# ownCloud Branded Clients Manual

### The ownCloud Team

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## **Branded Clients**

- Building a Branded Desktop Sync Client
- Building Branded Android Apps
- Building Branded iOS Apps

## **Creating Branded Desktop Client**

### **Building a Branded Desktop Sync Client**

### Introduction

To build a branded Desktop sync client, you need to supply your own artwork and use the ownBrander wizard in your account on customer.owncloud.com. The ownBrander wizard details the required image specifications.

### **Build Process**

In the ownBrander wizard at your account, start with the Common section at the top, and enter information common to all clients that you can build with ownBrander. You may override any settings inside the *Common* section of the *Client* sections.

Then go to the *Desktop client section* of ownBrander, which has two sections, *Required* and *Optional*.

ownClou	d 🔻 Enterprise Edition	٩	carla 🔻
Common	This is the tab for Desktop Client brar tab, you will enter all of the branding	nding for Windows and MAC OS. In the information for the Desktop Client. N	his We
IOS	have divided the tab into two section no Advanced options for the Desktop	s: Required, and Suggested. There a Client. Required items are those th	are
Optional	must be uploaded for the Desktop Cl items are those that ownCloud sugg	ients to build correctly. Recommend ests as they improve the overall us	ed ser
Advanced	experience. Advanced items give you interface, but are too fine grained for i	i a greater degree of control over t most of our customers.	he (
Android	Required		
Optional	All of the branding items in this se required. It will not be possible to ge	ection of the Desktop Client tab are nerate your Desktop Clients until you	1 P
Advanced	enter all of the requested items.		
Desktop	Name of your app		lion
Optional			

Work your way through the wizard, enter required elements and any optional elements you wish. When you have completed the wizard, press the **[Generate Desktop Client]** button. You will either get messages warning of any items that need to be corrected, or a success message.

It takes 24-48 hours to build your client. When finalized you will see it in your account on customer.owncloud.com.

## **Updating Your Branded Desktop Clients**

### Introduction

The Client Updater Server provides a Web service that will tell an ownCloud Desktop sync client whether or not an update is available. If an update is available, it will also provide metadata for the update, such as the Download URL, signatures or a fallback URL that the client can resort to in case the update goes wrong.

Clients for Mac OS X and Windows will update themselves automatically. Linux clients will not. You have two options for your Linux users:

- Set up your own download repository so your Linux users can update your branded clients with their package managers when they receive an update notification.
- Upload new versions of your branded client to your Web server. Your Linux users receive update notifications, then download and install the client manually.

There are times when you may want to disable update notifications. See the examples below to learn how to do this.

### Prerequisites

- 1. Configure *Update URL* in the *Desktop* section of your ownBrander account (available for *advanced* users only).
  - Example: https://mycloud.example.com/updates/ (note the forward slash at the end)
- 2. Generate branded clients.
- 3. Upload branded clients to your Web server.
  - Windows example: https://mycloud.example.com/install/mycloud-2.1.1.240-setup.exe
  - Mac OS X examples: https://mycloud.example.com/install/mycloud-2.1.1.787.pkg https://mycloud.example.com/install/mycloud-2.1.1.787.pkg.tbz https://mycloud.example.com/install/mycloud-2.1.1.787.pkg.tbz.sig
  - You should have a Web page with links to your branded clients, so your users can find and download them. For example, https://mycloud.example.com/install/ with Options +Indexes in your ownCloud .htaccess file.

### Install client-updater-server

- 1. Download client-updater-server-0.4.tar.xz from https://customer.owncloud.com/
- 2. Extract client-updater-server-0.4.tar.xz to your Web server. The index.php must be accessible at https://mycloud.example.com/updates/index.php.
- 3. Copy your ownCloud config/ownCloud.yml file, and name it according your Application short

name as configured in ownBrander.

Example: config/mycloud.yml

### **Configure client-updater-server**

All configuration is done in your config/mycloud.yml:

```
throttle: 1 # 100% of the requests get served with the new version
platforms:
 win32msi:
    currentVersion: 2.5.0.10598
    currentVersionString: ownCloud Client 2.5.0 (build 10598)
    updateUrl: https://owncloud.com/desktop-app
    downloadUrl: http://download.owncloud.com/desktop/stable/ownCloud-2.5.0.10598.msi
 win32:
    currentVersion: 2.4.3.10188
    currentVersionString: ownCloud Client 2.4.3 (build 10188)
    updateUrl: https://owncloud.com/desktop-app
    downloadUrl: http://download.owncloud.com/desktop/stable/ownCloud-2.4.3.10188-
setup.exe
 linux:
    currentVersion: 1.8.0
    currentVersionString: ownCloud Client 1.7.1
    updateUrl: https://owncloud.com/desktop-app
 macos:
    currentVersion: 1.8.0.2139
    currentVersionString: ownCloud Client 1.8.0 (build 2139)
    downloadUrl: https://download.owncloud.com/desktop/stable/ownCloud-
1.8.0.2139.pkg.tbz
    pubDate: 2015-03-26
    signature: MCwCFFedScUKeRXYMS6vKVLw821B+/+lAhRbiCxHNzVVZFNXHSvB9GNHOuI5cw==
   minimumSystemVersion: 10.7.0
```

