequent certificate

If no error occurred while generating the request, the page will display the generated request in PKCS10 format.

When you click the "**Submit Request for Processing**" button, a dialog will appear containing your request for a follow-up certificate. This request must be signed with the certificate for which you are requesting a subsequent.

| <b>1.</b> System Test  | <b>2.</b> Verification  | <b>3.</b> Recapitulation  | <b>4.</b> Signing a Request               | 5. Finalization                     |
|--|---|---|---|-------------------------------------|
|  |   |   |   |                                     |
|  |   | Created request for c   | ertificate                                |                                     |
| Request for renewed of signed with a currently                           | certificate has been successfully g<br>y valid certificate and sent for pro                                 | generated. By clicking on "Send the<br>ocessing.                    | e request to be processed" button yo      | ur request for a certificate will b |
| We Advised to that yo<br>Follow the instruction:<br>Please be aware that | u make a backup of the private ke<br>s here: https://www.ica.cz/Prive<br>administration your private key is | ey.<br><b>ate-key-backup</b><br>s always fully responsible applican | t for a certificate. Possible loss of pri | vate key can not be considered      |
| fault the services prov  | ided by I.CA and there is no reaso  | on to issue a new certificate free o                                | f charge.                                 | vate key tarriot be considered      |
| Save on local disk (   | or external storage   |   |   |                                     |
|  |   |   |   |                                     |
|  | The price (   | of issuing renowal cort   | ificato is 725 00 C7K                     |                                     |
|  | The price of  | of issuing renewal cert   | Incate is 725.00 CZK                      |                                     |
| Choose the payme   | nt method   |   |   |                                     |
| 🖲 By bank transfer (y  | you will receive an advance invoic  | e by e-mail)  |   |                                     |
| O Payment card   |   |   |   |                                     |
|  |   | Send the request to be  | processed                                 |                                     |
|  | Copyright I.CA All Ri   | ights Reserved   První certifikační                                 | autorita, a.s.   Contacts   9.16.00       |                                     |
|  |   |   | <b>_</b>                                  | <b>_</b>                            |



The application needs to be signed by clicking on the "OK" button

If the request is generated to a smart card, it needs to be signed by entering the **PIN code** of the smart card.

If you are requesting a TWINS subsequent certificate, you must sign both the subsequent qualified certificate request and the commercial certificate request.

| <b>1.</b> System Test   | 2. Verification         | 3. Recapitulation  | <b>4.</b> Signing a Request   | 5. Finalization       |
|---|-------------------------|--|---|-----------------------|
|   |                         |  |   |                       |
| Request for renew SE signed with a curre  | NDING THE RENEWAL CERTI | FICATE REQUEST   |   | a certificate will be |
| We Advised to that<br>Follow the instruct<br>Please be aware that a<br>fault the services provi | Please wait, sign       | n and send the ren<br>g data with your private signature l | ewal certificate requeres the second | uest.                 |
| Save on local disk o  | or external storage     | An application is requesting                               | access to a Protected item.   |                       |
| Choose the paymer   | The p                   | Password for:<br>CryptoAPI Private Key                     | K   |                       |
| O Payment card  |                         | ОК   | Cancel Details  |                       |
|   |                         |  | processed<br>autorita, a.s.   Contacts   9.16.00  |                       |





If your application is successful, you will see the following page:

| 1. System Test  | 2. Verification | <b>3.</b> Recapitulation | <b>4.</b> Signing a Request | <b>5.</b> Finalization |
|---|-----------------|--------------------------|-----------------------------|------------------------|
|   |                 |                          |                             |                        |
|   |                 |                          |                             |                        |
| Your request for the renewal certificate has been successfully accepted and will be processed after   |                 |                          |                             |                        |
| payment.  |                 |                          |                             |                        |
| ID request for the qualified certificate: 5708611016745   |                 |                          |                             |                        |
| You can track the status of your application with ID 5708611016745.   |                 |                          |                             |                        |
| ID request for the commercial certificate: 5/08000/66504  |                 |                          |                             |                        |
| Tou can track the status of your application with 10 5706007/60504.   |                 |                          |                             |                        |
| If the download does not start automatically click the file to download <b>bere</b>   |                 |                          |                             |                        |
| in the download does not start automatically, elek the file to download <b>here</b>   |                 |                          |                             |                        |
| The advance invoice has been sent to your email address.  |                 |                          |                             |                        |
| After payment, the renewal certificate will be issued, which you will receive at the email address specified in the application. The tax document will be sent to you at the same time. |                 |                          |                             |                        |
|   |                 | Exit guide               |                             |                        |

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# 4. Problem Solving

If an error occurs during the application generation process, you will be informed by an error message.

Some errors may be of a more serious technical nature. They may be related to the state of your computer's hardware or software. In this case, we recommend contacting <u>I.CA | Contacts (ica.cz)</u>

