

# Starter Kit Plus

## Security Certificates Installation Guide

February 10, 2022



# Contents

<b>1</b>	<b>Introduction</b>	<b>3</b>
<b>2</b>	<b>Windows</b>	<b>4</b>
2.1	Install demo-root-ca.crt . . . . .	4
2.2	Install admin_pki_container.p12 . . . . .	8
<b>3</b>	<b>macOS</b>	<b>11</b>
3.1	Install demo-root-ca.crt . . . . .	11
3.2	Install admin_pki_container.p12 . . . . .	13
<b>4</b>	<b>iOS and iPadOS</b>	<b>14</b>
4.1	Install demo-root-ca.crt . . . . .	14
4.2	Install admin_pki_container.p12 . . . . .	17
<b>5</b>	<b>Linux (Ubuntu, Debian)</b>	<b>18</b>
5.1	Install demo-root-ca.crt . . . . .	18
5.2	Install admin_pki_container.p12 . . . . .	22
<b>6</b>	<b>Troubleshooting</b>	<b>25</b>
<b>7</b>	<b>Contact &amp; Support</b>	<b>26</b>

# 1 Introduction

Perinet Smart Components and periMICA containers received in this kit are authenticating themselves with certificates signed by a **demo root CA** that was created by Perinet for demonstration purposes.

Client certificates are used for providing access control, in order to keep both data communication and configuration of the network devices secure.

To access the Smart Components and the containers included in the Starter Kit Plus, please install the two security certificates downloaded from the **GettingStarted** container. Please go to the section of your operating system in this guide and follow the indicated steps to install the *demo-root-ca.crt* and the *admin\_pki\_container.p12* certificates.

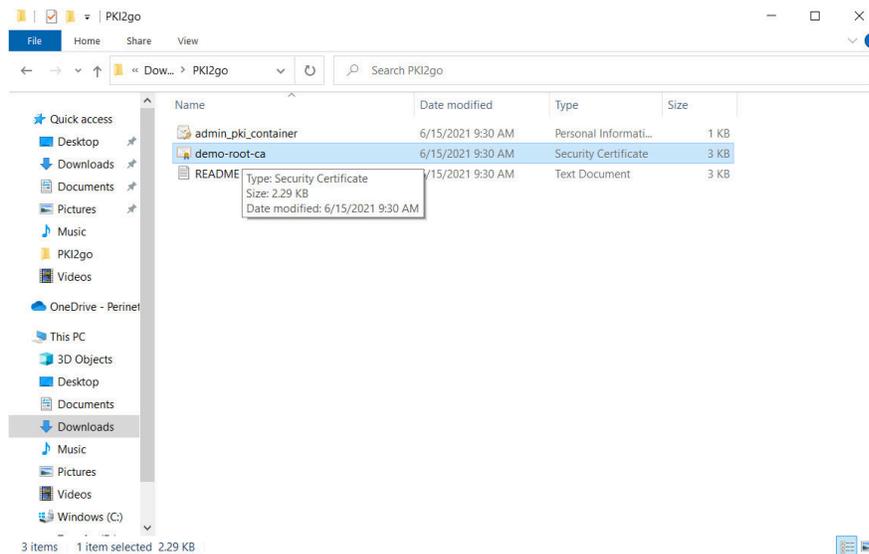
For further information on security concepts, please refer to <https://docs.perinet.io>.

## 2 Windows

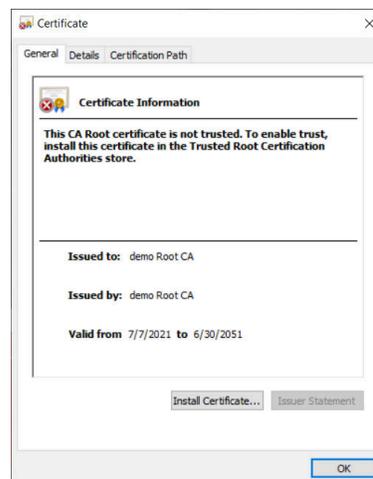
This section describes how to install **demo-root-ca.crt** and **admin\_pki\_container.p12** certificates on Windows systems.

### 2.1 Install demo-root-ca.crt

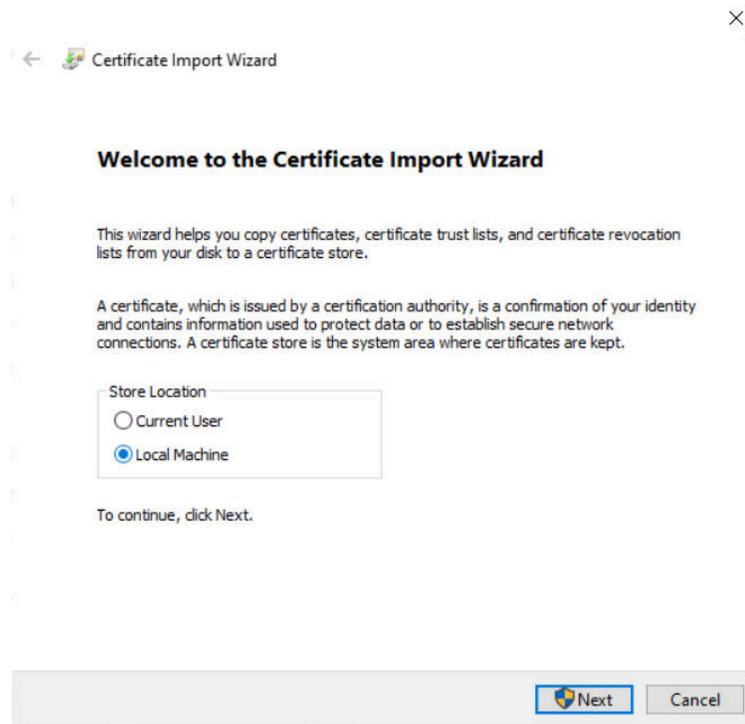
Double-click on the file and follow the installation instructions below:



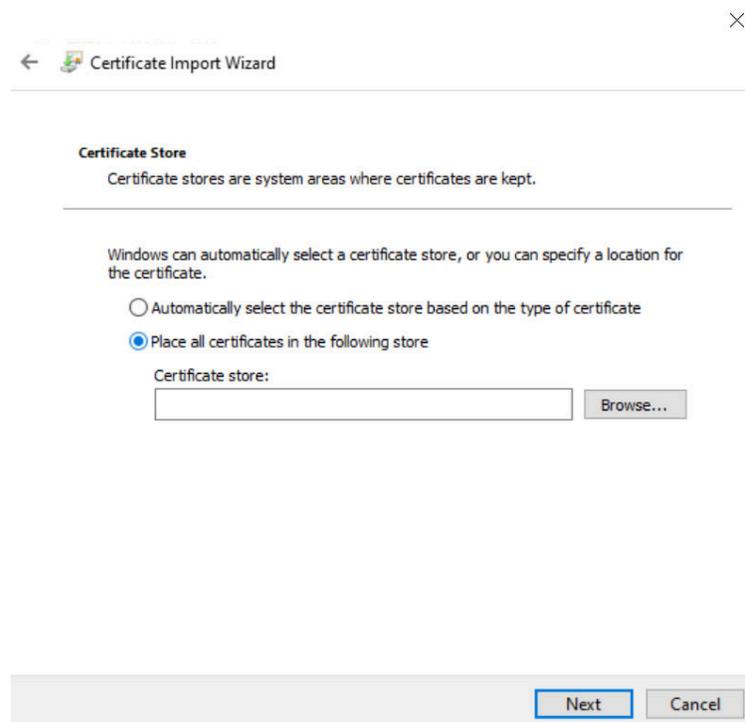
(1) Double Click on *demo-root-ca.crt*



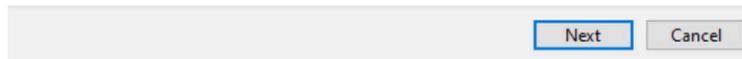
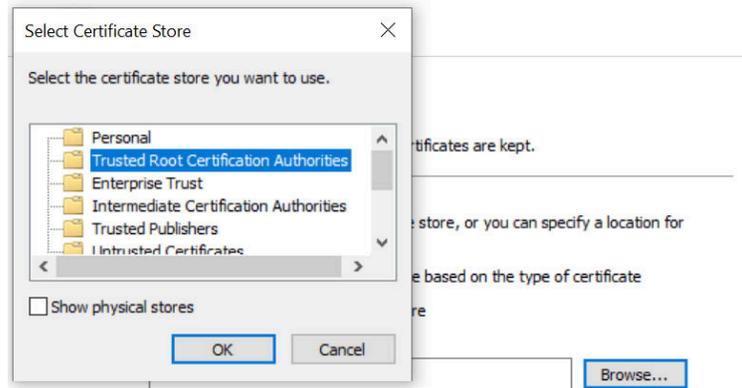
(2) Select *Install Certificate...*



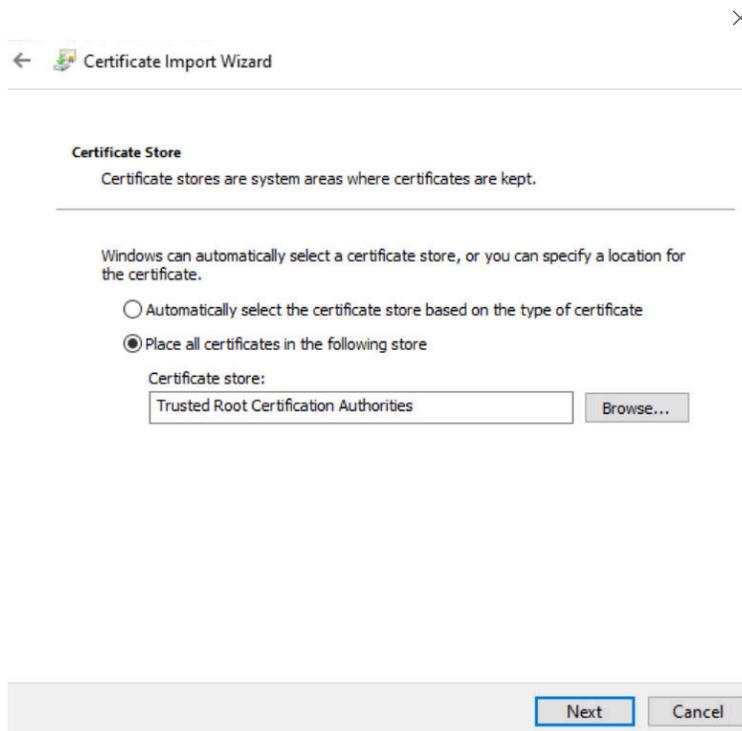
(3) Select *Local Machine*



(4) Select *Place all certificates in the following store*



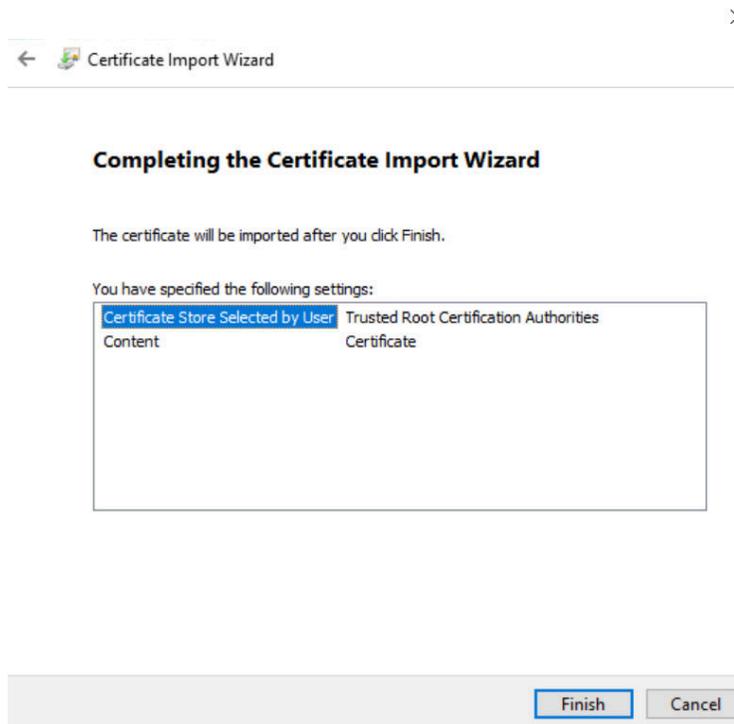
(5) Select *Trusted Root Certification Authorities*