In earlier versions this configuration was written in PHP, which is still supported but no longer the default. The structure slightly changed and would look like this analoguely to the yml config config/mycloud.php:

```
<?php

$updateInfo = [
    'throttle' => 0.7, // 70% of the requests get served with the new version
    'platforms' => [
        'win32msi' => [
        'currentVersion' => '2.5.0.10598',
```

```
'currentVersionString' => 'ownCloud Client 2.5.0 (build 10598)',
            'updateUrl' => 'https://owncloud.com/desktop-app',
            'downloadUrl' => 'http://download.owncloud.com/desktop/stable/ownCloud-
2.5.0.10598.msi',
        ],
        'win32' => [
            'currentVersion' => '2.4.3.10188',
            'currentVersionString' => 'ownCloud Client 2.4.3 (build 10188)',
            'updateUrl' => 'https://owncloud.com/desktop-app',
            'downloadUrl' => 'http://download.owncloud.com/desktop/stable/ownCloud-
2.4.3.10188-setup.exe',
        ],
        'linux' => array(
            'currentVersion' => '1.8.0',
            'currentVersionString' => 'ownCloud Client 1.7.1',
            'updateUrl' => 'https://owncloud.com/desktop-app',
        ),
        'macos' => array(
            'currentVersion' => '1.8.0.2139',
            'currentVersionString' => 'ownCloud Client 1.8.0 (build 2139)',
            'downloadUrl' => 'https://download.owncloud.com/desktop/stable/ownCloud-
1.8.0.2139.pkg.tbz',
            'pubDate' => '2015-03-26',
            'signature' =>
'MCwCFFedScUKeRXYMS6vKVLw821B+/+1AhRbiCxHNzVVZFNXHSvB9GNHOuI5cw==',
            'minimumSystemVersion' => '10.7.0',
        ),
    ]
];
```

(The former top-level config options were moved under a platforms key.)

### **Disabling Notifications**

There may be times when you wish to disable update notifications. To do this, make the 'currentVersion' and 'currentVersionString' older than the currently installed version. To reenable notifications, change these to release versions that are newer than the currently installed clients.

### Windows

'currentVersion'

Exact version of the new client, including the build number

• 'currentVersionString'

Name of the new client, same as "Application name" configured in ownBrander.

• 'updateUrl'

Human-readable Web site with links to your new client files.

'downloadUrl'

Full URL to download the \*.exe file. https needed.

### Mac OS X

- currentVersion' Exact version of the new client, including the build number.
- 'currentVersionString' Name of the new client, same as Application name configured in ownBrander.
- 'downloadUrl'
   Full URL to download the \*.pkg.tbz file. https needed.
- 'pubDate' Currently not used.
- 'signature' Content of mycloud-2.1.1.787.pkg.tbz.sig, adds some extra security to the Mac OS X updater.
- 'minimumSystemVersion' Minimum required Mac OS X version according to https://owncloud.com/desktop-app/

### Linux

- 'currentVersion' Exact version of the new client, including the build number
- 'currentVersionString' Name of the new client, same as Application name configured in ownBrander.
- 'updateUrl'

Human-readable Web site with links to your new client files to manually install new client versions.

### **Debugging client-updater-server**

### Windows

```
This a example URL of a 2.5.0 client for Microsoft Windows:
https://mycloud.example.com/updates/?version=2.5.0.10598&platform=win32&msi=true&oem=mycloud
```

You should see something like the following in your Web server logs:

```
[19/Feb/2016:14:33:35 +0100] "GET
/updates/?version=2.5.0.10598&platform=win32&msi=true&oem=mycloud HTTP/1.1" 200 185 "-
"
"Mozilla/5.0 (Windows) mirall/2.5.0 (mycloud)" microsecs:530450
```

The output should look like this if you call the URL manually:

```
<?xml version="1.0"?>
    <owncloudclient>
        <version>2.5.0.10598</version>
        <versionstring>MyCloud Client 2.5.0 (build 10598)</versionstring>
```

```
<web>https://mycloud.example.com/install/</web>
<downloadurl>https://mycloud.example.com/install/
mycloud-2.5.0.10598.msi</downloadurl>
</owncloudclient>
```

### Mac OS X

This a example URL of a 2.1.1 client for Mac OS X:

https://mycloud.example.com/updates/?version=2.1.1.687&platform=macos&oem=mycloud&sparkle=true

You should see something like the following in your Web server logs:

```
[19/Feb/2016:14:00:17 +0100] "GET
/updates/?version=2.1.1.687&platform=macos&oem=mycloud&sparkle=
true HTTP/1.1" 200 185 "-" "Mozilla/5.0 (Macintosh) mirall/2.1.1 (mycloud)"
microsecs:1071 response_size:2070 bytes_received:306 bytes_sent:2402
```

