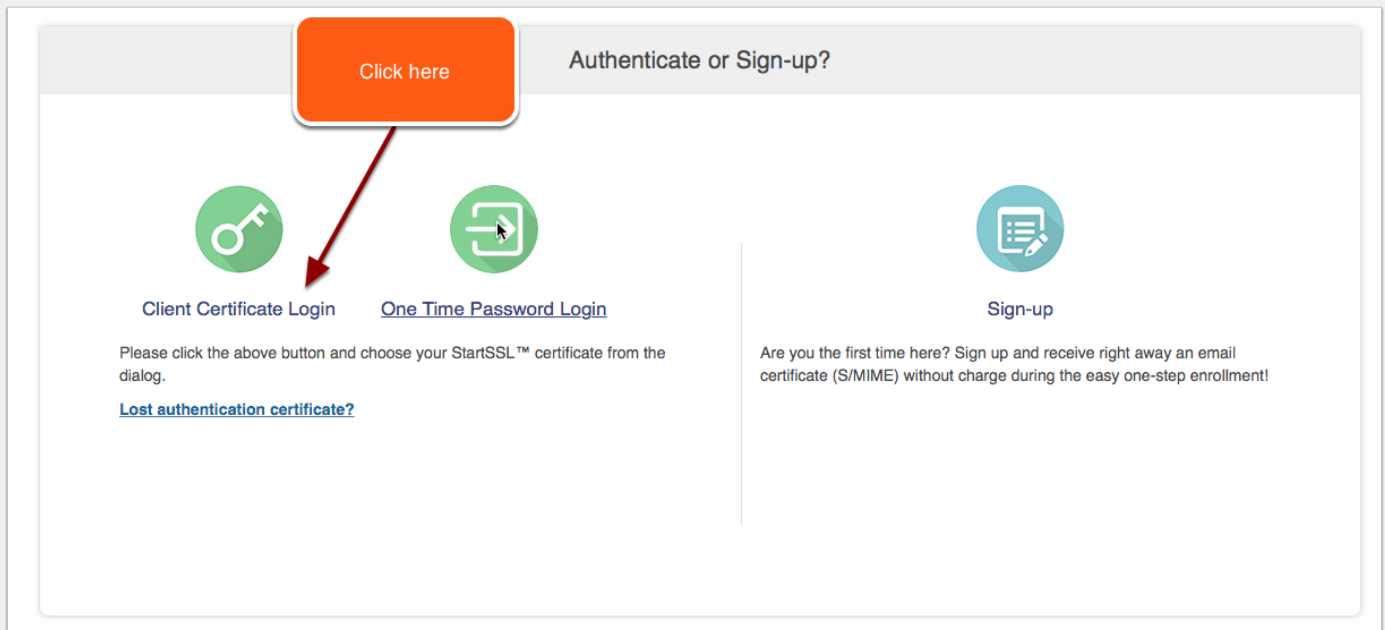


Setting up an expired SMIME Certificate

You already have the account at Start SSL

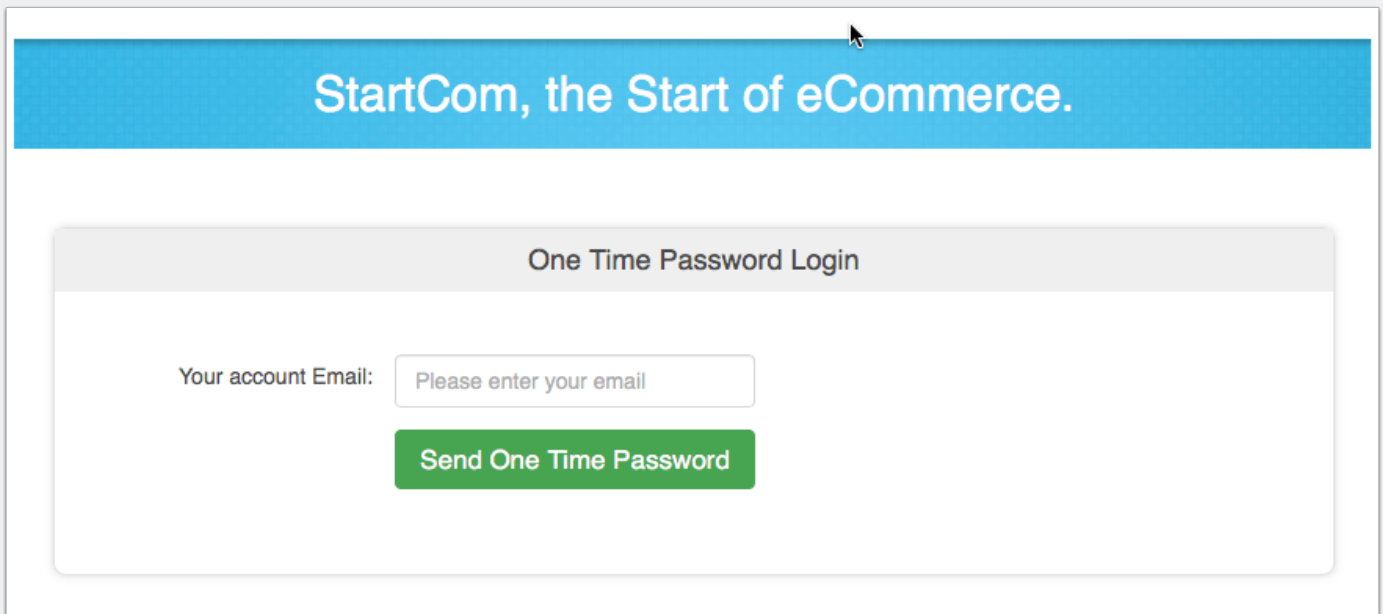
Step One in Safari



Setting up an expired SMIME Certificate

StartSSL™ Certificates & Public Key Infrastructure

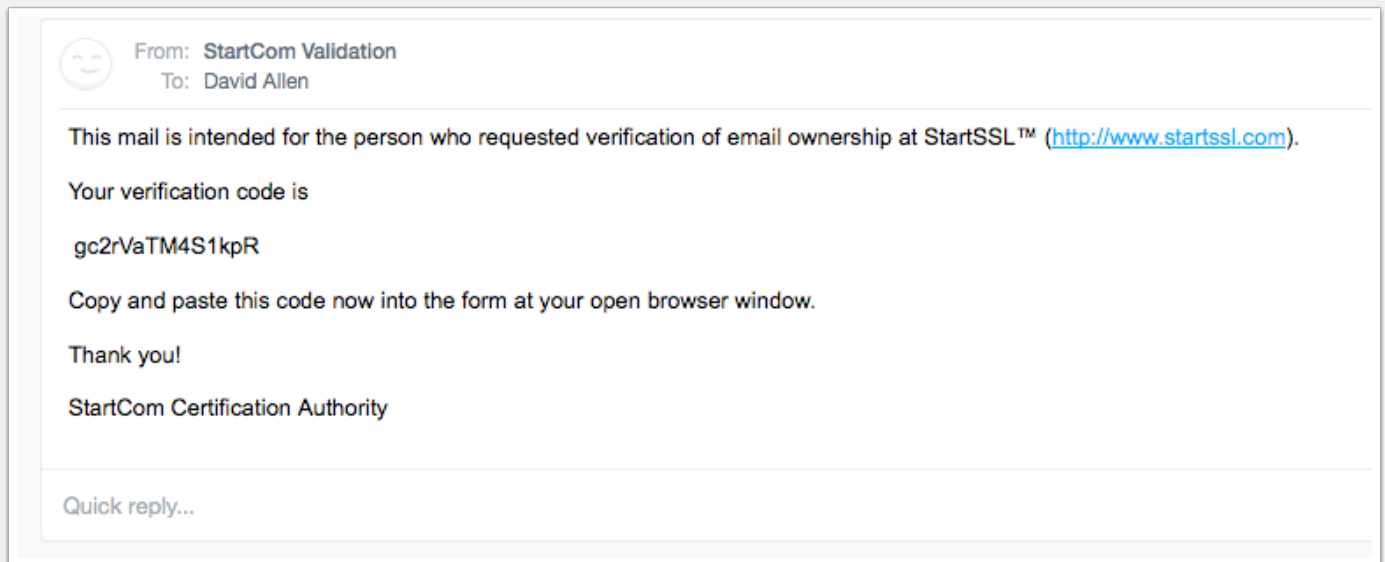
Put in the email and get the one time password



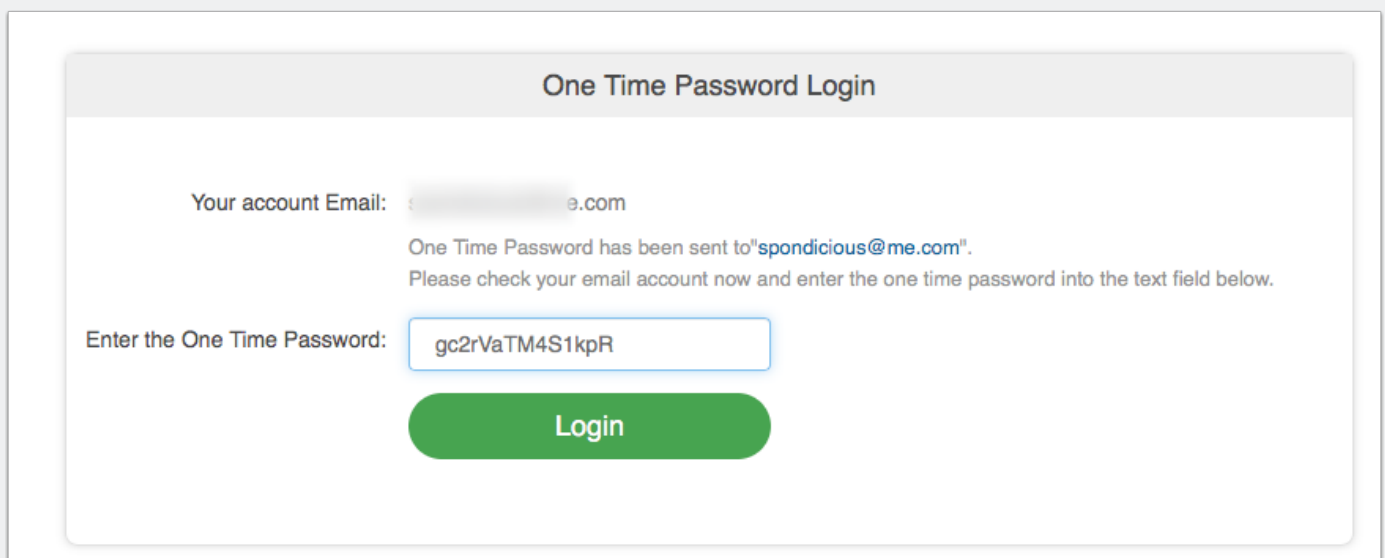
The screenshot shows a web interface for StartCom. At the top is a blue banner with the text "StartCom, the Start of eCommerce." Below this is a light gray box titled "One Time Password Login". Inside this box, there is a label "Your account Email:" followed by a text input field containing the placeholder text "Please enter your email". Below the input field is a green button with the text "Send One Time Password".