(6) Click *Next*



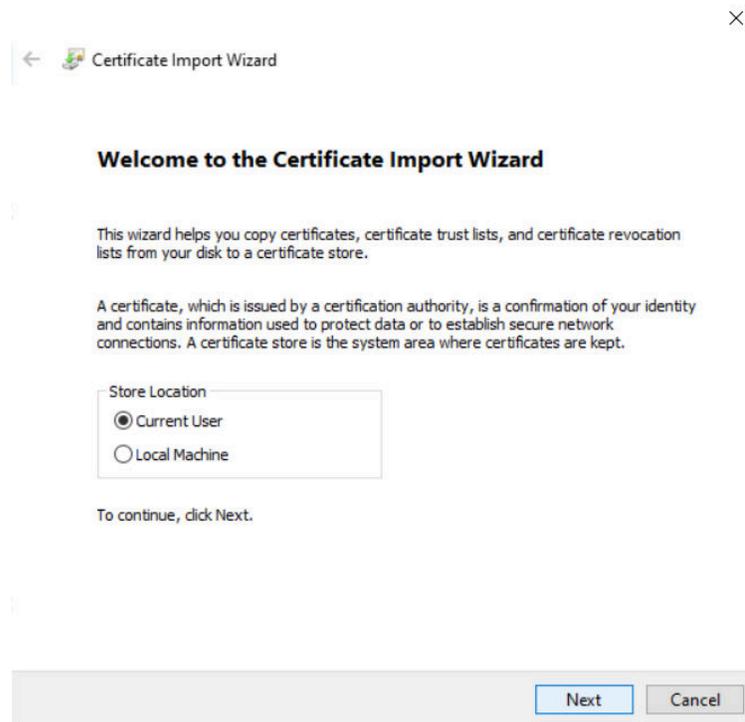
(7) Click Yes to confirm



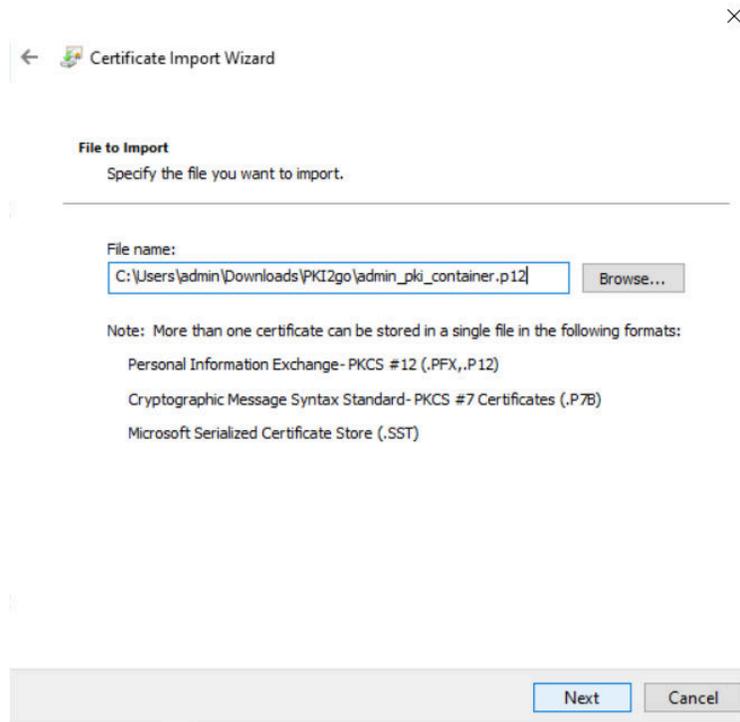
(8) Click *Finish*

## 2.2 Install admin\_pki\_container.p12

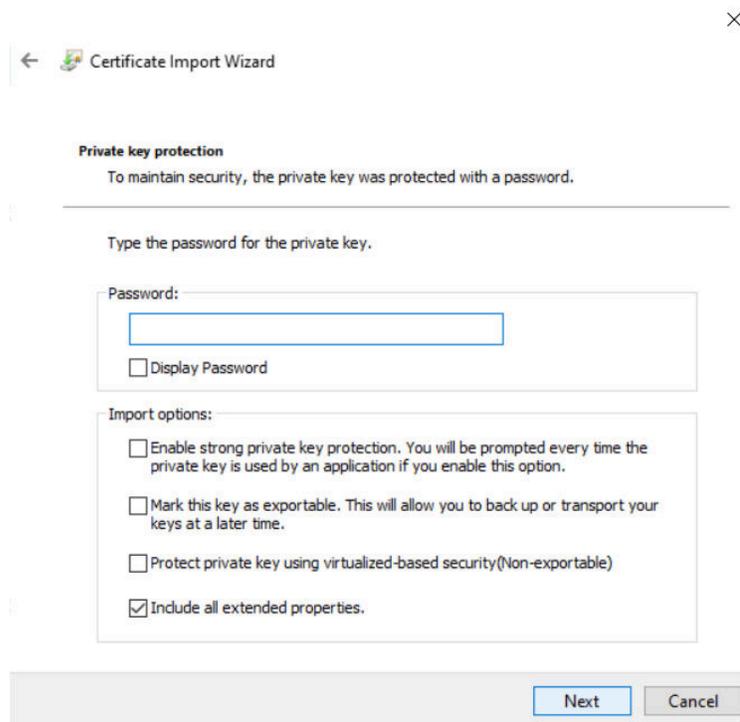
Double-click on the *admin\_pki\_container.p12* file and follow the installation instructions below:



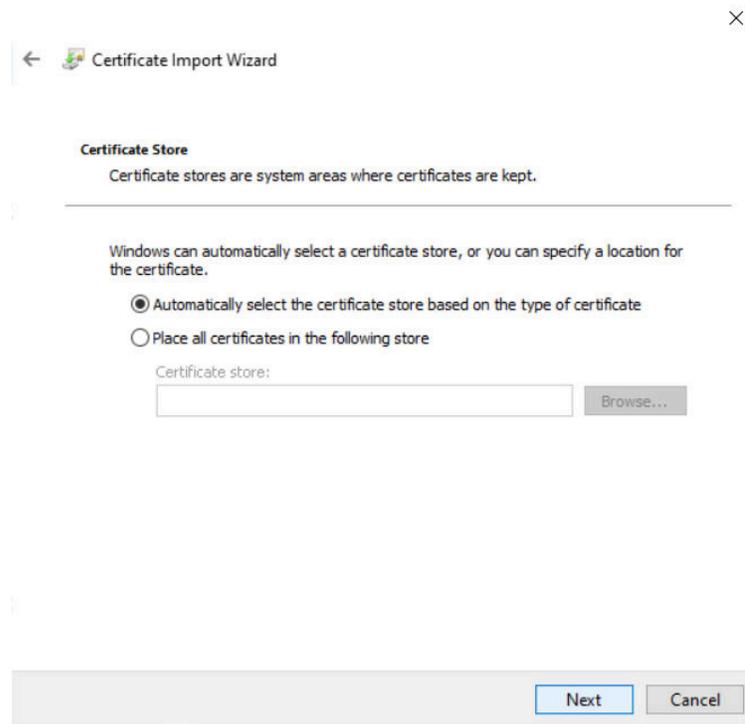
(9) Select *Current User*



(10) Click Next



(11) Type the password: *admin\_pki\_container*



(12) Click Next

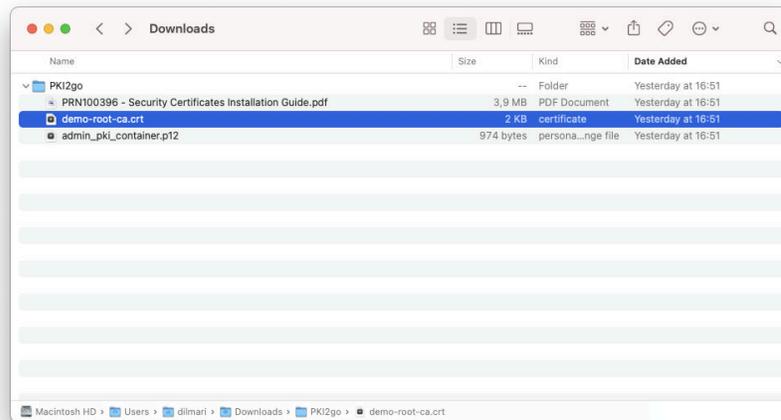
**Note:** Please restart your browser after installing the certificates.