The output should look like this if you call the URL manually:

```
<?xml version="1.0" encoding="utf-8"?>
 <rss version="2.0"
 xmlns:sparkle="http://www.andymatuschak.org/xml-namespaces/sparkle"
 xmlns:dc="http://purl.org/dc/elements/1.1/">
 <channel>
     <title>Download Channel</title>
     <description>Most recent changes with links to updates.</description>
    <language>en</language><item>
     <title>MyCloud Client 2.1.1 (build 787)</title>
     <pubDate>Mon, 23 Feb 16 00:00:00 -0500</pubDate>
     <enclosure url="https://mycloud.example.com/install/</pre>
       mycloud-2.1.1.787.pkg.tbz" sparkle:version="2.1.1.787"
       type="application/octet-stream"
       sparkle:dsaSignature="MCwCFFedScUKeRXYMS6vKVLw821B+/+
         lAhRbiCxHNzVVZFNXHSvB9GNHOuI5cw=="/>
      <sparkle:minimumSystemVersion>10.7.0</sparkle:minimumSystemVersion>
  </item>
  </channel>
 </rss>
```

## **Creating Branded iOS Apps**

### **Building and Distributing Your Branded iOS App**

### Introduction

Building and distributing your branded iOS ownCloud app involves a large number of interdependent steps. The process is detailed in this chapter over several pages. Follow these instructions exactly and in order, and you will have a nice branded iOS app that you can distribute to your users.

### Prerequisites

- A Mac OS X computer with Xcode (free download) and Keychain Access (included in Utilities). This computer is essential to the entire process and will be linked to to your iOS Developer account. You will use it create and store distribution certificates, and to upload your app to iTunes Connect.
- An iOS developer account on developer.apple.com/ios, which costs \$99 per year. Or an Enterprise account for \$299/yr. The developer account limits you to testing on 100 devices of each type (Apple TV, Apple Watch, iPad, iPhone, iPod Touch) which must be registered in your account. The Enterprise account allows testing on unlimited, unregistered devices.
- An ownCloud Enterprise Subscription, with the ownBrander app enabled on customer.owncloud.com
- Some iPhones or iPads for testing your app. Again, if you have the \$99 developer account each device must have its UDID registered in your account on developer.apple.com.

### Procedure

You need the Apple tools to build eight provisioning profiles (4 Ad Hoc and 4 App Store) and a P12 certificate. You will email the four Ad Hoc profiles and P12 certificate to support@owncloud.com after building your app with the ownBrander app on customer.owncloud.com. You must create the provisioning profiles and P12 certificate first, before building your app, because you must supply a unique **bundle ID** and an **app group** to build your app. These are created in your account on developer.apple.com, and with Keychain Access on your Mac computer.

We use the 4 Ad Hoc provisioning profiles and P12 certificate to complete building your app, and then in 24-48 hours your new branded app is loaded into your account on customer.owncloud.com.

The next step is to test your app. When it passes testing, the final step is to upload it to your iTunes Connect account for distribution.

You will need a lot of graphics for building your app, and for your iTunes store listing, in specific sizes and file formats. The ownBrander app and iTunes detail all the image specifications you will need.

### **Create Certificate Signing Request**

Start by creating a .certSigningRequest (CSR) file on your Mac, using Keychain Access. Open Finder, and then open Keychain Access from the Utilities folder.



Next, open **Keychain Access > Certificate Assistant > Request a Certificate From a Certificate Authority**.

Ű.	Keychain Access	File	e Edit	View	Window	Help					
	About Keychain /	Acces	15			Kouch	nia Anona				
	Preferences		36			Neycr	tain Access		la s	iearch	0
1	Keychain First Ai	d	\C ≅A								
	Certificate Assist	ant	•	Ope	an						
	Ticket Viewer		.Ω≅K	Cre	ate a Certif	icate					
	Services		•	Cre Cre	ate a Certif ate a Certif	icate Aut Icate For	hority Someone Else as a	Certificate Authority			
	Hide Keychain Ad	ccess	SH	Rec	uest a Cer	tificate Fr	rom a Certificate Au	thority			
	Hide Others		TSH	Set	the default	Certifica	te Authority			xpires	Key
	Show All			Eva	luate a Cer	tificate					logi
							private key	**			logi
	Quit Keychain Ac	0088	#Q	stent Sta	ate Encryption	1	application password	Apr 1, 2015, 9:19:30 AM			logi
	Category		omorne ad	fe Storag	ie.		application password	Apr 1, 2015, 9:59:15 AM			logi
	All Items	4	ids: identity	-rsa-key	-pair-signatur	re-v1	application password	Apr 1, 2015, 9:19:35 AM			logi
	<ol> <li>Passwords</li> </ol>	4.	ids: identity	-raa-priv	/ate-key		application password	Apr 1, 2015, 9:19:35 AM			logi
	Secure Notes	4	las: laentity	-rea-put	лю-кеу	the stars	application password	Apr 1, 2015, 9:19:35 AM			logi
		- <b>A</b> aa (25)	ios: unregia	nerec-m	essage-protec	люп-кеу	application password	100ay, 11:17 AM			log
	% Kevs	T O	Message L	noryptio	n Key		public key				logi
	Gertificates	C.	Message 6	ianina K	in ruby Gra		private key				logi
		C	Message 9	ionina K	ev.		private key				logi
		1	and only of the		-1		private may				100
	1	+) [i	Сору				12 items				

Enter the email address that you use in your Apple developer account, and enter a common name. The common name can be anything you want, for example a helpful descriptive name like "ios-mybiz". Check **[Saved to disk]** and **[Let me specify key pair information]**, then click

### [Continue].

Enter information f Continue to reque	for the certificate you are requesting. Click st a certificate from the CA.
User Email Address:	carla@bratgrrl.com
Common Name:	ios-mybiz
CA Email	Required
Request is:	Emailed to the CA
	<ul> <li>Saved to disk</li> </ul>
	<ul> <li>Let me specify key pair information</li> </ul>

Give your CSR a helpful descriptive name, such as **iosapp.certSigningRequest**, and choose the location to save it on your hard drive, then click **[ Save ]**.