Setting up an expired SMIME Certificate

All Accounts — Inbox (2 messages)



StartSSL™ Certificates & Public Key Infrastructure



Setting up an expired SMIME Certificate

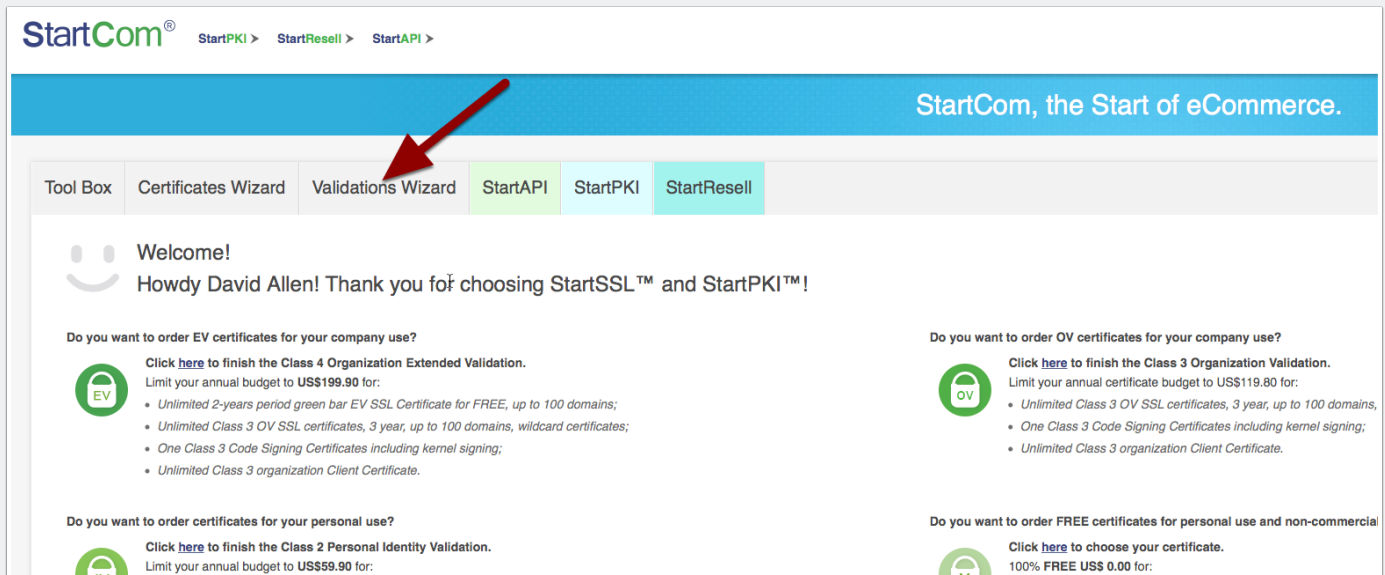
Choose what to do

If you want to get a certificate you go to the certificates Wizard if it is an email already validated

if you need to do a new email then you have to start by going to the validations Wizard

if you want to download a certificate already made and not expired then go to the toolbox

in this case we're going to go for a new email to add a certificate – so we're going to start with the validations wizard



StartCom® StartPKI > StartResell > StartAPI >

StartCom, the Start of eCommerce.

Tool Box Certificates Wizard **Validations Wizard** StartAPI StartPKI StartResell

Welcome!
Howdy David Allen! Thank you for choosing StartSSL™ and StartPKI™!

Do you want to order EV certificates for your company use?

Click [here](#) to finish the Class 4 Organization Extended Validation.
Limit your annual budget to US\$199.90 for:

- Unlimited 2-years period green bar EV SSL Certificate for FREE, up to 100 domains;
- Unlimited Class 3 OV SSL certificates, 3 year, up to 100 domains, wildcard certificates;
- One Class 3 Code Signing Certificates including kernel signing;
- Unlimited Class 3 organization Client Certificate.

Do you want to order OV certificates for your company use?

Click [here](#) to finish the Class 3 Organization Validation.
Limit your annual certificate budget to US\$119.80 for:

- Unlimited Class 3 OV SSL certificates, 3 year, up to 100 domains,
- One Class 3 Code Signing Certificates including kernel signing;
- Unlimited Class 3 organization Client Certificate.

Do you want to order certificates for your personal use?

Click [here](#) to finish the Class 2 Personal Identity Validation.
Limit your annual budget to US\$59.90 for:

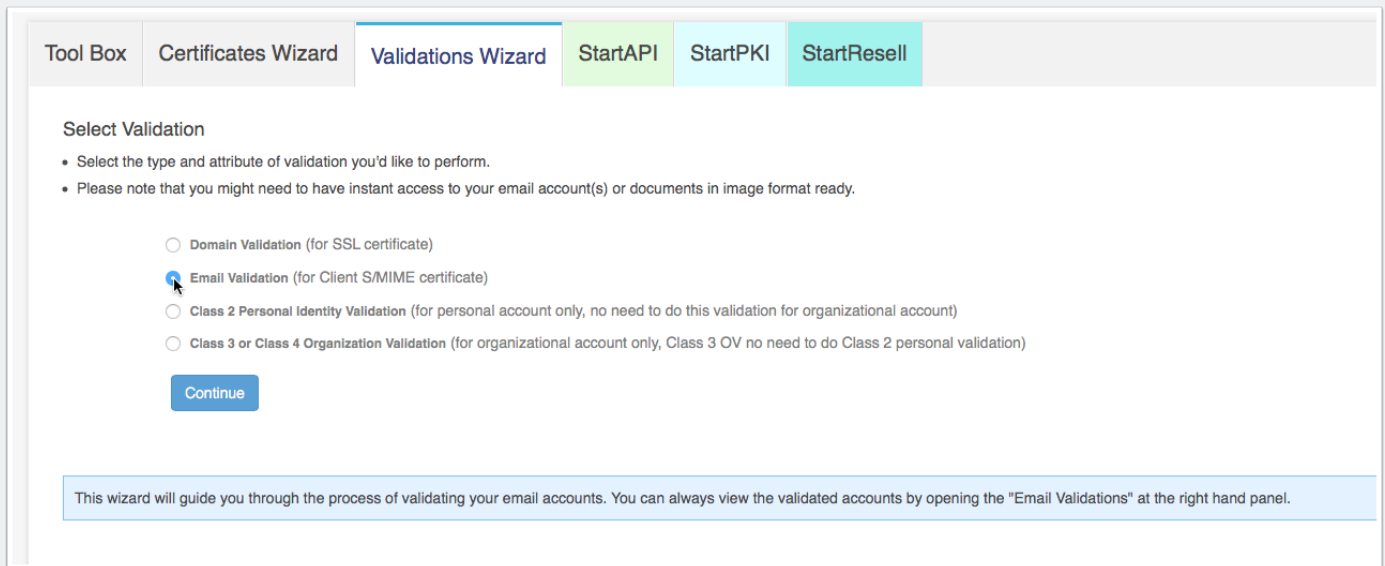
Do you want to order FREE certificates for personal use and non-commercial?

Click [here](#) to choose your certificate.
100% FREE US\$ 0.00 for:

Setting up an expired SMIME Certificate

Fill in the forms

Choose email validation from the list and click continue



The screenshot shows a web-based wizard interface. At the top, there is a horizontal navigation bar with five tabs: 'Tool Box', 'Certificates Wizard', 'Validations Wizard' (which is the active tab), 'StartAPI', and 'StartResell'. Below the navigation bar, the main content area is titled 'Select Validation'. It contains two bullet points: 'Select the type and attribute of validation you'd like to perform.' and 'Please note that you might need to have instant access to your email account(s) or documents in image format ready.' Below these instructions are four radio button options: 'Domain Validation (for SSL certificate)', 'Email Validation (for Client S/MIME certificate)' (which is selected), 'Class 2 Personal Identity Validation (for personal account only, no need to do this validation for organizational account)', and 'Class 3 or Class 4 Organization Validation (for organizational account only, Class 3 OV no need to do Class 2 personal validation)'. A blue 'Continue' button is positioned below the radio buttons. At the bottom of the main content area, there is a light blue informational box that reads: 'This wizard will guide you through the process of validating your email accounts. You can always view the validated accounts by opening the "Email Validations" at the right hand panel.'

Tool Box Certificates Wizard Validations Wizard StartAPI StartPKI StartResell

Select Validation

- Select the type and attribute of validation you'd like to perform.
- Please note that you might need to have instant access to your email account(s) or documents in image format ready.

☐ Domain Validation (for SSL certificate)

☒ Email Validation (for Client S/MIME certificate)

☐ Class 2 Personal Identity Validation (for personal account only, no need to do this validation for organizational account)

☐ Class 3 or Class 4 Organization Validation (for organizational account only, Class 3 OV no need to do Class 2 personal validation)

Continue

This wizard will guide you through the process of validating your email accounts. You can always view the validated accounts by opening the "Email Validations" at the right hand panel.

Setting up an expired SMIME Certificate

Use the verification code

Fill in the email address to send the validation code – click the button underneath the email address field.

Next you'll have to go to your email client where for the email to come in and copy the verification code to paste into this form

you have 15 minutes to use the validation code which you have been sent.

When you filled in these two fields on the form click on validation

Tool Box Certificates Wizard **Validations Wizard** StartAPI StartPKI StartResell

Email Validation

- Enter the email address you want to validate.
- The program sends you a verification code which you need to submit within 15 minutes.

Email:

[Click to send validation code](#)

Verification Code:

[Validation](#)

Setting up an expired SMIME Certificate

Not the Droid you're looking for

This screen is not what you're looking for. They are trying to get you to buy a certificate and you don't need to spend any money

click on one of the other tabs such as toolbox

Then click again on **Certificates Wizard**

Tool Box

Certificates Wizard

Validations Wizard

StartAPI

StartPKI

StartResell

Leave a message

Class 3 Organization Client S/MIME Certificate

You can [apply](#) a Class 3 Organization Client S/MIME Certificate for FREE:

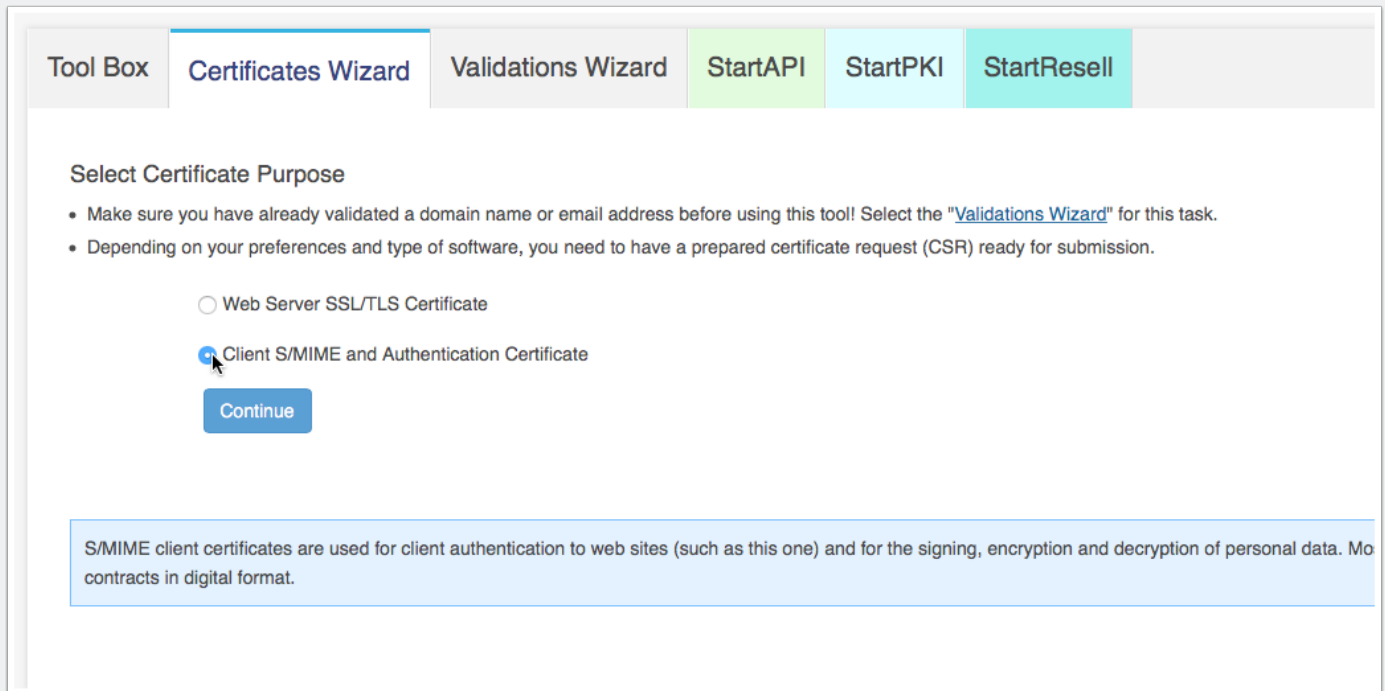
DN =

	Free Class 3 organization employee certificate	Charged Class 3 Organization certificate
Certificate Fee	Free	US\$9.90 per employee
Validated by	Your organization	StartCom
Subject Info	Have a special field: "Description = This employee certificate Common Name is validated by this Organization"	Standard field, no Description field. E, CN, O, L, S, C
Email address requirement	The email address should contain complete employee name like "john.smith@yourdomain.com"	No special requirement
Multi-email support	One email only	Multi-email addresses in one certificate, up to 10 emails
Batch apply	Yes	No
	Apply Now	Apply Now

Setting up an expired SMIME Certificate

Choose the Cert

This is the next form you want to get to. Click on **Client S Mime and Authentication Certificate** – Then Click on **Continue**



The screenshot shows a web interface for a 'Certificates Wizard'. At the top, there are tabs: 'Tool Box', 'Certificates Wizard' (active), 'Validations Wizard', 'StartAPI', 'StartPKI', and 'StartResell'. Below the tabs, the section is titled 'Select Certificate Purpose'. It contains two bullet points: 'Make sure you have already validated a domain name or email address before using this tool! Select the "[Validations Wizard](#)" for this task.' and 'Depending on your preferences and type of software, you need to have a prepared certificate request (CSR) ready for submission.' Below the text are two radio button options: 'Web Server SSL/TLS Certificate' and 'Client S/MIME and Authentication Certificate'. The second option is selected, indicated by a blue dot and a mouse cursor. Below the radio buttons is a blue 'Continue' button. At the bottom of the form, there is a light blue box containing the text: 'S/MIME client certificates are used for client authentication to web sites (such as this one) and for the signing, encryption and decryption of personal data. Mo contracts in digital format.'