## 3 macOS

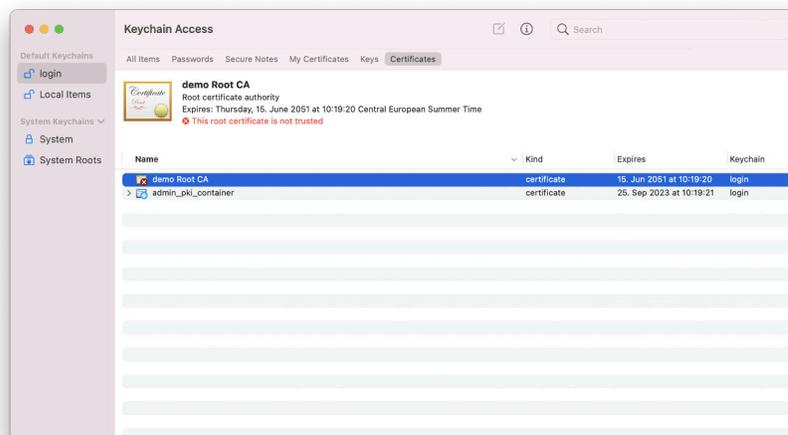
This section describes how to install **demo-root-ca.crt** and **admin\_pki\_container.p12** certificates on macOS systems.

### 3.1 Install demo-root-ca.crt

Double-click on the file and follow the installation instructions below:



(13) Double-click on *demo-root-ca.crt*



(14) Double-click on *demo Root CA*

**demo Root CA**  
 Root certificate authority  
 Expires: Thursday, 15. June 2051 at 10:19:20 Central European Summer Time  
 ⚠ This root certificate is not trusted

**Trust**

When using this certificate:  Use System Defaults ?

**Secure Sockets Layer (SSL)** Always Trust

**Secure Mail (S/MIME)** Never Trust

**Extensible Authentication (EAP)** no value specified

**IP Security (IPsec)** no value specified

**Code Signing** no value specified

**Time Stamping** no value specified

**X.509 Basic Policy** no value specified

**Details**

**Subject Name**

**Organisation** pki2goY-mica-gkvm9  
**Common Name** demo Root CA

**Issuer Name**

**Organisation** pki2goY-mica-gkvm9  
**Common Name** demo Root CA

**Serial Number** 00 D6 8E 25 D5 1A C9 30 A8 E7 A0 06 2E E2 D4 54 D6  
**Version** 3

**Signature Algorithm** ECDSA Signature with SHA-256 ( 1.2.840.10045.4.3.2 )  
**Parameters** None

**Not Valid Before** Tuesday, 22. June 2021 at 10:19:20 Central European Summer Time  
**Not Valid After** Thursday, 15. June 2051 at 10:19:20 Central European Summer Time

**Public Key Info**

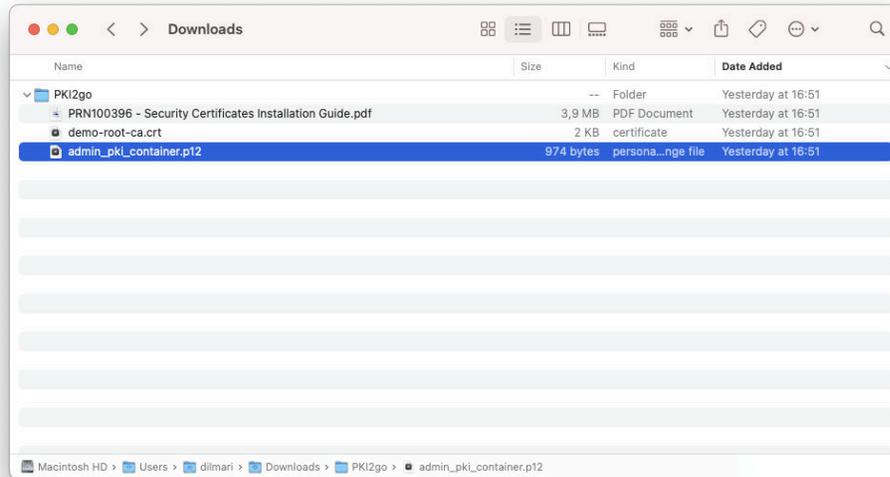
**Algorithm** Elliptic Curve Public Key ( 1.2.840.10045.2.1 )  
**Parameters** Elliptic Curve secp256r1 ( 1.2.840.10045.3.1.7 )  
**Public Key** 65 bytes: 04 DE 19 D3 3C 78 73 BF ...  
**Key Size** 256 bits  
**Key Usage** Verify

**Signature** 70 bytes: 30 44 02 20 7A E2 3E 01 ...

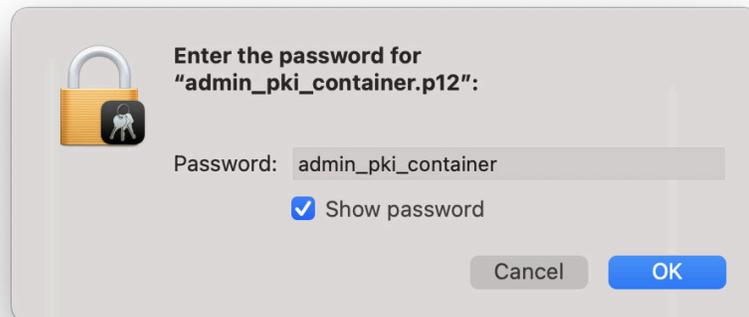
(15) Select Always Trust

### 3.2 Install `admin_pki_container.p12`

Double-click on the `admin_pki_container.p12` file and follow the installation instructions below:



(16) Double-click on the `admin_pki_container.p12`



(17) Type the password: `admin_pki_container`

**Note:** Please restart your browser after installing the certificates.

## 4 iOS and iPadOS

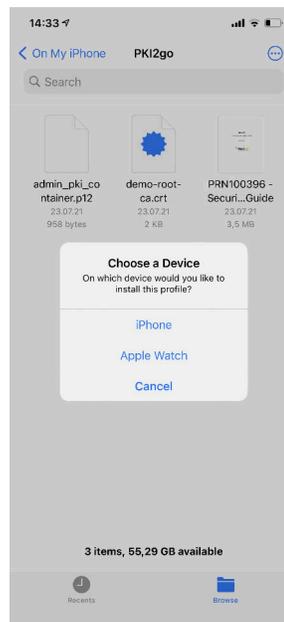
This section describes how to install **demo-root-ca.crt** and **admin\_pki\_container.p12** certificates on iOS and iPadOS systems.

### 4.1 Install demo-root-ca.crt

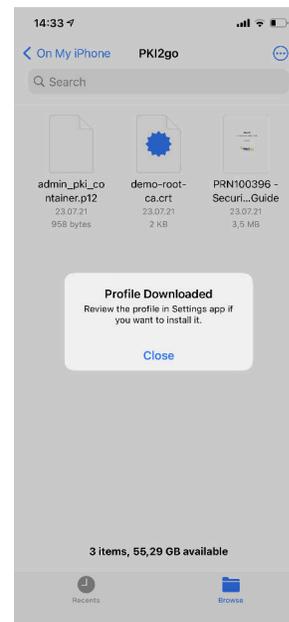
Open the **Files** app, find the downloaded folder **PKI2go** and click on **demo-root-ca.crt**. Then follow the instructions according to the pictures below:



(18) Click on *demo-root-ca.crt*



(19) Choose the device

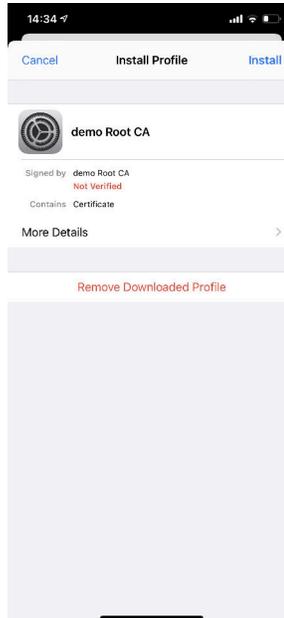


(20) Click on *Close*

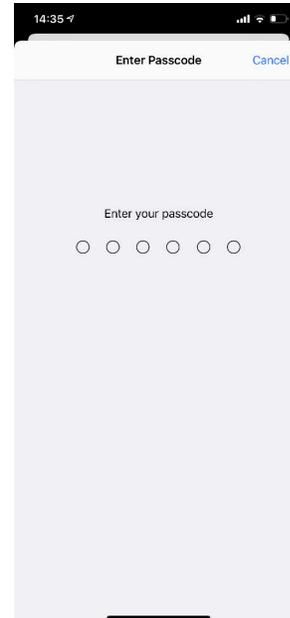
Open the **Settings** app and follow the installation instructions below:



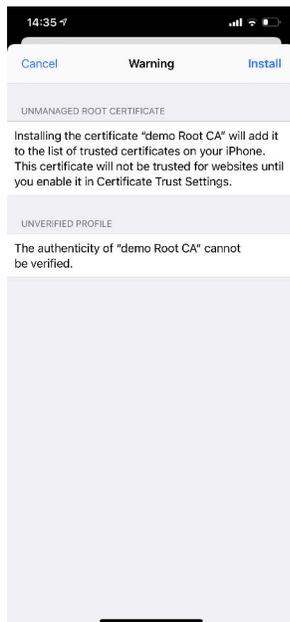
(21) Click on *Profile Downloaded*



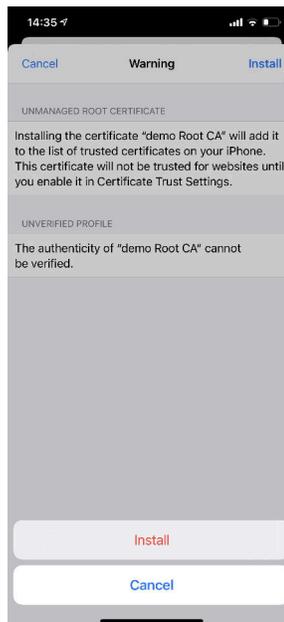
(22) Click on *Install*



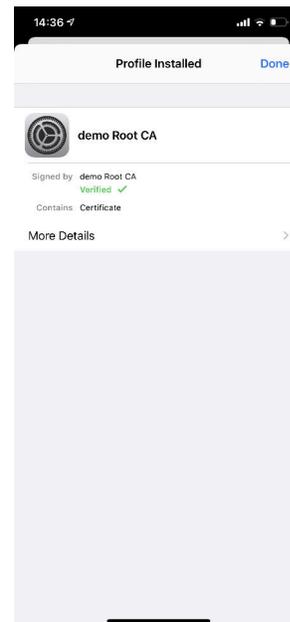
(23) Enter the passcode (user passcode)



(24) Click on *Install*

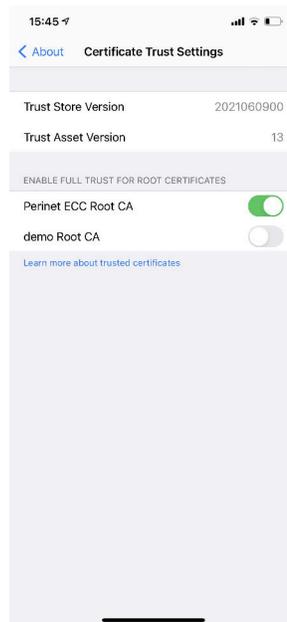


(25) Click on *Install*

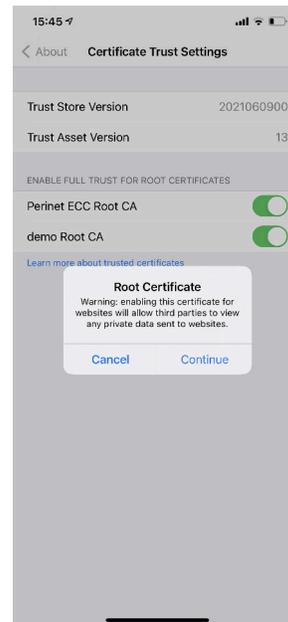


(26) Click on *Done*

Now the certificate is installed, but not yet trusted. In order to trust the **demo Root CA**, open *Settings* → *About* → *Certificate Trust Settings* and follow the instructions in the pictures below:



(27) Enable the demo Root CA



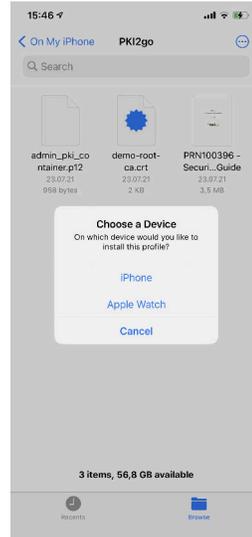
(28) Click on *Continue*

## 4.2 Install admin\_pki\_container.p12

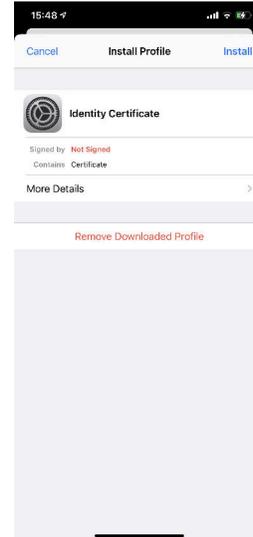
Open the *Files* app and find the downloaded file. Click on the **admin\_pki\_container.p12** and follow the installation instructions:



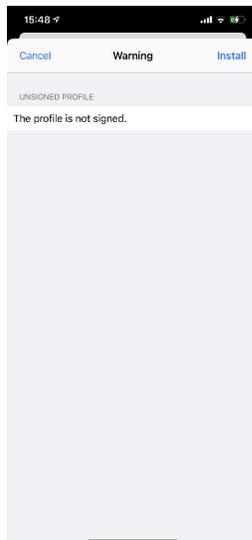
(29) Click on *admin\_pki\_container.p12*