	Certificate Assista	nt
Save As:	iosapp.certSigningRequest	<b>~</b>
Tags:		
Where:	Documents	<b>\$</b>
		Cancel Save

In the next window, set the **Key Size** value to **2048 bits** and **Algorithm** to **RSA**, and click **[Continue]**. This will create and save your certSigningRequest file (CSR) to your hard drive.

ł	Key Pair Information
	Specify the key size and algorithm used to create your key pair.
A	The key pair is made up of your private and public keys. The private key is the secret part of the key pair and should be kept secret. The public key is made publicly available as part of the digital certificate.
	Key Size: 2048 bits 🗘 Algorithm: RSA 🗘
	Learn More
	Continue

In the next screen your certificate creation is verified. Click a button to view it, or click **[Done]** to go to the next step.

Conclusion	
Your certificate requi	est has been created on disk.
	Show In Finder
	Done

You also get a corresponding public and private key pair, which you can see in the **Login** > **Keys** section of Keychain.

Keychains		
💣 login	(O) <key> Kind public key BSA 2048 bit</key>	
🥤 Local Items	Usage Encrypt, Derive, Verify	
🔒 System	$\mathbb{P}$	
System Roots		
	Name	^ Kind
Category	<pre></pre>	public key
All Items	<pre></pre>	private key
/ Paceworde	IMessage Encryption Key	public key
	IMessage Encryption Key	private key
Secure Notes	iMessage Signing Key	public key
My Certificates	iMessage Signing Key	private key
🎙 Keys	🤗 ios-mybiz	public key
Certificates	🦞 ios-mybiz	private key

Double-click on your new private key to open the Access Control dialog. Check [Allow all applications to access this item].

•	ios-mybiz	1
	Attributes Acces	s Control
<ul> <li>Allow all appli</li> </ul>	cations to access this item	Access to this item is not restricted
O Confirm before	allowing access	
Ask for Key	chain password	
Always allow acce Name	ess by these applications:	
+ -		Save Changes

Now login to the **Member Center** on https://developer.apple.com/. Click **[ Certificates, Identifiers** & **Profiles ]**.



Then click **iOS Apps > Certificates**.



Next, click the [ add ] button (the little plus sign) in the top right corner of the iOS Certificate page.



Under "What type of certificate do you need?" check **[App Store and Ad Hoc]**, then click the **[Continue]** button at the bottom of the page.



The next screen, **About Creating a Certificate Signing Request (CSR)** has information about creating a CSR in Keychain Access. You already did this, so go to the next screen. "Add iOS Certificate", to upload the CSR you already created, then click the **[ Generate ]** button.

	1
8	entificate
19	engieune

### Generate your certificate.

When your CSR file is created, a public and private key pair is automatically generated. Your private key is stored on your computer. On a Mac, it is stored in the login Keychain by default and can be viewed in the Keychain Access app under the "Keys" category. Your requested certificate is the public half of your key pair.

#### Upload CSR file.

Select .certSigningRequest file saved on your Mac.



Your new certificate is named **ios\_distribution.cer**. Download it to your Mac; then find it and double-click on it to install it properly in Keychain.

Centificate O	our certific	ate is ready.
<b>Download, Insta</b> Download your c Access. Make sur	<b>all and Backu</b> ertificate to yo re to save a ba	<b>p</b> our Mac, then double click the .cer file to install in Keychain ckup copy of your private and public keys somewhere secure.
Certificate Standard O	Name: Type: Expires:	iOS Distribution: Carla Schroder iOS Distribution Jun 24, 2016 Download

After installing it, you should see it stored with its corresponding private key in Keychain.



Remember to make backups of your keys and certificates and keep them in a safe place.

### **Create Bundle IDs**

### **Create Bundle IDs**

The next step is to create four **Bundle IDs**. These are unique identifiers for your branded iOS app. You must also create an **App Group** and place your three **Bundle IDs** in your **App Group**. You will need your base **Bundle ID** and **App Group** when you build your app with the ownBrander app on customer.owncloud.com.

### **Create App ID**

Now you must create your App ID. Go to **Identifiers** > **App IDs** and click the **[ plus button ]** (top right) to open the "Register iOS App ID" screen. Fill in your **App ID Description**, which is anything you want, so make it helpful and descriptive. The **App ID Prefix** is your Apple Developer Team ID, and is automatically entered for you.

	Register iOS App ID + Q
ID Regi	stering an App ID
The App ID string co as your Team ID by Each part of an App	ntains two parts separated by a period (.)—an App ID Prefix that is defined default and an App ID Suffix that is defined as a Bundle ID search string. ID has different and important uses for your app. Learn More
App ID Descri	otion
Nam	You cannot use special characters such as @, &, *, ', "
App ID Prefix	
Valu	2: XYDX7DCSUW (Team ID)

Scroll down to the **App ID Suffix** section and create your **Bundle ID**. Your **Bundle ID** is the unique identifier for your app. Make a note of it because you will need it as you continue through this process. The format for your **Bundle ID** is reverse-domain, e.g. *com.MyCompany.MyProductName*.