Now to generate a CSR

You'll see a list of your validated emails in green. Choose the email you are working with and put it into the email field.

Click on the button – **Generated by Myself**

Select the Open SSL Command Which Is Written in Red and put onto to your clipboard

Setting up an expired SMIME Certificate

Tool Box

Certificates Wizard

Validations Wizard

StartAPI

StartPKI

StartResell

Class 1 S/MIME Certificate

Please enter your Email details

Validated Email(s): s mac.com

Email:

Free S/MIME Certificate support 1 email 3 years only, If you want to add more email more years, please finish the "Personal Identity Validation" for personal use that only cost US\$60 for unlimited multi-email Client certificate for 2 years period for FREE.
or go to "Organization Extended Validation" for organization use that only cost US\$200 for unlimited multi-email Client certificate for 3 years period for FREE, and unlimited multi-domain and wildcard OV SSL certificate for :

Please submit your Certificate Signing Request (CSR):

☐ Generated by Myself (.cer PEM format certificate)
You can use [StartComTool.exe](#) to generate the CSR.
or use the openssl command: `openssl req -newkey rsa:2048 -keyout yourname.key -out yourname.csr`

Submit

Setting up an expired SMIME Certificate

In a text editor – I used Byword – paste in the clipboard and follow the instructions below.

You just need to change this so that it is going to be identifiable when it is downloaded to make it easier to find.

The next step is to open **Terminal**

```
openssl req -newkey rsa:2048 -keyout yourname.key -out yourname.csr
```

Change what you just posted above where it says yourname to something you're used to identify the key and the CSR.

This is what I've changed mine to so I can identify it from other CSR codes I've already downloaded.

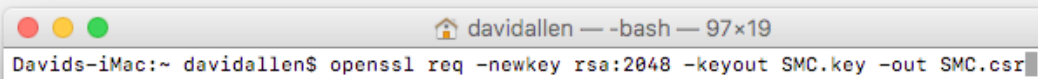
```
openssl req -newkey rsa:2048 -keyout SMC.key -out SMC.csr
```

Setting up an expired SMIME Certificate

Open terminal and paste in the terminal command

press Enter

```
openssl req -newkey rsa:2048 -keyout SMC.key -out SMC.csr
```

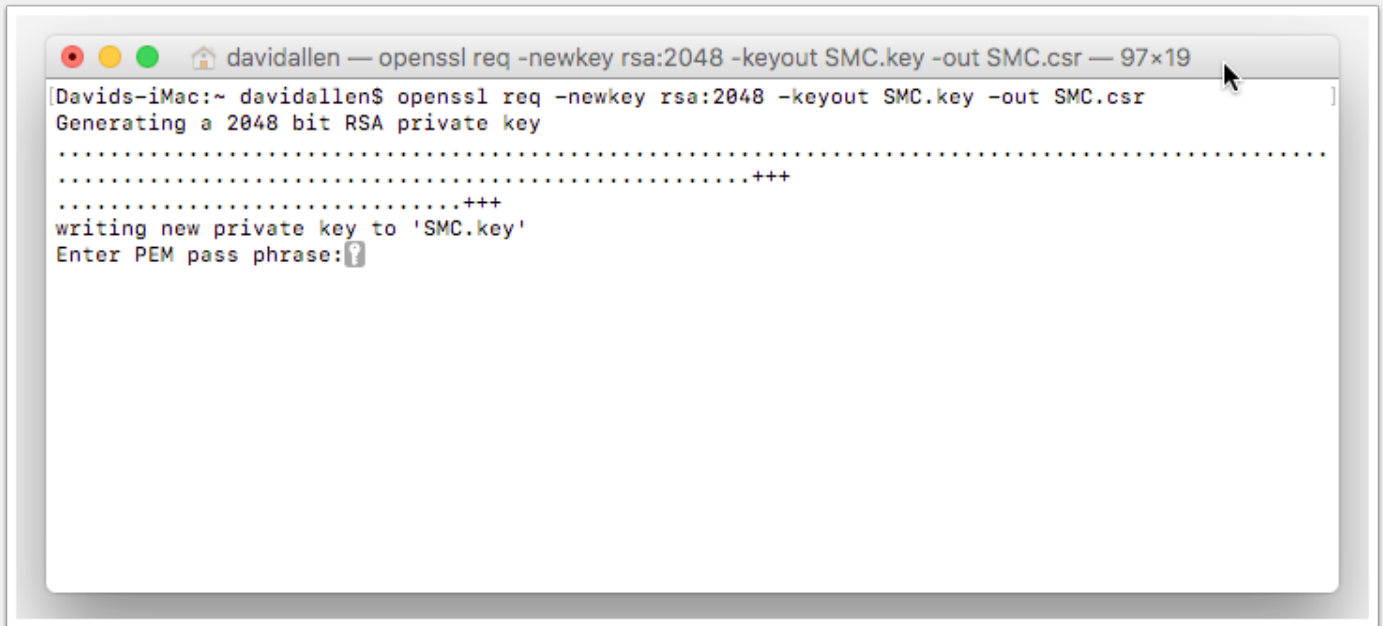
A screenshot of a macOS terminal window. The window title bar shows 'davidallen' and '-bash' with a size of '97x19'. The terminal content shows the command 'openssl req -newkey rsa:2048 -keyout SMC.key -out SMC.csr' being entered at the prompt 'David's-iMac:~ davidallen\$'. The cursor is at the end of the command.

```
David's-iMac:~ davidallen$ openssl req -newkey rsa:2048 -keyout SMC.key -out SMC.csr
```

I

Setting up an expired SMIME Certificate

Working in Terminal



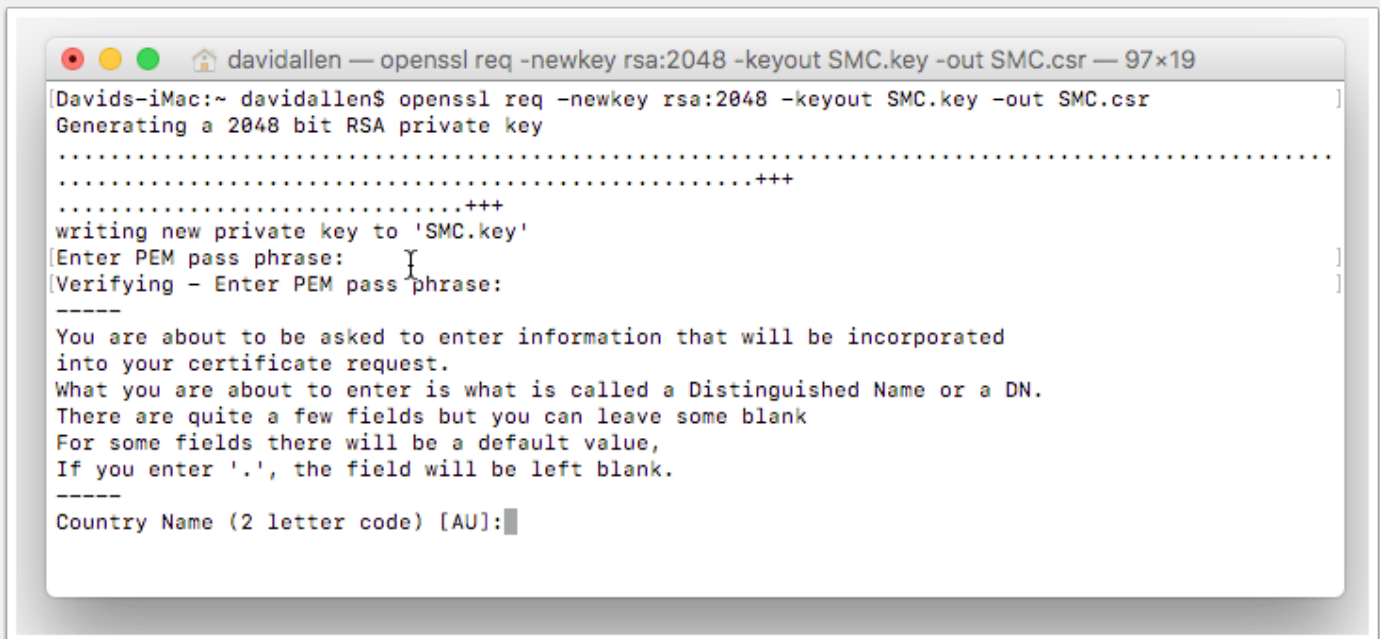
```
Davidallen — openssl req -newkey rsa:2048 -keyout SMC.key -out SMC.csr — 97x19
Davids-iMac:~ davidallen$ openssl req -newkey rsa:2048 -keyout SMC.key -out SMC.csr
Generating a 2048 bit RSA private key
.....
.....+++
.....+++
writing new private key to 'SMC.key'
Enter PEM pass phrase:?
```

Setting up an expired SMIME Certificate

Terminal Velocity

You will enter a pass phrase for a PEM – I just enter a four digit code I can easily remember.

Then follow the instructions to enter the details for the country code,

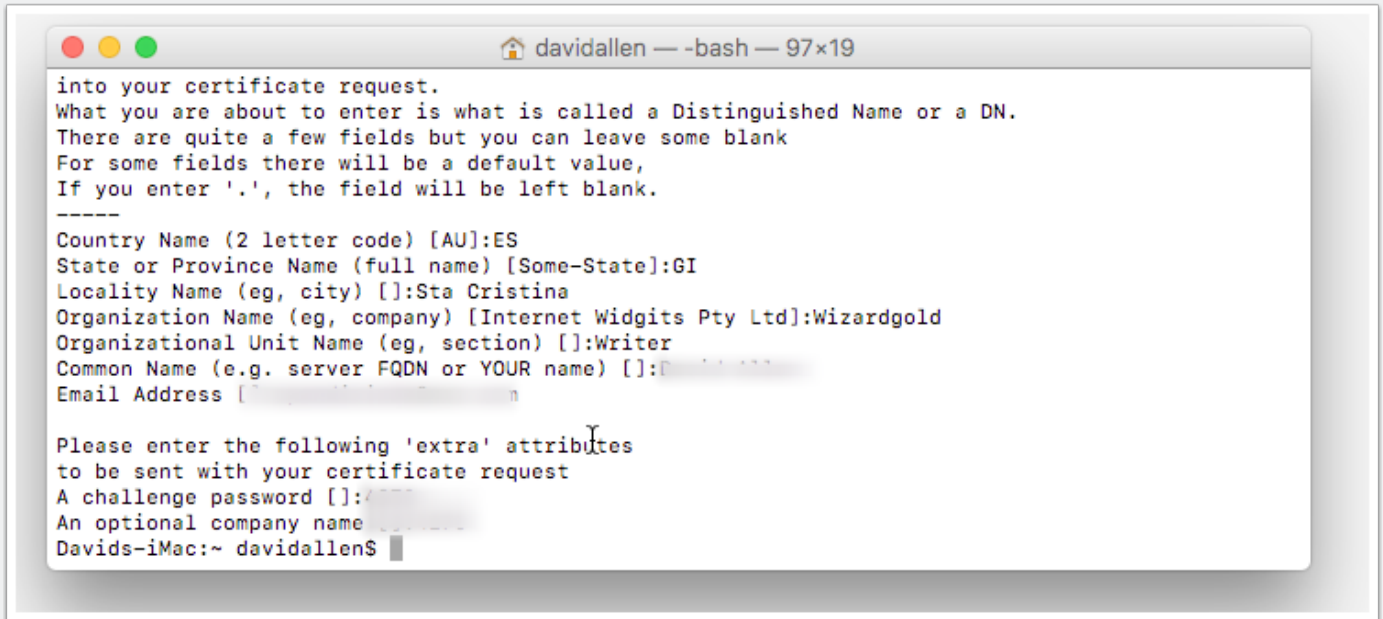


```
Davidallen — openssl req -newkey rsa:2048 -keyout SMC.key -out SMC.csr — 97x19
[Davidallen-iMac:~ davidallen$ openssl req -newkey rsa:2048 -keyout SMC.key -out SMC.csr
Generating a 2048 bit RSA private key
.....
.....+++
.....+++
writing new private key to 'SMC.key'
[Enter PEM pass phrase:
[Verifying - Enter PEM pass phrase:
-----
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:
```

Setting up an expired SMIME Certificate

Fill in the details as asked by the terminal.