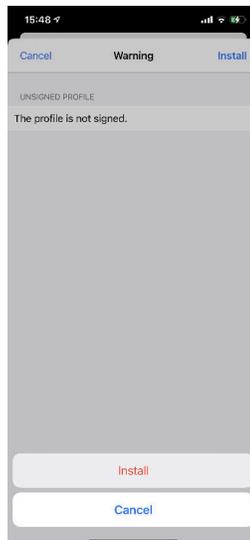
(30) Choose a Device



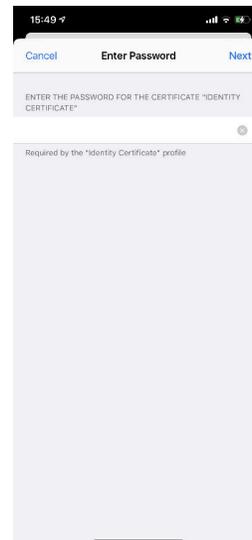
(31) Click on *Install*



(32) Click on *Install*



(33) Click on *Install*



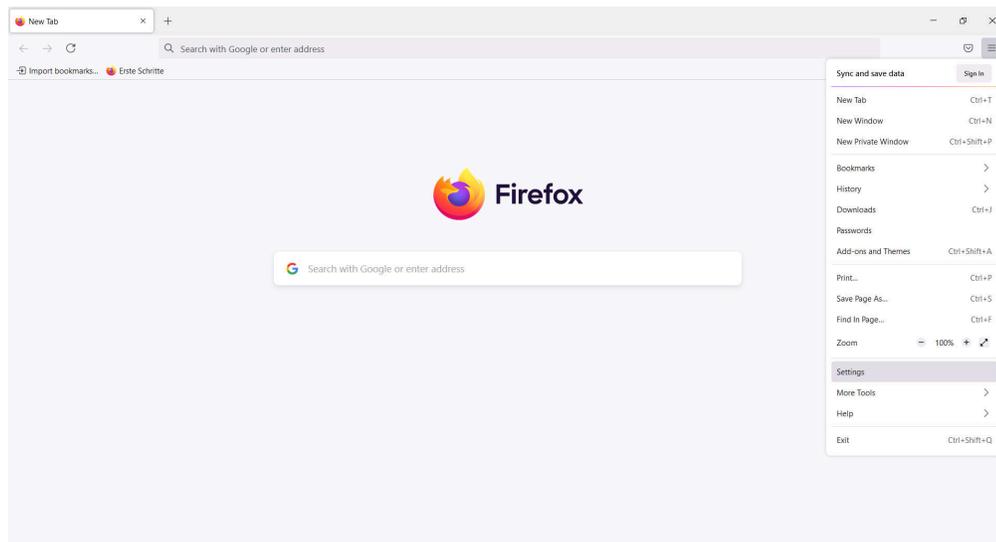
(34) Type the password (*admin\_pki\_container*) and click on *Next*

## 5 Linux (Ubuntu, Debian)

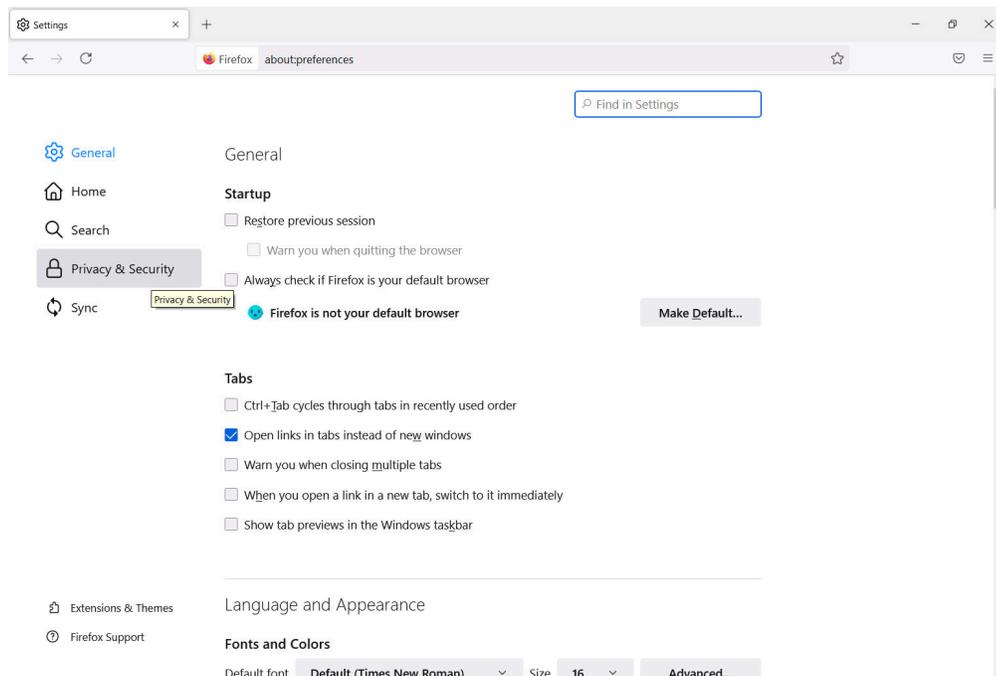
This section describes how to install **demo-root-ca.crt** and **admin\_pki\_container.p12** certificates on Linux (Ubuntu, Debian) systems. The example below is for Firefox browser:

### 5.1 Install demo-root-ca.crt

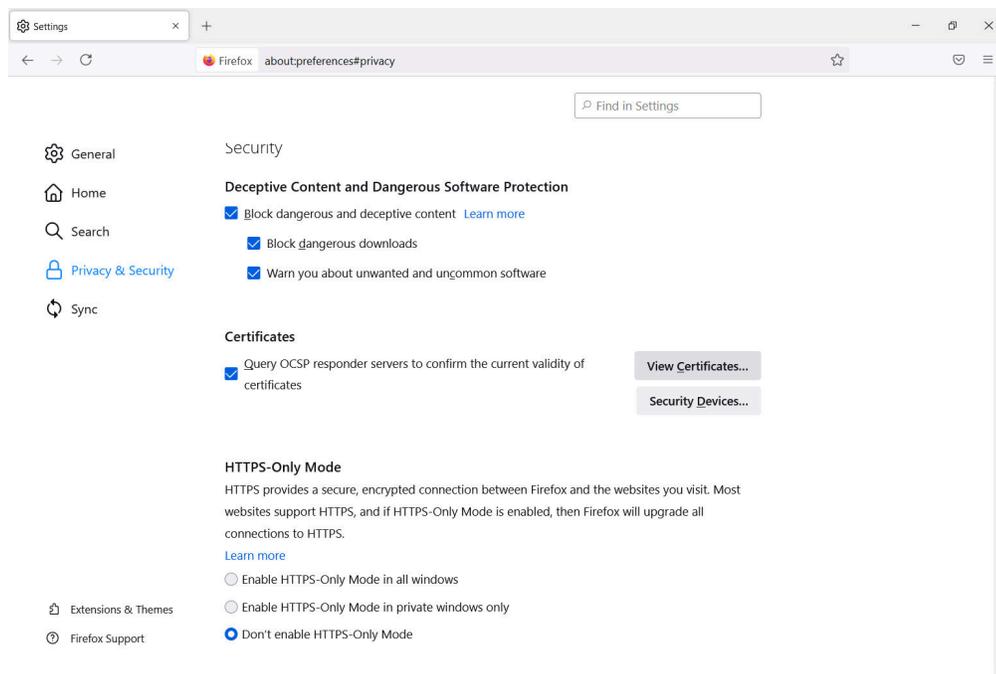
In the Menu, go to **Settings** and follow the installation instructions below:



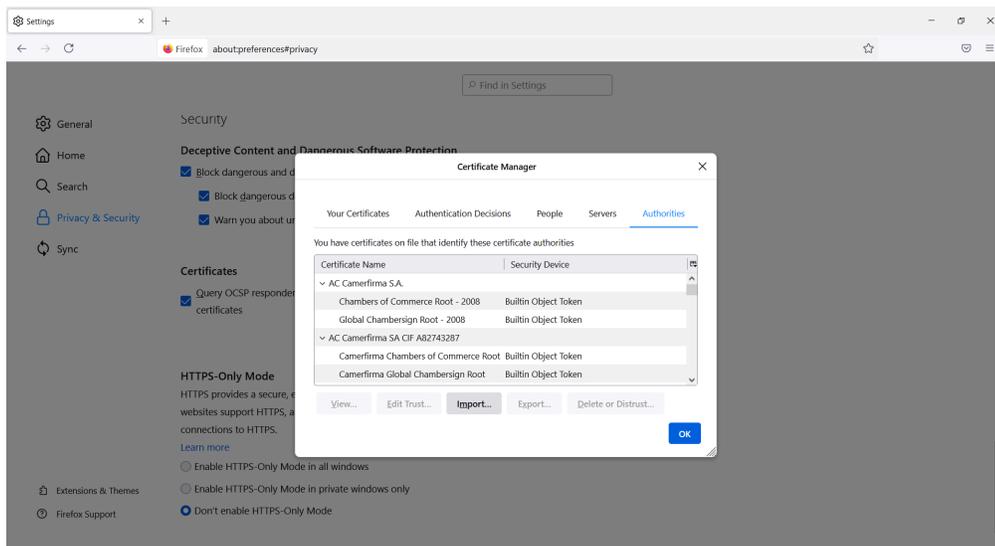
(35) Go to *Settings*



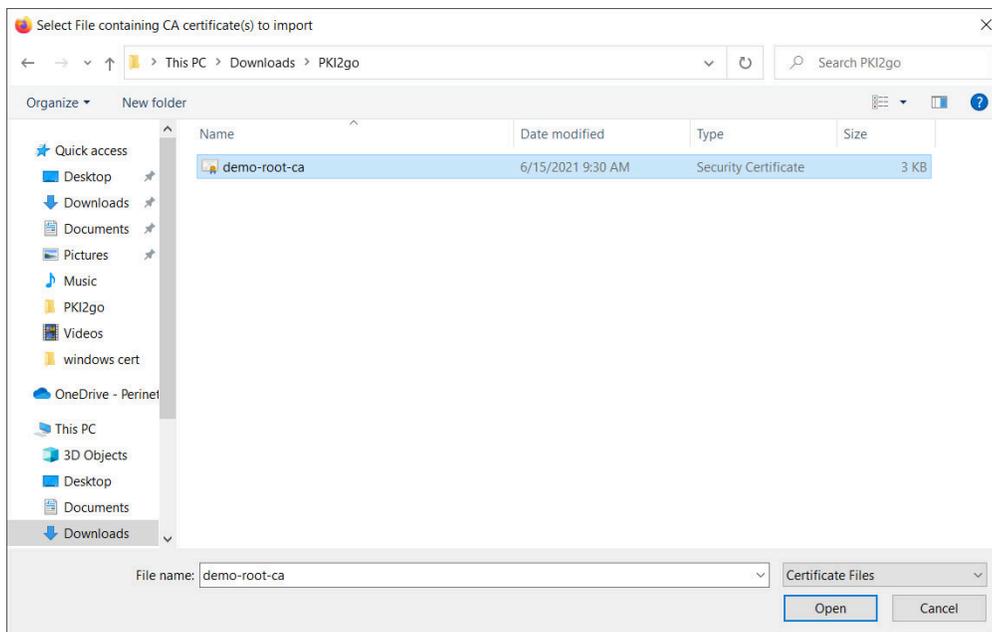
(36) Select Privacy & Security



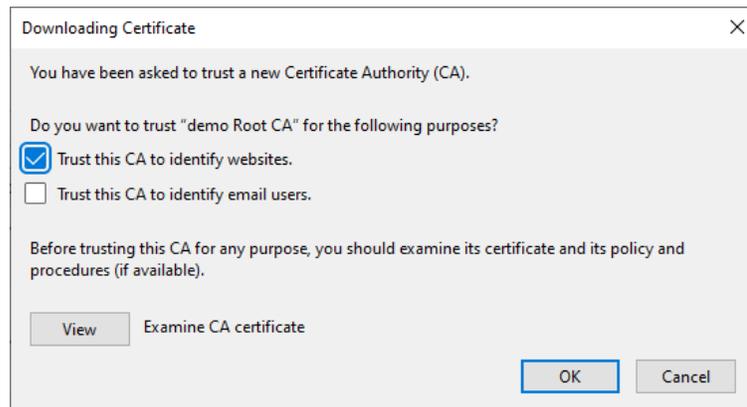
(37) Click on View Certificates...



(38) Select *Import...* on *Authorities* tab



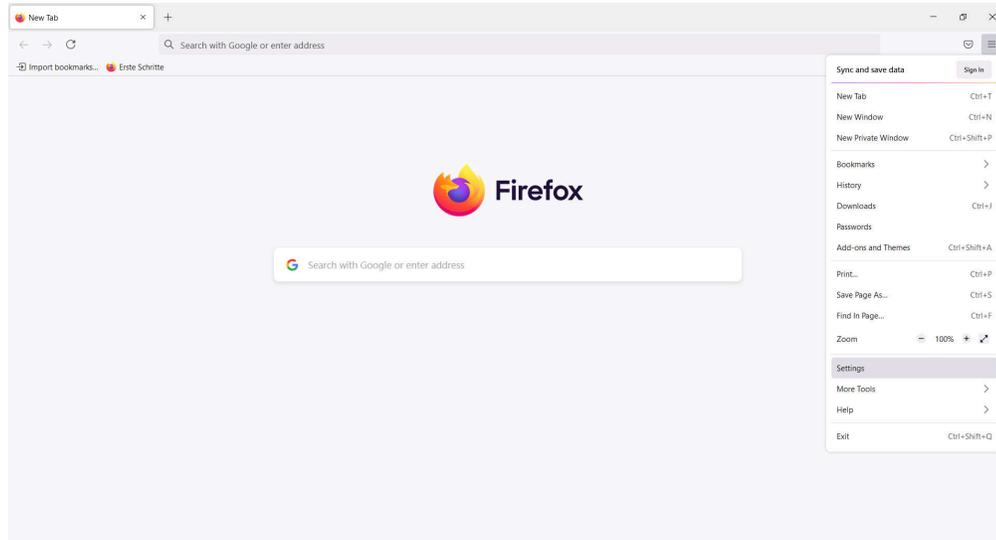
(39) Double-click on the *demo-root-ca.crt*