App ID Suffix
<ul> <li>Explicit App ID</li> <li>If you plan to incorporate app services such as Game Center, In-App Purchase, Data Protection, and iCloud, or want a provisioning profile unique to a single app, you must register an explicit App ID for your app.</li> <li>To create an explicit App ID, enter a unique string in the Bundle ID field. This string should match the Bundle ID of your app.</li> </ul>
Bundle ID: com.mybiz.iosapp
We recommend using a reverse-domain name style string (i.e., com.domainname.appname). It cannot contain an asterisk (*).

The next section, **App Services**, is where you select the services you want enabled in your app. You can edit this anytime after you finish creating your **App ID**. Check **App Groups**, make your other selections and then click the **[Continue]** button at the bottom. Now you can confirm all of your information. If everything is correct click **[Submit]**; if you need to make changes use the **[Back]** button.

App ID Description:	MyBiz iOS App
ldentifier:	XYDX7DCSUW.com.mybiz.iosapp
App Groups:	Configurable
Associated Domains:	Disabled
Data Protection:	© Disabled
Game Center:	Enabled
HealthKit:	© Disabled
HomeKit:	Disabled
Wireless Accessory Configuration:	© Disabled
iCloud:	Disabled
In-App Purchase:	Enabled
Inter-App Audio:	Disabled
Apple Pay:	© Disabled
Passbook:	Disabled
Push Notifications:	Disabled
VPN Configuration & Control:	Disabled
Cancel	Back Submit

When you are finished you will see a confirmation. Click the **[ Done ]** button at the bottom.



### **Create App Group**

The next step is to create an App Group and put your App ID in it. Go to **Identifiers** > **App Groups** and click the **[ plus button ]** (top right).

App Groups	(+)Q
Getting Started with App Groups	
App Groups allow access to group containers that are shared among multiple related apps, and allows certain additional interprocess communication between apps.	
<b>Register App Groups</b> Team agents and admins can manually register App Groups. Continue	

Create a description for your app group, and a unique identifier in the format *group.com.MyCompany.MyAppGroup*. Then click **[ Continue ]** 

ID Registe	ring an App Group			
Registering your App Gr related apps, and allows	roup allows access to group containers that are shared among multiple s certain additional interprocess communication between the apps.			
App Groups Desc	ription			
Description:	MyBiz iOS Apps			
	You cannot use special characters such as @, &, *, ', "			
Identifier Enter a unique identifier for your App Group, starting with the string 'group'. ID: group.com.mybiz.iosapps We recommend using a reverse-domain name style string (i.e.,				
	com.domainname.appname). Cancel Continue			

Review the confirmation screen, and if everything looks correct click the [ Register ] button.

ID c	Confirm your App Group.			
Ensure your App Group information is correct.				
Ide	Name: <b>MyBiz</b> i ntifier: <b>group.</b>	iOS Apps com.mybiz.iosapps		

You'll see a final confirmation screen; click [ Done ].

ID Registration complete.				
	Name: Identifier:	MyBiz iOS Apps group.com.mybiz.iosapps		

When you click on [ App Groups ] you will see your new app group.

Certificates, Identifiers & Profiles					
iOS Apps 👻		App Groups			
🆑 Certificates	1 App Groups Total				
■ All	Name	* ID			
Pending	MyBiz iOS Apps	group.com.mybiz.iosapps			
Development					
Production					
Identifiers					
App IDs					
Pass Type IDs					
Website Push IDs					
iCloud Containers					
App Groups					
Merchant IDs					

Now go back to **Identifiers** > **App IDs** and click on your **[App ID]**. This opens a screen that displays all your app information. Click the **[Edit]** button at the bottom.

1 App IDs Total			
Name	* ID		
MyBiz iOS App	соп	n.mybiz.iosapp	
ID	Name: MyBiz iOS App Prefix: XYDX7DCSUW ID: com.mybiz.iosapp		
	Application Services:		
	Service	Development	Distribution
	App Group	Configurable	😑 Configurable
	Associated Domains	Oisabled	Oisabled
	Data Protection	Disabled	Oisabled
	Game Center	Enabled	Enabled
	HealthKit	Oisabled	Oisabled
	HomeKit	Disabled	Oisabled
	Wireless Accessory Configuration	Disabled	Disabled
	iCloud	Disabled	Oisabled
	In-App Purchase	Enabled	Enabled
	Inter-App Audio	Disabled	Oisabled
	Apple Pay	Disabled	Oisabled
	Passbook	Oisabled	Oisabled
	Push Notifications	Disabled	Oisabled
	VPN Configuration & Control	Oisabled	Oisabled
	Edit		

Click the [ Edit ] button next to [ App Groups ].

		iOS App ID Settings	(+) Q
Setu	up and co	onfigure services for this App ID.	
	ID	Name: MyBiz IOS App ID: com.mybiz.iosapp	
	Enable	Service	
		Configurable. App Group IDs (0)	dit

Check your app and click the [ Continue ] button.