This is not a difficult section it tells you you can leave some of these empty if you want to. I fill in what seems sensible to have filled in.

A terminal window titled 'davidallen — -bash — 97x19' showing the output of a command. The text in the terminal is as follows:

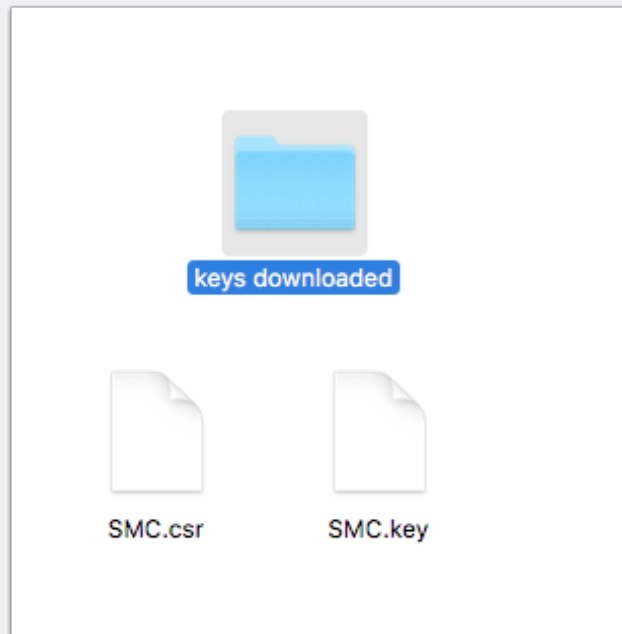
```
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:ES
State or Province Name (full name) [Some-State]:GI
Locality Name (eg, city) []:Sta Cristina
Organization Name (eg, company) [Internet Widgits Pty Ltd]:Wizardgold
Organizational Unit Name (eg, section) []:Writer
Common Name (e.g. server FQDN or YOUR name) []:
Email Address []:

Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:
An optional company name []:
Davids-iMac:~ davidallen$
```

Setting up an expired SMIME Certificate

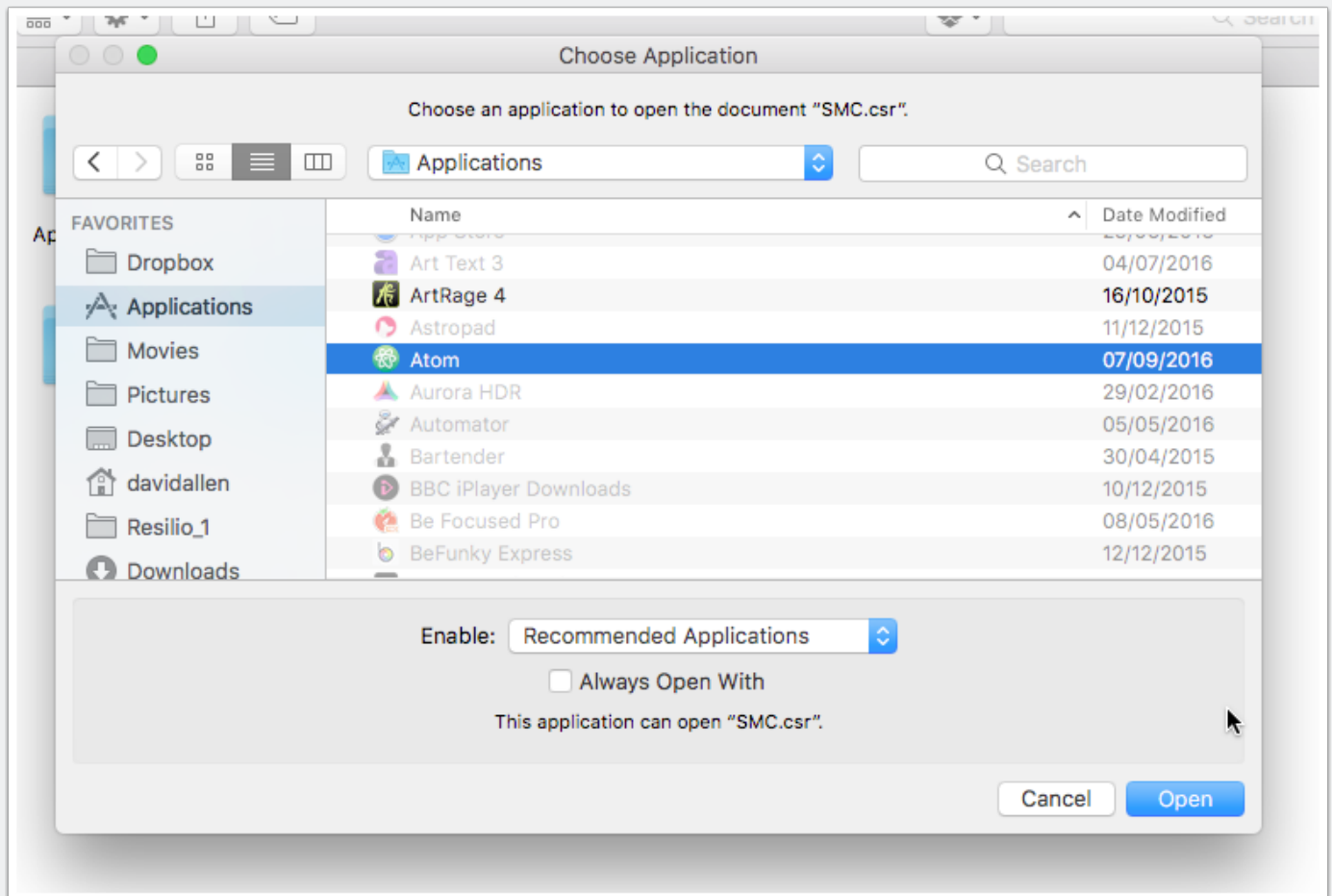
You have to go to your user home folder in Finder.

You will see that two files have been downloaded. One is the CSR code and the other is the private key.



Setting up an expired SMIME Certificate

Choose Application - Atom



Setting up an expired SMIME Certificate

Right click on the file and choose open in. Open the file in a text editor. I use the text editor Atom

in Atom select the text and put it on your clipboard.

Go back to the webpage and paste this CSR code

[illegible]

Setting up an expired SMIME Certificate

Paste in the CSR

When you first paste the Certificate Signing Request – CSR it will be coloured red. Wait until the code is verified and it turns to black text.

Click on the button Submit

wait for it to do its thing

Setting up an expired SMIME Certificate

Please submit your Certificate Signing Request (CSR):

- Generated by Myself (.cer PEM format certificate)

You can use [StartComTool.exe](#) to generate the CSR.

or use the openssl command: `openssl req -newkey rsa:2048 -ke`

```
6A1G/JUvxBEKV90GXEJV0bcAAnTH8Jp6atUwlhwpGdMI91vNi2LDKI
3CQ7JEOi+wx/2M37m1+lc7f/K2Mfy/jlg8WVtIDHq2+3dGgs3niJ0pVHIE
XFTJQpHHuCXVnv+oPNxuXhq8/zvoTPVO5J8fOjEXaHvbF/n0lgqCBX
uwC6tgpuibh+GYH6PefS0xLqLgqK/Es6BqfeGfOHPFkgZ+rkvU0Ux5SI
FkoYpb63Y7gVfCusFsm/IQIDAQABoCowEwYJKoZlHvcNAQkCMQYTI
KoZlHvcNAQkHMQYTBdQyNzAwDQYJKoZlHvcNAQEFBQADggEBAI
iUUBGEgwOilvbpo/12RMziElzkBpNTEGIIfRanB5OhZegxBz/TIWfQLG(
fyNJn+o+G4kUh2hVWCFOq+leAXNq/Xo9TUAbXsFeFJCbYLAF577Lj.
ZkYf8O3ct8ZUbNi/NkLGMEGuHroEBJGjPN16Dg/6R1MXd3jCWZeXG
fYrHiaqNaH8VfwjADQzj1GvHleZGI5Q26+b5ZzVe1XdEOAmfL3NC0uc
nTI2nnDWIPpB1Z8V/eT7YKqREF+s/RkBY+95HEG7baPfg+11fmO57F
upwzfVg=
```

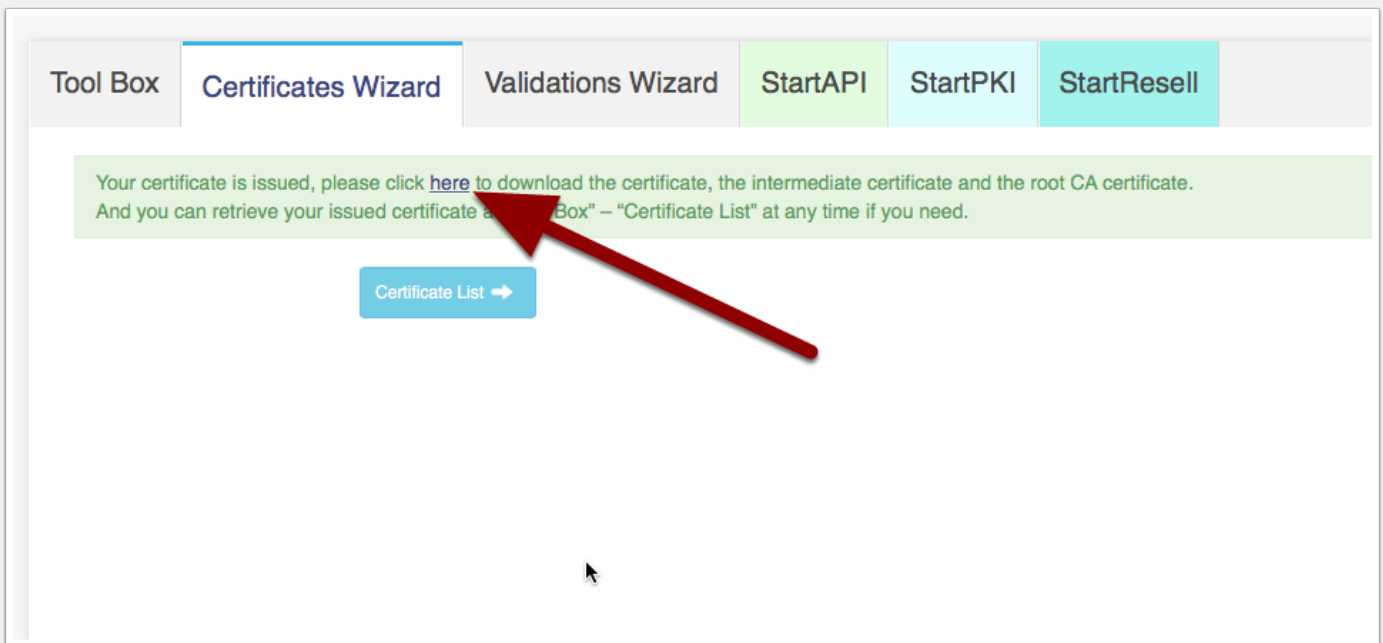
Submit

Setting up an expired SMIME Certificate

Click 'here' to download the cert

When you see this on your screen you can download the certificate.

