



## Creating .pem files for iOS Push Notifications with buzztouch

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There are four main steps.

- 1) Create a Certificate Signing Request (CSR). You do this on your Mac using the Keychain Access application.
- 2) Generate a Push Certificate in the iOS Developer Portal. You do this by uploading the CSR you made on your mac to the iOS Development Portal.
- 3) Convert the Push Certificate to the .pem format to use in the buzztouch control panel.

### Step-by-Step

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*Replace APPNAME with the name of your application.*

- 1) Create a folder on your computer to save some important files. It's important that you are able to locate this folder later and in the future. When you're done completing this process, do not move it to the trash.

I made a folder on the desktop named APPNAME-Certs

`/Users/davidbook/Desktop/APPNAME-Certs`

- 2) Open the Keychain Access app on your Mac. Search for it using Spotlight or Applications > Utilities > Keychain Access
- 3) Generate a Certificate Signing Request using Keychain Access.
  - a) In Keychain Access, select "login" on the left under "Keychains"
  - b) From the Keychain Access main menu:  
Keychain Access > Certificate Assistant > Request a Certificate from a Certificate Authority. A wizard will open.
  - c) Enter your email address (the one you use in the iOS Portal)  
Enter your APPNAME as the common name.  
Select "Saved to Disk"
  - d) Click "Continue" Navigate to the folder you created in step 1 and save the CSR in the folder you created.

- 4) Visit the iOS Developer Portal and log into your iOS Developer Account.
- 5) Select App Id's from the menu.
- 6) Create a new App ID. For example "com. APPNAME.com"  
Do NOT choose "use a Team ID" from the drop down list. Do not enter any numbers for this App ID, the iOS portal will do this for you when you choose a number from the drop down list. The number you choose will be appended to the beginning of the App ID you enter.

**THIS APP ID MUST ALSO BE ENTERED IN YOUR XCODE PROJECT IN THE BT\_info.plist file. DO THIS NOW SO YOU DON'T FORGET. ENTER THIS App ID IN THE CFBundleIdentifier field. Do not enter the numbers that the iOS Portal shows you, just the APP ID. Like: "com. APPNAME.com"**

- 7) Click the Configure link next to this App ID to begin generating a new Development Push SSL Certificate. You'll repeat these steps to create a Production / Distribution certificate when you're ready to publish.
  - a) Click Configure
  - b) Select the "Enable for Apple Push Notification service" checkbox.
  - c) Click the "Configure" button to open the SSL Certificate wizard.  
(the first step explains the process you already completed in step 3)
  - d) "Continue" to the screen to upload the CSR your generated in step 3
  - e) Upload your CSR, then click "Generate"
  - f) "Continue" to the download screen and download the Certificate. Save it in the folder you created.
- 8) Double click the Certificate you downloaded, this will install it in your Keychain Access app.
- 9) Export the Certificate. Find the Certificate in KeyChain Access and expand the Private Key (the private key is under the Certificate and hidden until you expand). Select both the Certificate and the Private Key. Export as APPNAME.p12

DO NOT ENTER A PASSWORD to protect the exported items. We'll protect them later. Click OK with a blank password. You may be presented with another

password box so “Keychain Access can export the items.” Enter your Mac’s password. Save the files in the folder you created.

10) At this stage you have three files in your folder.

- The Certificate Signing Request you created.
- The Certificate you downloaded from the iOS Developer Portal.
- The .p12 file you exported using KeyChain Access.

11) Convert the .p12 file into a .pem file: Open up the Terminal App on your map. This is the old fashion command line, don’t be scared, it’s easy. Search for it using Spotlight or Applications > Utilities > Terminal

Navigate to the folder you created using the command line using the “cd” command (change directory).

//from the terminal prompt (this is a sample path)

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cd /Users/davidbook/Desktop/APPNAME-Certs
```

Next, issue this command to convert the .p12 file into a .pem file. Hint: Change the name of the APPNAME in this command then copy-paste the command into your Terminal window. This helps prevent typos.

//from the terminal prompt...

```
openssl pkcs12 -in APPNAME.p12 -out APPNAME.pem -nodes -clcerts
```

DO NOT ENTER A PASSWORD WHEN PROMPTED.  
DO NOT ENTER A PASSPHRASE WHEN PROMPTED.

You will see “Mac Verified OK” You can close Terminal.

12) Upload the .pem file you created on the Push Notifications screen in your buzztouch control panel. Enter a passphrase on this screen. The passphrase you enter does not matter much, you won’t need to remember it. If you replace the .pem file you’ll provide another password at that time.

Things to consider:

- You’ll be repeating these steps to create a Production Certificate and .pem file.
- The iOS Simulator does not support push notifications. This means you’ll need to create a Provisioning Profile, using the App ID you created, then compile your app with the Provisioning Profile when installing on your testing device.