ID	App Group Assigr	ıment.	
Select the A	pp Groups you wish to ass	ign to the bundle.	
Select	All		1 of 1 item(s) selected
MyBiz	iOS Apps	group.com.mybiz.iosapps	

The next screen asks you to "Review and confirm the App Groups you have selected". Click the **[Assign]** button to confirm. The next screen announces "You have successfully updated the App Groups associations with your App ID", and you must click yet another button, the **[Done]** button at the bottom.

### Create a DocumentProvider Bundle ID

Now you must return to **Identifiers** > **App IDs** and click the **[plus button]** to create a DocumentProvider Bundle ID. Follow the same naming conventions as for your App ID, then click **[Continue]**.



### Registering an App ID

The App ID string contains two parts separated by a period (.)—an App ID Prefix that is defined as your Team ID by default and an App ID Suffix that is defined as a Bundle ID search string. Each part of an App ID has different and important uses for your app. Learn More

#### App ID Description

Name: MyBiz iOS App DocumentProvider You cannot use special characters such as @, &, \*, ', "

#### App ID Prefix

Value: XYDX7DCSUW (TeamID)

#### App ID Suffix

#### Explicit App ID

If you plan to incorporate app services such as Game Center, In-App Purchase, Data Protection, and iCloud, or want a provisioning profile unique to a single app, you must register an explicit App ID for your app.

To create an explicit App ID, enter a unique string in the Bundle ID field. This string should match the Bundle ID of your app.

Bundle ID: com.mybiz.iosapp.DocumentProvider

We recommend using a reverse-domain name style string (i.e., com.domainname.appname). It cannot contain an asterisk (\*).

#### Confirm your new App ID and click [Submit].



Confirm your App ID.

To complete the registration of this App ID, make sure your App ID information is correct, and click the submit button.



You will see one more confirmation: "Registration complete. This App ID is now registered to your account and can be used in your provisioning profiles." Click **[ Done ]**.

Now you need to add it to your App Group. Go to **Identifiers** > **App IDs** and click on your new **[DocumentProvider Bundle ID]** to open its configuration window, and then click the **[Edit]** button at the bottom.

	iOS App IDs
2 App IDs Total	
Name	ID
MyBiz iOS App	com.mybiz.iosapp
MyBiz iOS App DocumentProvider	com.mybiz.iosapp.DocumentProvider

### Select [ App Groups ] and click the [ Edit button ].

ID	Name: ID:	MyBiz iOS App Docum com.mybiz.iosapp.Docum	entProvider entProvider	
Enable	Service			
~	Here and the second sec	<b>p Groups</b> Configurable. App Group II	Ds (0)	Edit
Select yo	our group	and click <b>[ Continue</b>	e].	
ID	Арр	Group Assignment		
Selectthe	∋App Groups	s you wish to assign to the bu	indle.	
🕑 Sel	ect All			1 of 1 item(s) selected
🖌 My	Biz iOS App	s	group.com.mybiz.iosapps	~~~

Once again you will asked if you really mean it. On the confirmation screen click **[Assign]**, and you'll see the message "You have successfully updated the App Groups associations with your App ID."

### Create a DocumentProviderFileProvider Bundle ID

One more time, go to Identifiers > App IDs and click the [plus button] to create a DocumentProviderFileProvider Bundle ID. Follow the same naming conventions as for your App ID, then click [ Continue ].



The App ID string contains two parts separated by a period (.)-an App ID Prefix that is defined as your Team ID by default and an App ID Suffix that is defined as a Bundle ID search string. Each part of an App ID has different and important uses for your app. Learn More

### App ID Description

Name: MyBiz iOS App DocumentProviderFileProvider You cannot use special characters such as @, &, \*, ', "

### App ID Prefix

Value: XYDX7DCSUW (TeamID)

### App ID Suffix

### Explicit App ID

If you plan to incorporate app services such as Game Center, In-App Purchase, Data Protection, and iCloud, or want a provisioning profile unique to a single app, you must register an explicit App ID for your app.

To create an explicit App ID, enter a unique string in the Bundle ID field. This string should match the Bundle ID of your app.

Bundle ID: com.mybiz.iosapp.DocumentProviderFileProvider

We recommend using a reverse-domain name style string (i.e., com.domainname.appname). It cannot contain an asterisk (\*).

Confirm your new App ID and click [Submit].



To complete the registration of this App ID, make sure your App ID information is correct, and click the submit button.

> App ID Description: MyBiz iOS App DocumentProviderFileProvider Identifier: XYDX7DCSUW.com.mybiz.iosapp.DocumentProvi...

You will see one more confirmation; review it and click **[Done]**. Now you need to add it to your App Group. Go to **Identifiers > App IDs** and click on your new **[DocumentProviderFileProvider Bundle ID]** to open its configuration window, and then click the **[Edit]** button.

iOS Ar	pp IDs + Q
3 App IDs Total	
Name	ID
MyBiz iOS App	com.mybiz.iosapp
MyBiz iOS App DocumentProvider	com.mybiz.iosapp.DocumentProvider
MyBiz iOS App DocumentProviderFileProvider	com.mybiz.iosapp.DocumentProviderFileProvider

Select [ App Groups ] and click the [ Edit ] button.

ID	Name:         MyBiz iOS App DocumentProviderFileProvider           ID:         com.mybiz.iosapp.DocumentProviderFileProvider	
Enable	Service	
~	App Groups     Onfigurable. App Group IDs (0)	Edit

Select your group and click [ Continue ].