The certificates will go to your downloads folder



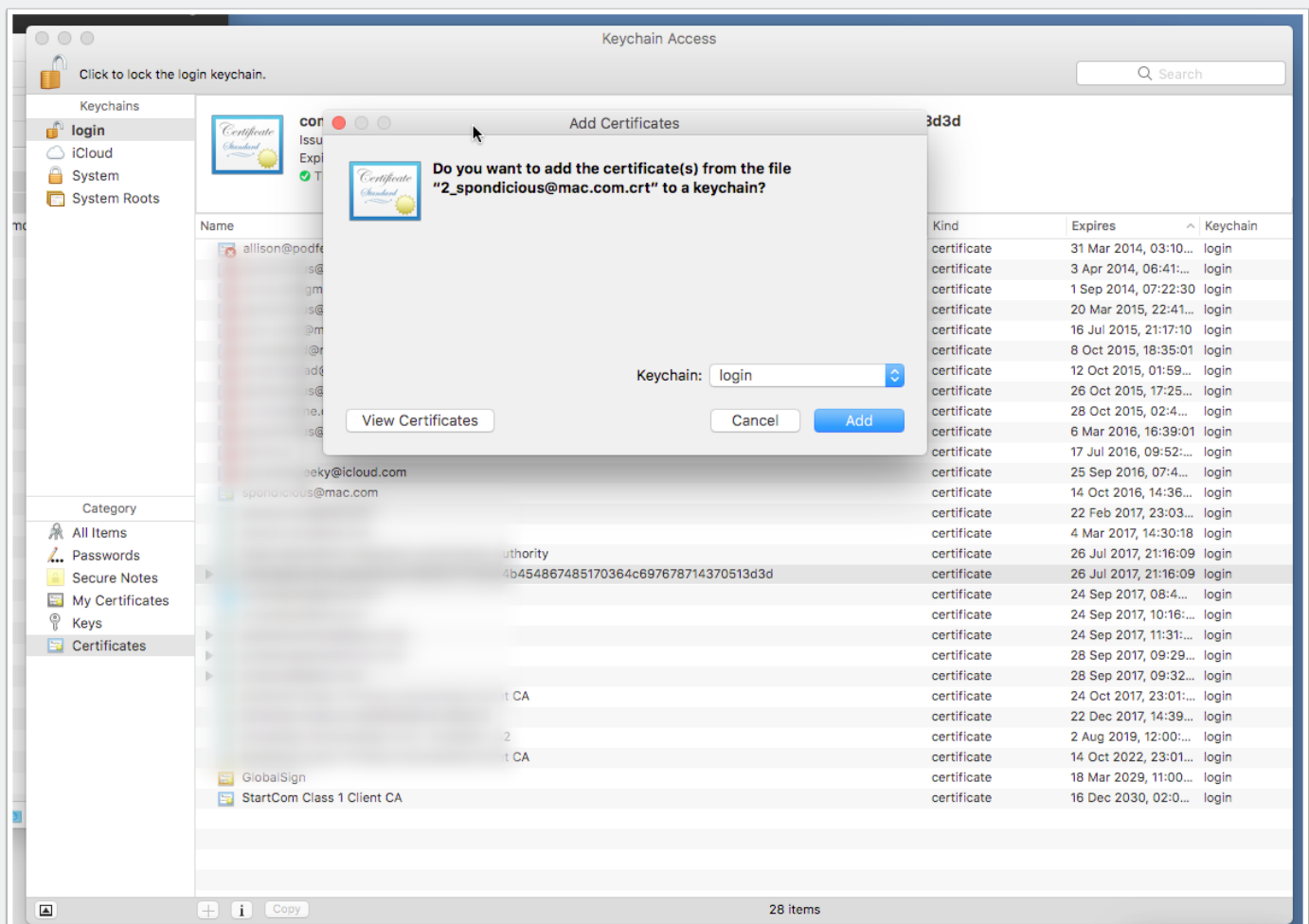
Setting up an expired SMIME Certificate

Add Certificates

Select the certificates in the downloads folder and drag them and drop them into your Keychain access application.

You don't need to change anything just click on the button – Add.

If you do a search you'll see that your new certificate has been added to the list of certificates in the login section.

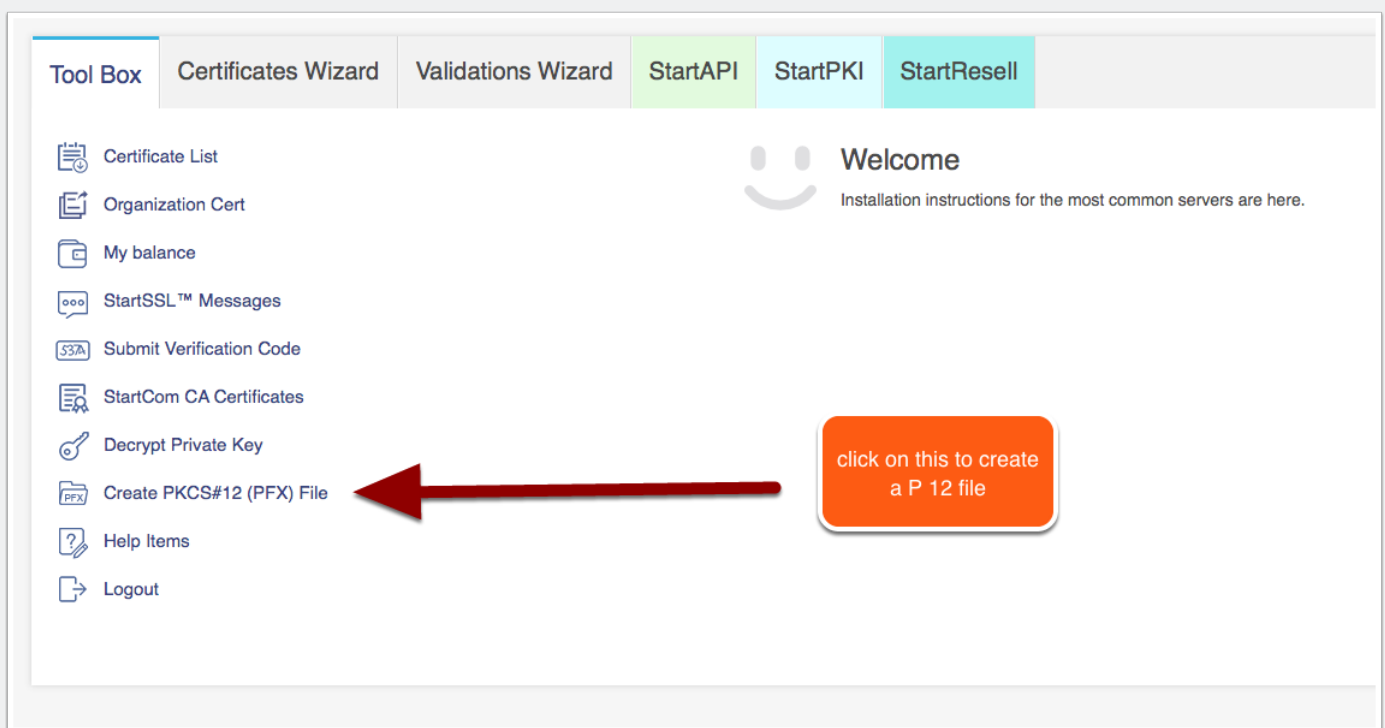


Setting up an expired SMIME Certificate

Moving the certificates onto your iOS devices. What we've done so far is just to use on your Mac

That is most of the job done. If you want to use the certificates created on your iOS devices are well will need to go back to start.com and create a different sort of file.

Let's create a P12 file to get the cert moved on to the iOS devices.



Setting up an expired SMIME Certificate

In the Downloads folder right click on the file and use the open in command to open up the certificate in the text editor – I suggest using Atom

Setting up an expired SMIME Certificate

The image shows a two-part process for setting up an expired SMIME certificate. The top part shows the Atom code editor with a certificate file named `2_spondici` open. The certificate text is visible, starting with `-----BEGIN CERTIFICATE-----`. An orange callout box with a circled '2' points to the certificate text, stating: "this is the file when opened in Atom". Another orange callout box with a circled '3' points to the end of the certificate text, stating: "select all of this text then go back to the webpage to paste it". A red arrow points from the certificate text to the bottom part of the image.

The bottom part shows the macOS Downloads folder. A table lists the files in the folder:

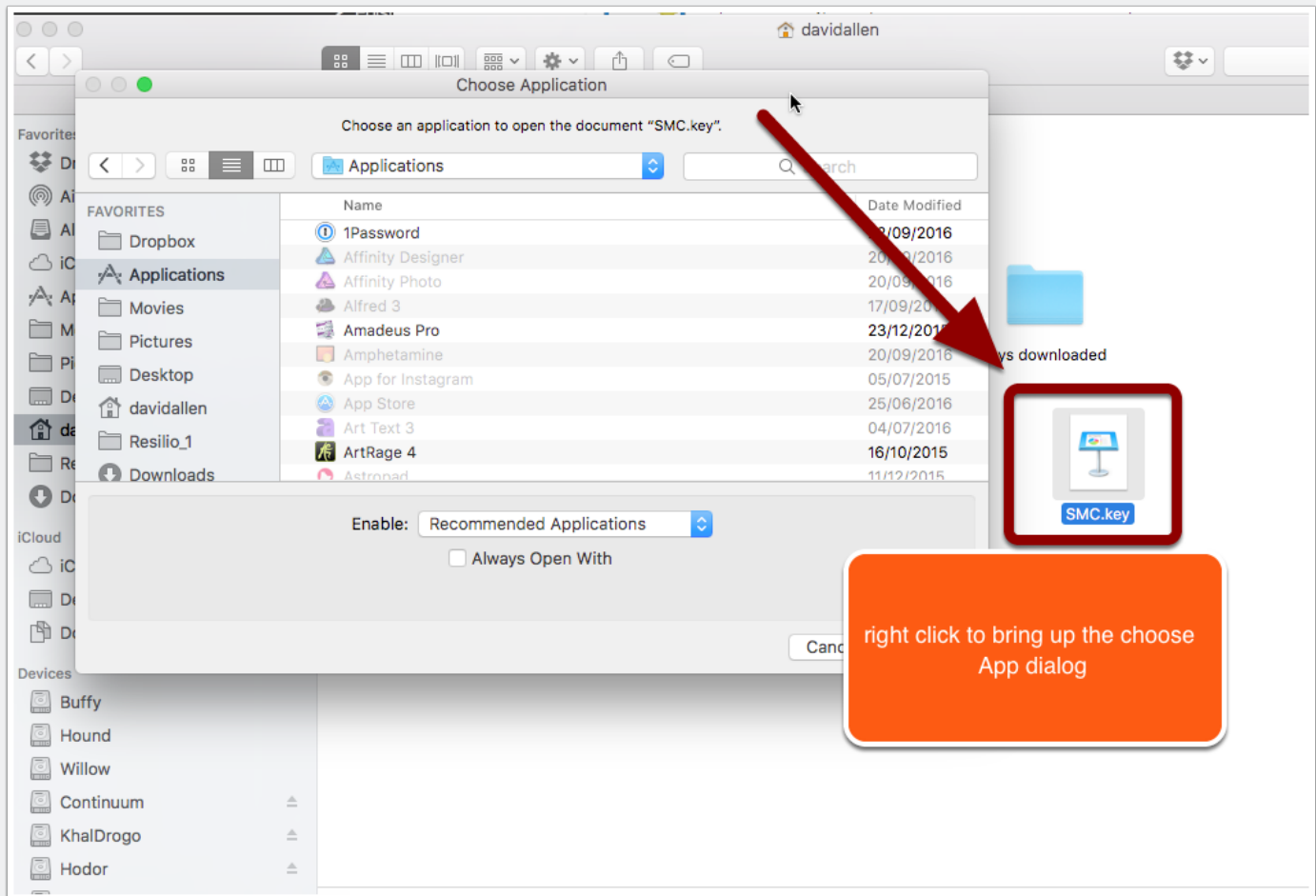
Name	Size	Kind	Date Added
▼ spondicious%40mac	--	Folder	Today, 11:35
1_Int...crt	2 KB	certificate	Today, 11:35
2_sp...@mac.com.crt	2 KB	certificate	Today, 11:35
ScenesandSequels_KlaassenMike.mobi	677 KB	Kindle...t Books	17 Sep 2016, 23:46

An orange callout box with a circled '1' points to the file `2_sp...@mac.com.crt`

Setting up an expired SMIME Certificate

Choose Application - Open the file with the Private Key in the home folder - Use Atom