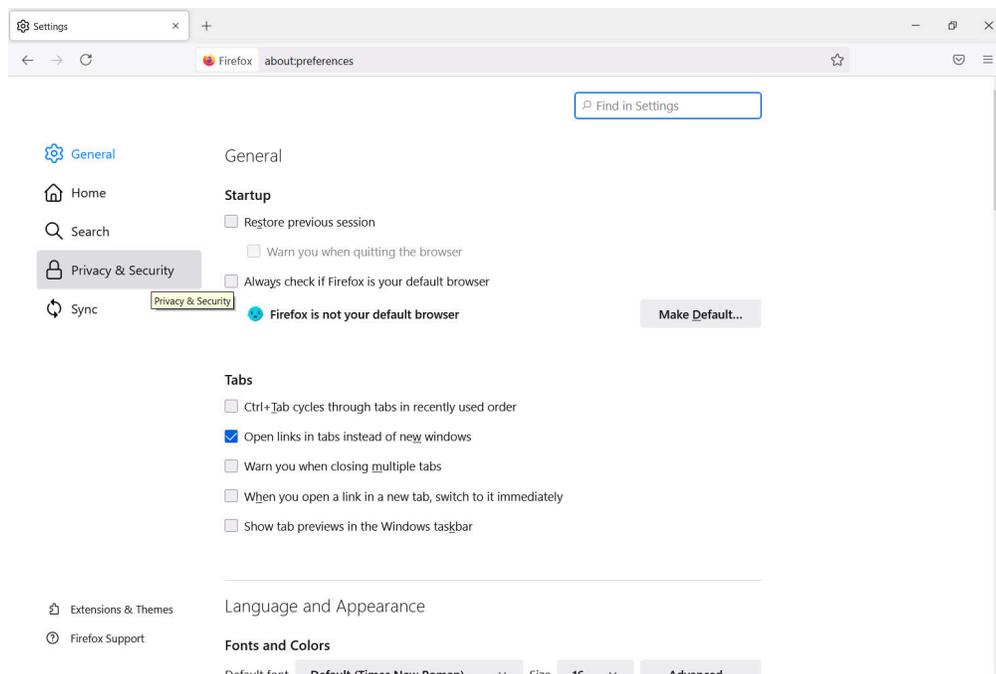
(40) Mark *Trust this CA to identify websites*

## 5.2 Install admin\_pki\_container.p12

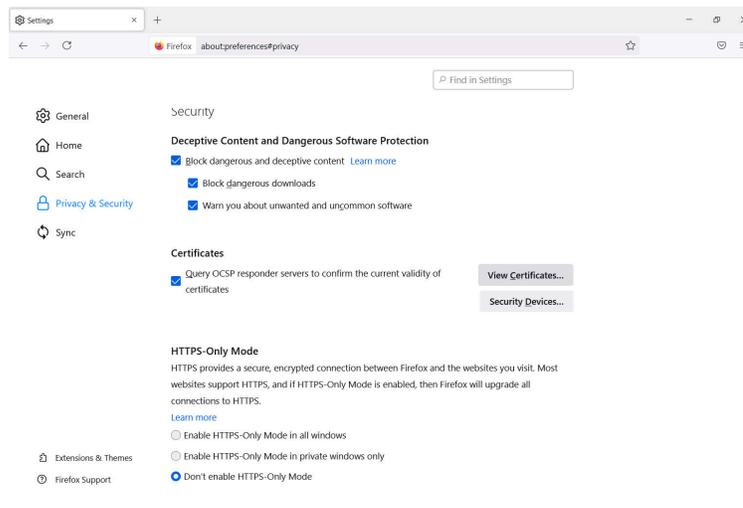
Double-click on *admin\_pki\_container.p12* and follow the installation instructions below.



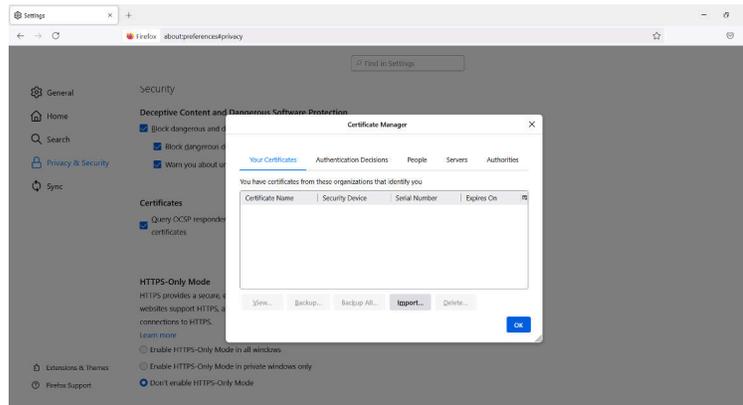
(41) Go to *Settings*



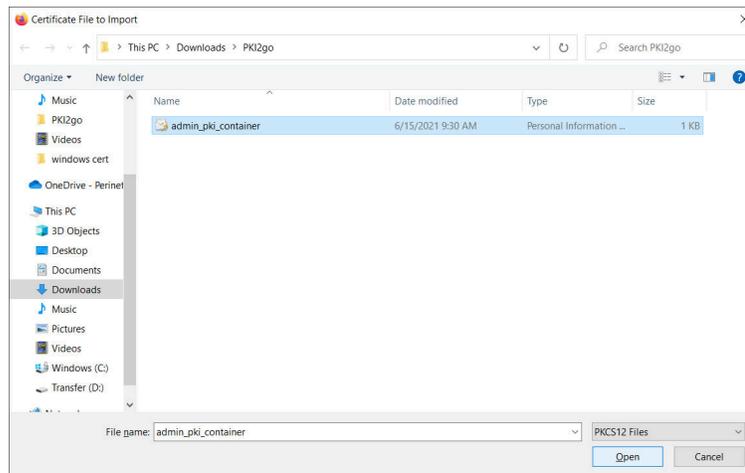
(42) Select *Privacy & Security*



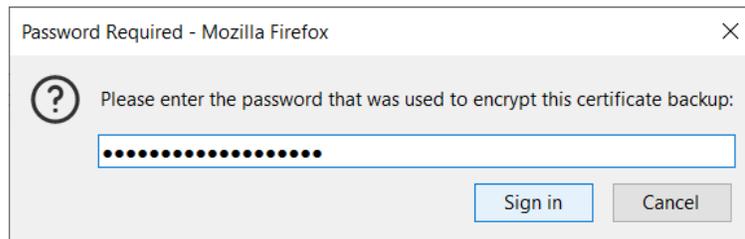
(43) Click on *View Certificates...*



(44) Select *Import...* on *Your Certificates* tab



(45) Double-click on the *admin\_pki\_container.p12*



(46) Type the password *admin\_pki\_container* and click *Sign in*

**Note:** Please restart your browser after the certificates installation.

## 6 Troubleshooting

- Browsers can cache SSL certificates in order to speed up the access. But caching can cause issues, because a protected server will refuse the connection if the browser sent the incorrect certificate. In that case, refreshing the web page might help. If the problem still occurs, make sure to have the correct client certificates imported and restart the browser.
- When the periMICA is not able to reach any NTP (Network Time Protocol) server, its Time & Date are not automatically synchronized and it can generate security errors when trying to access the containers installed. To fix this problem you can configure the Time & Date manually in *periMICA Homepage* → *Settings* → *Time & Date*.

## 7 Contact & Support

For customer support, please call us at **+49 30 863 206 701** or send an e-mail to *support@perinet.io*.

For complete contact information visit us at [www.perinet.io](http://www.perinet.io)

## Revision History

Revision	Date	Author(s)	Description
1.0	February, 9, 2022	Dilmari Seidel Heuer	Initial release