Select the App Groups you wish to assign to the bundle.

Select All	1	of 1 item(s) selected
MyPiziOS Apps	group com mybiz jocanne	^
	gloup.com.mybiz.iosapps	0
		V

On the confirmation screen click [Assign], and you'll see the message "You have successfully updated the App Groups associations with your App ID."

### Create a ShareExtApp Bundle ID

This supports Apple's ShareIN extension.

Yet again, go to Identifiers > App IDs and click the [ plus button ] to create a ShareExtApp Bundle ID. Follow the same naming conventions as for your App ID, then click [ Continue ].

### App ID Description

Name: MyBix iOS App ShareExtApp You cannot use special characters such as @, &, \*, ', "

### App ID Prefix

Value: XYDX7DCSUW (Team ID)

### App ID Suffix



If you plan to incorporate app services such as Game Center, In-App Purchase, Data Protection, and iCloud, or want a provisioning profile unique to a single app, you must register an explicit App ID for your app.

To create an explicit App ID, enter a unique string in the Bundle ID field. This string should match the Bundle ID of your app.

Bundle ID: com.mybiz.iosapp.ShareExtApp

We recommend using a reverse-domain name style string (i.e., com.domainname.appname). It cannot contain an asterisk (\*).

Confirm your new App ID and click [ Submit ].



To complete the registration of this App ID, make sure your App ID information is correct, and click the submit button.



You will see one more confirmation; review it and click **[Done]**. Now you need to add it to your App Group. Go to **Identifiers** > **App IDs** and click on your new **[ShareExtApp Bundle ID]** to open its configuration window, and then click the **[Edit]** button.

	iOS App IDs	+ Q
4 App IDs Total		
Name ^	ID	
MyBiz iOS App	com.mybiz.iosapp	
MyBiz iOS App DocumentProvider	com.mybiz.iosapp.DocumentProvider	
MyBiz iOS App DocumentProviderFileP	$com.mybiz.iosapp.Document {\sf ProviderFileProvider}$	
MyBiz iOS App ShareExtApp	com.mybiz.iosapp.ShareExtApp	

Select [ App Groups ] and click the [ Edit ] button.

iOS App ID Settings	+ Q
Setup and configure services for this App ID.	
Name: MyBiz iOS App ShareExtApp ID: com.mybiz.iosapp.ShareExtApp	
Enable Service	
Configurable. App Group IDs (0)	Edit
Select your group and click [ Continue ].	



Select the App Groups you wish to assign to the bundle.

Select All	1 of 1 item(s) selected
MvBiz iOS Apps	aroup.com.mybiz.iosapps
	v

On the confirmation screen click **[Assign]**, and you'll see the message "You have successfully updated the App Groups associations with your App ID."

### Four Completed App IDs

Now you should have four new App IDs, and all of them should belong to your App Group.

iC	OS	S App IDs	• Q
4 App IDs Total			
Name	•	ID	
MyBiz iOS App		com.mybiz.iosapp	
MyBiz iOS App DocumentProvider		com.mybiz.iosapp.DocumentProvider	
MyBiz iOS App DocumentProviderFileProvider		$com.mybiz.iosapp.Document {\sf ProviderFileProvider}$	
MyBiz iOS App ShareExtApp		com.mybiz.iosapp.ShareExtApp	

### **Setting up Testing Devices**

The \$99 Apple Developer account allows you to test your iOS apps on a maximum of 100 devices of each type:

Apple TV	100
Apple Watch	100
iPad	100
iPhone	100
iPod Touch	100

And you must register the UDID of each device in your Apple developer account. If you have the \$299 Enterprise account then you can install your app on any device without registering it.

The easiest way to find UDIDs is to connect to your iTunes account. Then connect your iOS device to your Mac computer. Your device will appear on the left sidebar in iTunes. Click on this to display your device information. Then click on the serial number, and you will see your UDID.



Return to your account on Developer.apple.com, go to **IOS Apps** > Devices > All, and click the plus button on the top right to register a new device. You can make the name anything you want, and the UDID must be the UDID copied from iTunes.

	Add iOS Devices	÷	<b>Q</b>	
Regis	tering a New Device or Multiple Devices	5		
<b>Pre-Release Software</b> You may only share Ap organization who are re Apple software to deve Unauthorized distributi and may result in the te criminal liability.	e Reminder ple pre-release software with employees, contractors, a egistered as Apple developers and have a demonstrable lop and test applications on your behalf. on of Apple confidential information (including pre-relea ermination of your Apple Developer Program. It may also	nd members of your need to know or use se software) is prohib subject you to civil ar	ited nd	
<ul> <li>Register Device Name your device Name:</li> </ul>	and enter its Unique Device Identifier (UDID). Layla's iPhone			
UDID:	796f752068617665206120666173742063617	2		
f you have a larg and then upload th	e number of devices to register, you mane file:	ay enter them i	n a text file in thi	s form

Device ID Device Name A123456789012345678901234567890123456789 NAME1 B123456789012345678901234567890123456789 NAME2

Click **Download sample files** to see examples of plain text and markup files.