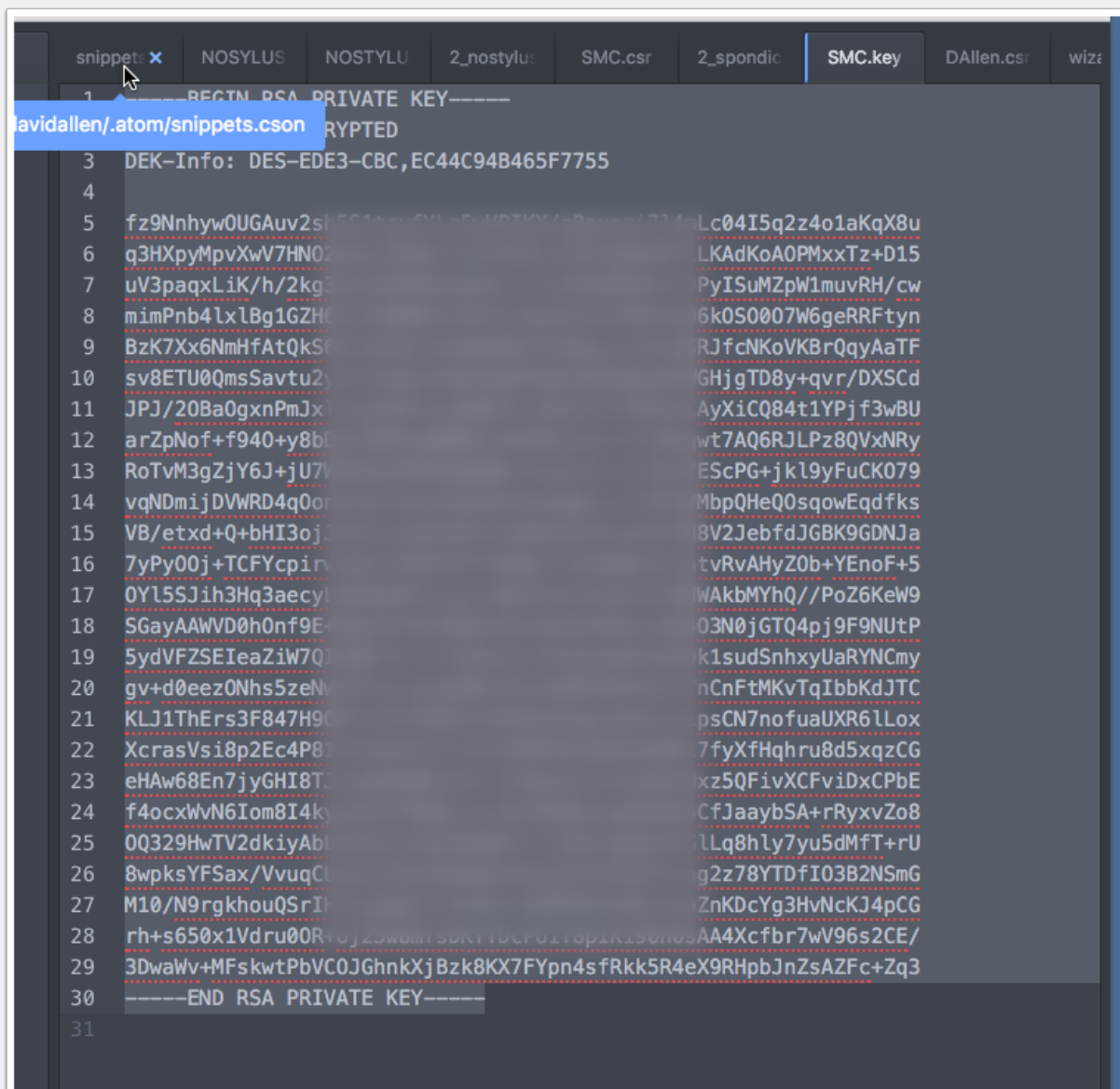
Right click on the file containing the key in the home folder - We downloaded it earlier



Setting up an expired SMIME Certificate

SMC.key — In the Atom App

Select the key and put on the clipboard



The screenshot shows the Atom code editor with the 'SMC.key' file selected in the sidebar. The file content is a PEM-formatted RSA private key. The text is as follows:

```
-----BEGIN RSA PRIVATE KEY-----
MIIEpQIBAAKCAQEAfz9Nnhyw0UGAuv2sl5G11...Lc04I5q2z4o1aKqX8u
q3HXpyMpvXwV7HNO...LKAdKoA0PMxxTz+D15
uV3paqxLiK/h/2kg...PyISuMZpW1muvRH/cw
mimPnb4lx1Bg1GZH...6k0S007W6geRRFtyn
BzK7Xx6NmHfAtQkS...RJfcNkoVKBBrQyAaTF
sv8ETU0QmsSavtu2...GHjgTD8y+qvr/DXSCd
JPJ/20Ba0gxnPmJx...AyXiCQ84t1YPjf3wBU
arZpNof+f940+y8b...wt7AQ6RJLPz8QVxNRy
RoTvM3gZjY6J+jU7...EScPG+jkl9yFuCK079
vqNDmijDVWRD4q0o...MbpQHeQ0sqowEqdfks
VB/etxd+Q+bHI3oj...8V2JebfdJGBK9GDNJa
7yPy00j+TCFYcpir...tvRvAHyZ0b+YEnoF+5
0YL5S3ih3Hq3aecy...wAkBMYhQ//PoZ6KeW9
SGayAAWVD0h0nf9E...03N0jGTQ4pj9F9NUtP
5ydVFZSEIeaZiW7Q...k1sudSnhxyUaRYNCmy
gv+d0eez0Nhs5zeN...nCnFtMKvTgIbbKdJTC
KLJ1ThErs3F847H9...psCN7nofuaUXR6Llox
XcrasVsi8p2Ec4P8...7fyXfHqhru8d5xqzCG
eHAw68En7jyGHI8T...xz5QFivXCFviDxCPbE
f4ocxWvN6Iom8I4k...CfJaaybSA+rRyxvZo8
0Q329HwTV2dkiyAb...LLq8hly7yu5dMfT+rU
8wpksYFSax/VvuqC...g2z78YTDfI03B2NSmG
M10/N9rgkhouQSrI...ZnKDcYg3HvNcKJ4pCG
rh+s650x1Vdru00R...AA4Xcfbr7wV96s2CE/
3DwaWv+MFskwtPbVC0JGhnkXjBzk8KX7FYpn4sfRkk5R4eX9RHpbJnZsAZFc+Zq3
-----END RSA PRIVATE KEY-----
```

Setting up an expired SMIME Certificate

Paste the cert and key

Fill in all the details and click on Submit

Tool Box

Certificates Wizard

Validations Wizard

StartAPI

StartPKI

StartResell

Certificate List

Organization Cert

My balance

StartSSL™ Messages

Submit Verification Code

StartCom CA Certificates

Decrypt Private Key

Create PKCS#12 (PFX) File

Help Items

Logout

Create PKCS#12 (PFX) File

Enter Private Key: OQ329HwTV2dklyAbLhKk2TveQ1ZOoNK7vr13RnfgqQJUTGILq8hly7yu5dMIT+rU8wpksYFSax/VvuqCUzg1I2Ru38qSQdcR5jZZT9iFbwf5+ng2z78YTDfIO3B2NSmGM10/N9rgkhoulQsrlHruzggR1viA+QU+cXENSOP4/NUJIEoZnKdcYg8HvNcKJ4pCGrh+s650x1Vdru0OR+Uj25w8mfsDKYTDcPUiY8piK90n0sAA4Xctbr7wV96s2CE/3DwaWv+MFskwtPbVCOJGhnikXjBzk8KX7FYpn4sfrKk5R4eX9RHpbJnZsAZFc+Zq3-----END RSA PRIVATE KEY-----

Enter Certificate: 9NFav4isvkK6VlgJBj0gY6jyW8S2Uq+UGPWOMJt16yedwji0nyHxyXUGEFHkXqTXCHxlc1HrbXKrbSMq108LbysDKoLJE7NM8rtzfFaW7wdxiUOWG0LdSYtmzwV4icV3B5a7RH0q9MAAKwFlgV7p6iNdSZn+riRrwarjChxtOeDi00OwX1GhpobRi71MuZRTSBo3wB7dlJmmom7bur6X9ALRa9NZZYbMpRhHt29rqF6RWzQlicOegqqrHWpTqtRFPVCws+o5BDrEtsaa2MSr0PiKTS2I8S2MCKXpxr-----END CERTIFICATE-----

Provide a password:

Submit »»

Download the P12 file

Create PKCS#12 (PFX) File

✓ PKCS#12 (PFX) Generation Successful

- Click in the button below to retrieve your generated PKCS#12 (PFX) file.
- Make sure you disable any download blockers and/or whitelist the startssl.com web site.

Download »»

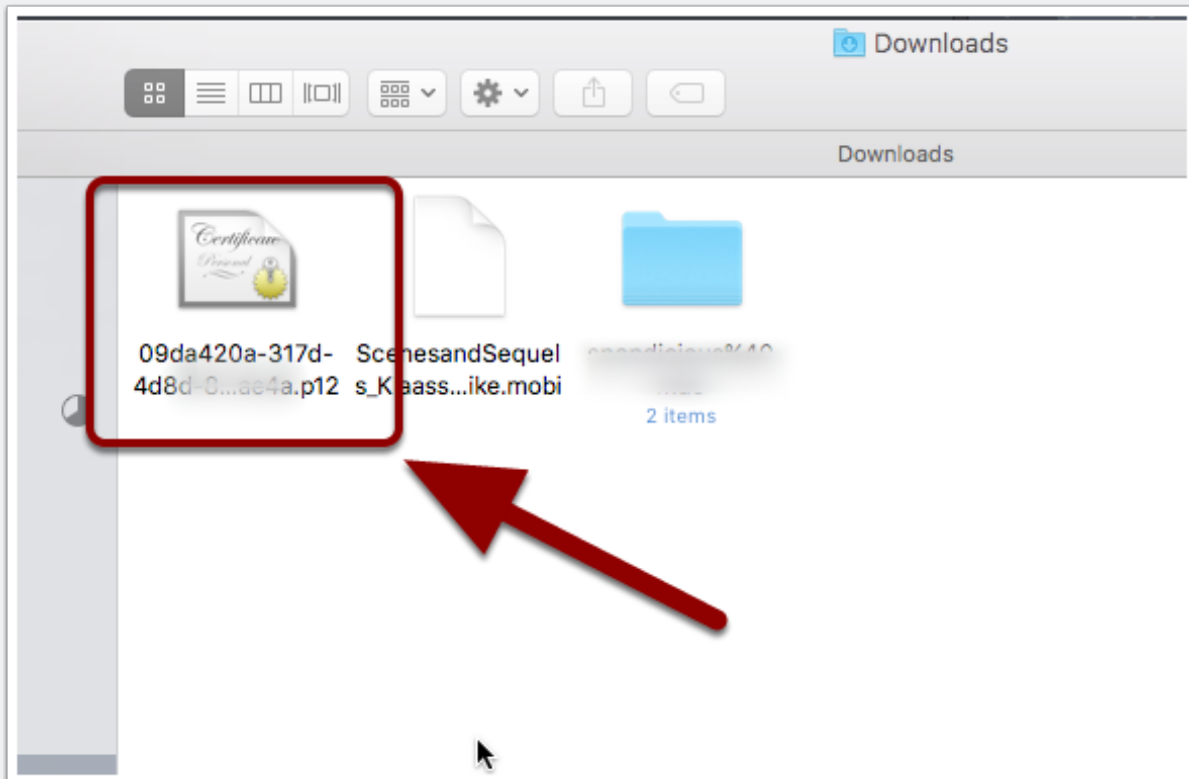
SETTING UP AN EXPIRED SMIME CERTIFICATE

27

Setting up an expired SMIME Certificate

Go to Downloads Folder

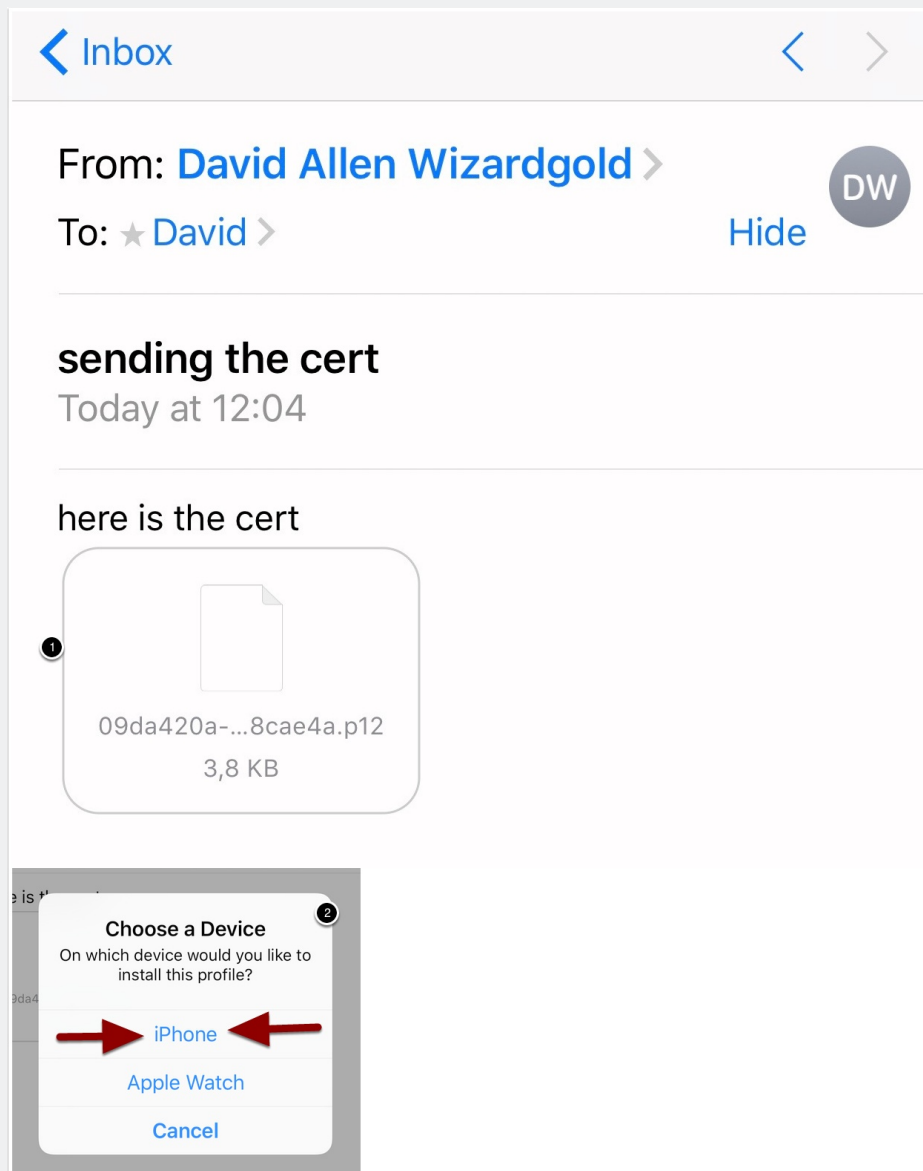
Select the certificate and send it to yourself in an email.



Setting up an expired SMIME Certificate

Open up the Mail App on your iOS device

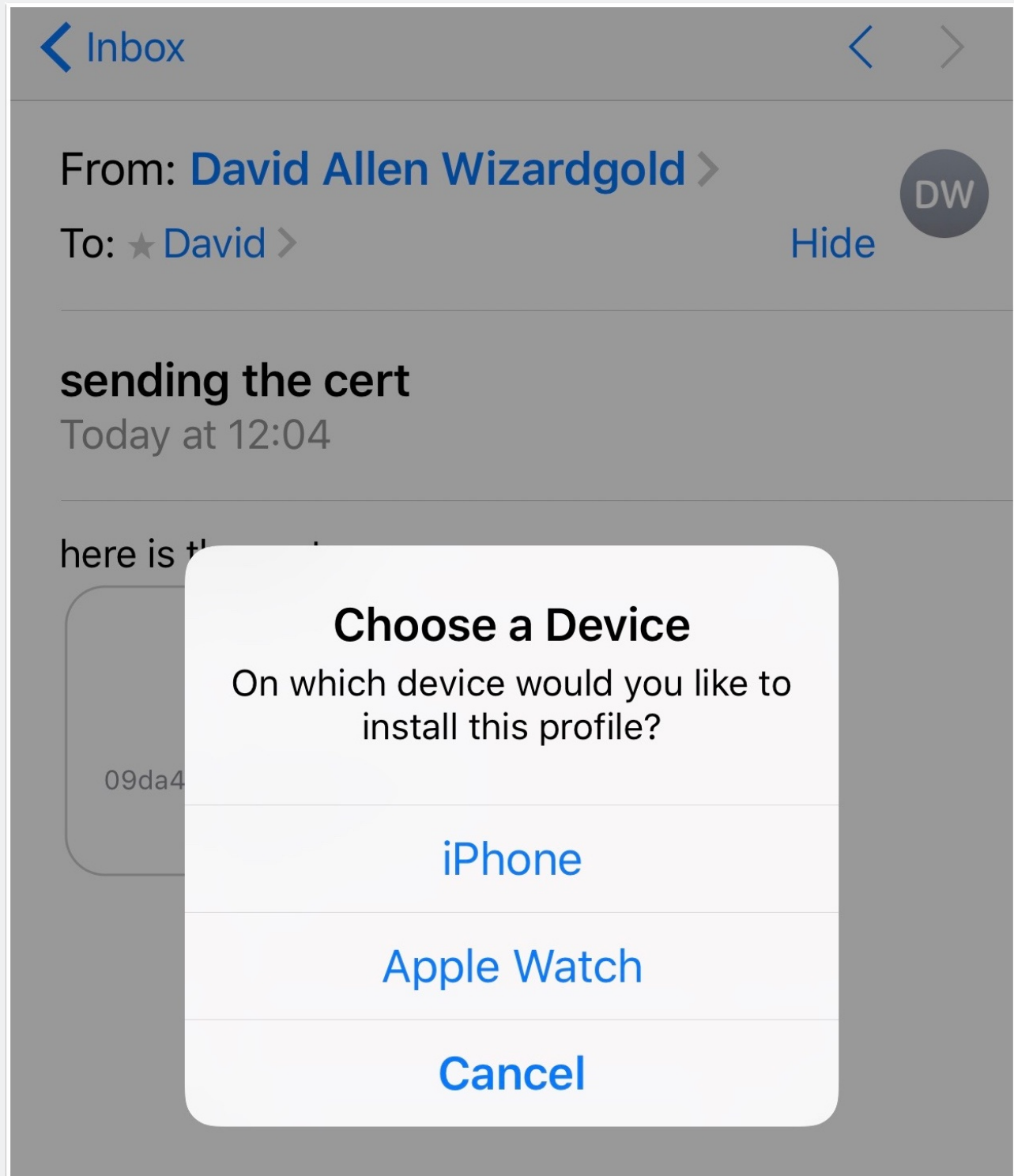
it needs to be the email application and not a third-party mail app. Open up the email you have just sent yourself with the certificate.



Setting up an expired SMIME Certificate

Choose to put on the iPhone

Setting up an expired SMIME Certificate

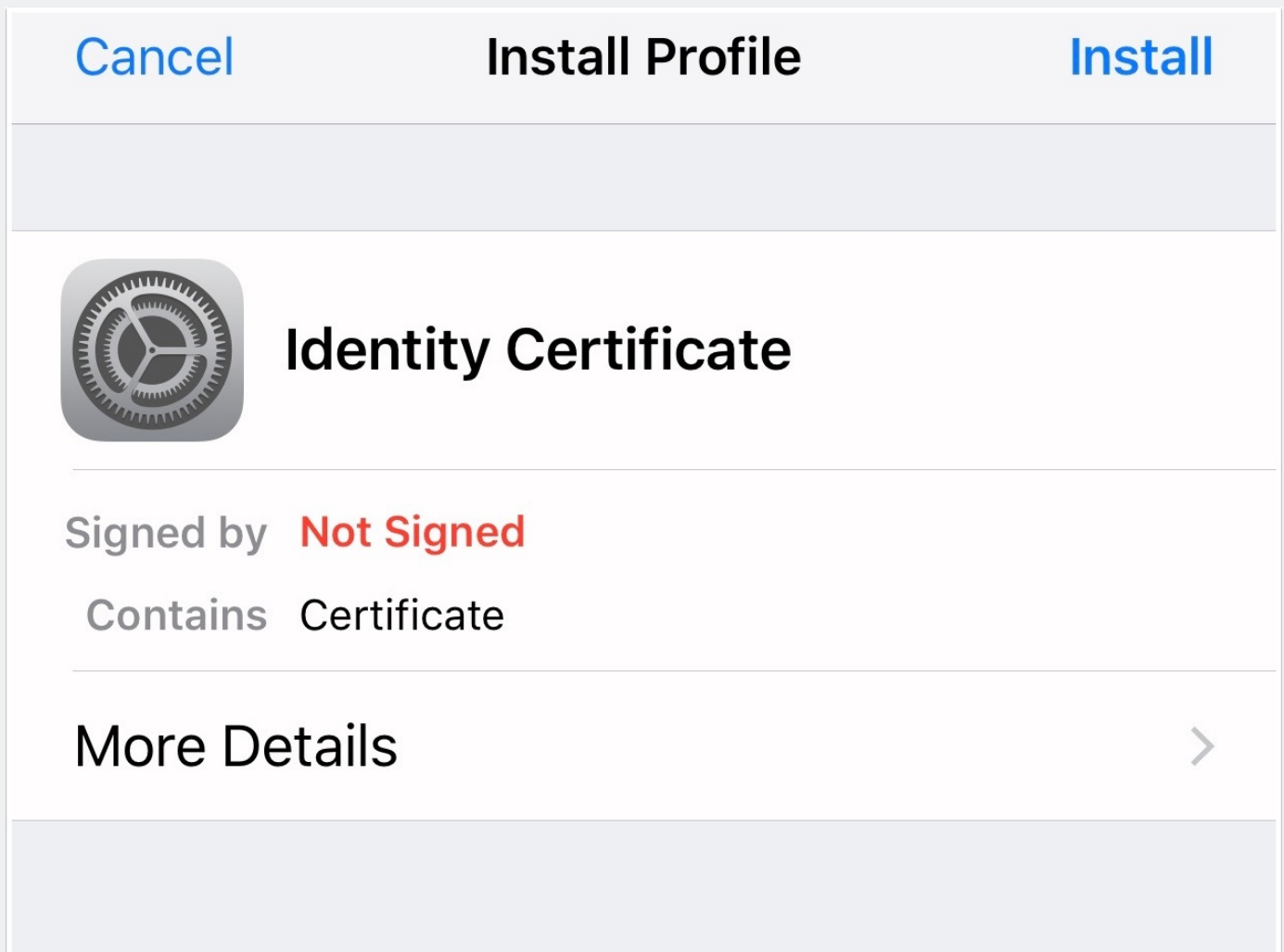


Setting up an expired SMIME Certificate

Install the Profile

Click on Install

Just keep following the prompts as you go

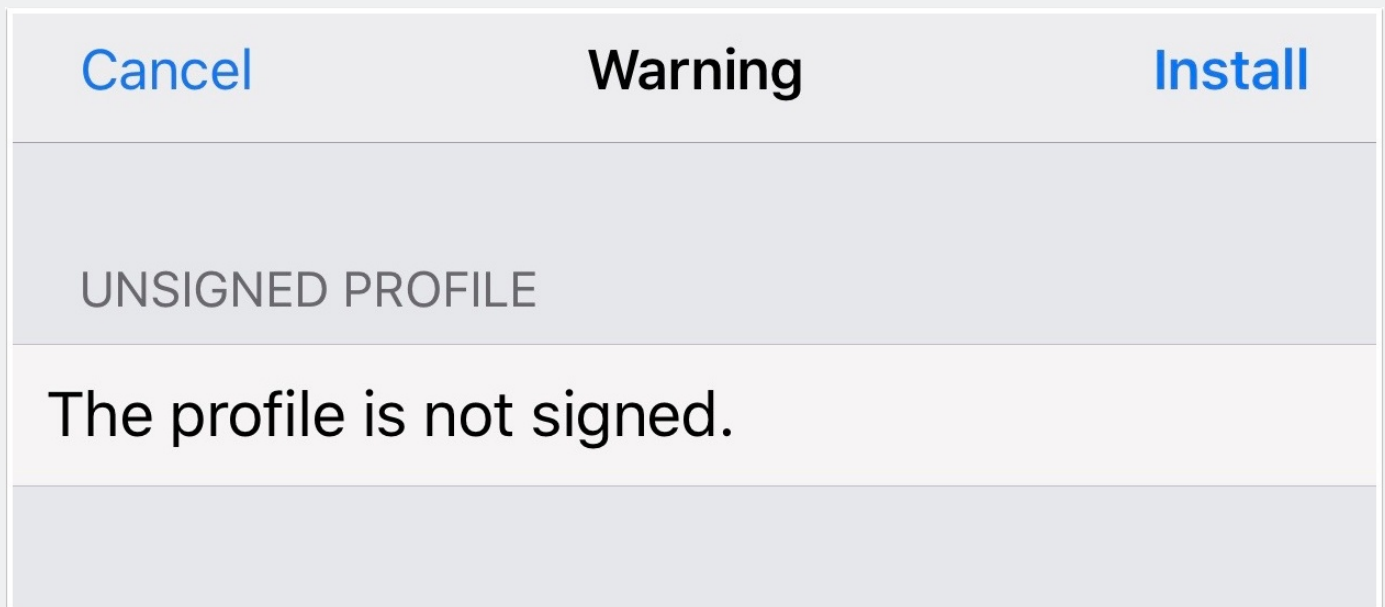


Setting up an expired SMIME Certificate

You have been warned

Ignore the warning - It has no meaning

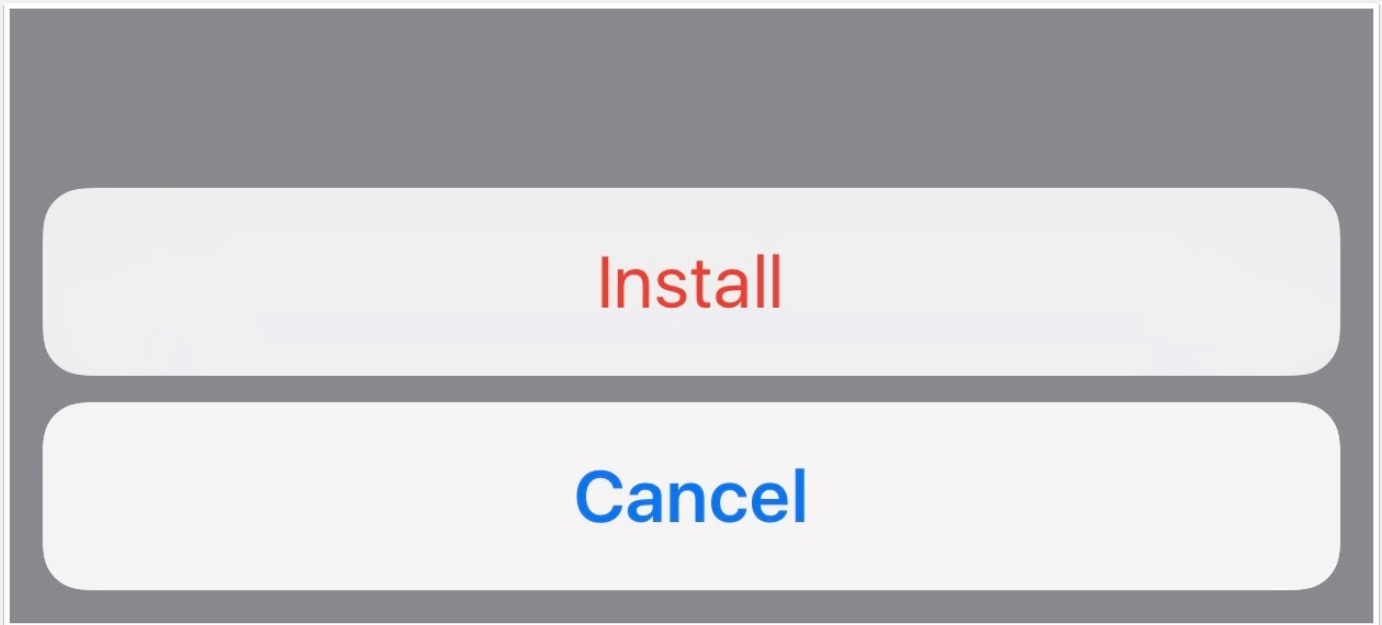
Just click on **Install**



Setting up an expired SMIME Certificate

Same again - But at the bottom of the screen

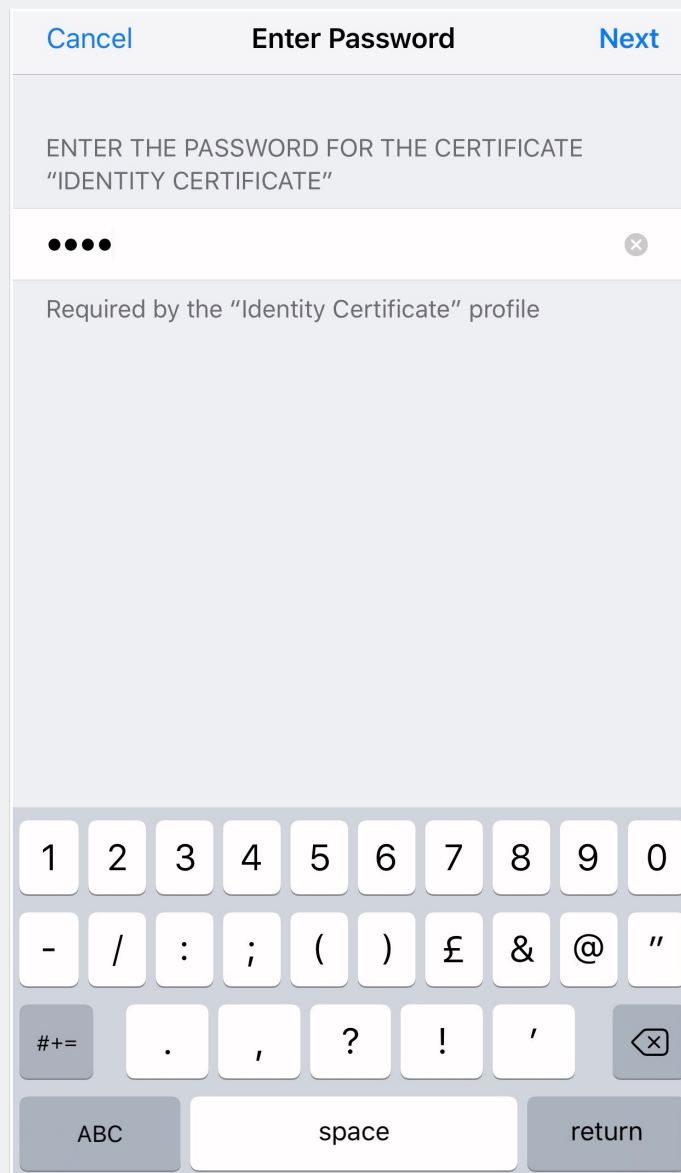
Click on **Install**



Setting up an expired SMIME Certificate

Enter the password you made for the certificate.

This is only a temporary password - doesn't have to be great if you are going to use the file straight away and you delete the file after you have installed the cert where you need it.



The screenshot shows a mobile-style dialog box titled "Enter Password". At the top, there are three buttons: "Cancel" (blue), "Enter Password" (black), and "Next" (blue). Below the title bar, the text "ENTER THE PASSWORD FOR THE CERTIFICATE 'IDENTITY CERTIFICATE'" is displayed. Underneath this is a password input field containing four black dots, with a small "x" icon to its right. Below the input field, the text "Required by the 'Identity Certificate' profile" is shown. At the bottom of the dialog is a virtual keyboard with the following layout: Row 1: 1, 2, 3, 4, 5, 6, 7, 8, 9, 0; Row 2: -, /, :, ;, (,), £, &, @, "; Row 3: #+=, ., ,, ?, !, ', and a delete icon (x in a box); Row 4: ABC, space, and return.

Setting up an expired SMIME Certificate

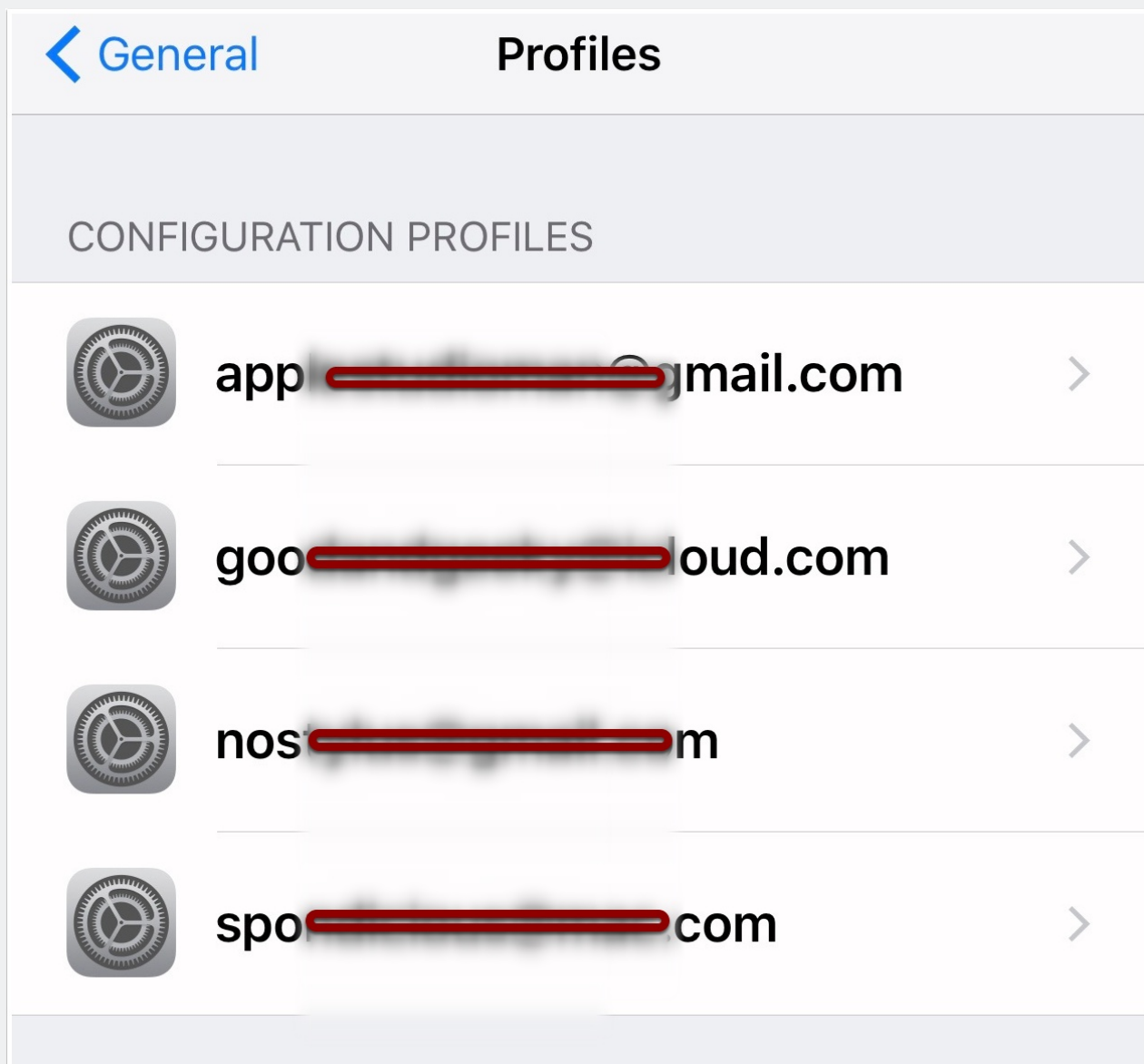
Success

Now you can receive encrypted emails and be able to read them.

Setting up an expired SMIME Certificate

You can see in the profiles area of settings for the device when the certificate has been added successfully

I had three certificates already and I added this other one



Setting up an expired SMIME Certificate

That's all there is too it. You will now be able to read emails encrypted with an SMime certificate on your iOS devices as well as on your Mac.

If you want to use encryption on the iDevice the I recommend using GPG - oPenGP Lite is the app I use for that purpose.

Setting up an expired SMIME Certificate

Get the Book on using GPG on your computers

[Buy the Book with step by step guides to using GPG Tools for private emails](#)