0	<b>Register Multiple Devices</b> Upload a file containing the devices you wish to register. Please note that a maximum of 100 devices can be included in your file and it may take a few minutes to process.
	Download sample files
	Choose File
	Cancel Continue

When you are finished entering your device IDs click the **Continue** button. Verify, and then click **Done**.

## **Create Provisioning Profiles**

### Next Step

The next phase of this glorious journey is to create eight provisioning profiles: 4 Ad Hoc and 4 App Store <app\_store\_profiles\_label>. You will email the four Ad Hoc profiles, and your P12 certificate <publishing\_ios\_app\_6> (which you will create after your provisioning profiles), to support@owncloud.com after building your branded app with the ownBrander app on customer.owncloud.com. Do not send us the App Store profiles. All eight of these profiles must be stored on your Mac PC.

### First Ad Hoc Provisioning Profile

Go to **Provisioning Profiles** > **All**, then click the **[plus button]** (top right) to open the *Add iOS Provisioning Profile* screen. Select **[Ad Hoc]** and click **[Continue]**.

Add iOS Provisioning Profile +
Select Type Configure Generate Download
What type of provisioning profile do you need?
Development OS App Development Create a provisioning profile to install development appson test devices.
Distribution
Oreate a distribution provisioning profile to submit your app to the App Store.
Ad Hoc     Create a distribution provisioning profile to install your app on a limited number of registered devices.

On the **Select App ID** screen select the first of the three App IDs that you created and click **[Continue]**. (The first one has the shortest name, if you followed the naming conventions in this manual.)



If you plan to use services such as Game Center, In-App Purchase, and Push Notifications, or want a Bundle ID unique to a single app, use an explicit App ID. If you want to create one provisioning profile for multiple apps or don't need a specific Bundle ID, select a wildcard App ID. Wildcard App IDs use an asterisk (\*) as the last digit in the Bundle ID field. Please note that iOS App IDs and Mac App IDs cannot be used interchangeably.

App ID: MyBiz iOS App (XYDX7DCSUW.com.mybiz.iosapp)

Select the certificate that you created at the beginning of this process and click [ Continue ].



(

Select certificates.

Select the certificates you wish to include in this provisioning profile. To use this profile to install an app, the certificate the app was signed with must be included.

•	Carla Schroder (iOS Distribution)
	Jun 25, 2016

Select the devices that you want to install and test your app on, then click [ Continue ].



Select the devices you wish to include in this provisioning profile. To install an app signed with this profile on a device, the device must be included.

Select All				1 of 1 item(s) selected
Layla's iPhone				
	Cancel	Back	Continue	

Name your provisioning profile with a descriptive **Profile Name** and click [Generate].


# Name this profile and generate.

The name you provide will be used to identify the profile in the portal.

Profile Name:	MyBiz iOS Profile
Type:	iOS Distribution
App ID:	MyBiz iOS App(XYDX7DCSUW.com.mybiz.iosapp)
Certificates:	1 Included
Devices:	1 Included

When it has generated, download your new profile to your Mac computer.



Your provisioning profile is ready.

#### Download and Install

Download and double click the following file to install your Provisioning Profile.



Name: MyBiz iOS Profile Type: iOS Distribution App ID: XYDX7DCSUW.com.mybiz.iosapp Expires Jun 25, 2016

Download

Find it on your Mac (usually the Download folder) and double-click to install it in Xcode.

<ul> <li></li> <li>&gt;</li> </ul>	
Favorites	Name
All My Files	ios_distribution.cer
iCloud Drive	MyBiz_iOS_Profile.mobileprovision
AirDrop	
Applications	
Desktop	
Downloads	

# Second Ad Hoc Provisioning Profile

Return to the "Your provision profile is ready" screen, scroll to the bottom and click [Add Another]. On the following screen select [Ad Hoc] and click [Continue].

Add iOS Provisioning Profile	1
Select Type Configure Generate Download	
What type of provisioning profile do you need?	
Oevelopment	
Create a provisioning profile to install development apps on test devices.	
Distribution	
App Store     Create a distribution provisioning profile to submit your app to the App Store.     Ad Hoc	
Create a distribution provisioning profile to install your appon a limited number of registered devices	2

This time select the **.DocumentProvider** app ID and click **[ Continue ]**.

App ID 🗸	/ MyBiz iOS App (XYDX7DCSUW.com.mybiz.iosapp) MyBiz iOS App DocumentProvider (XYDX7DCSUW.com.mybiz.iosapp DocumentProvider)
	MyBiz iOS App DocumentProvider (XPDX7DCSOW.com.mybiz.iosapp.Document MyBiz iOS App DocumentProviderFileProvider (XYDX7DCSUW.com.mybiz.iosapp.Document
	Cancel Back Continue

Select the certificate that you created at the beginning of this process and click [ Continue ].

PROV	Select certificates.
Select the o install an a	certificates you wish to include in this provisioning profile. To use this profile to pp, the certificate the app was signed with must be included.
<ul> <li>Carla</li> </ul>	Schroder (iOS Distribution)
Jun 25	5, 2016
-	
	▶

Cancel

Select the devices that you want to install and test your app on, then click **[ Continue ]**. These must be the same devices you selected for the first provisioning profile.

Back

Continue

PROV	Select de	evices.			
Select the this profile	devices you wis e on a device, th	sh to include in ne device must	this provisionir be included.	ng profile. To instal	l an app signed with
Select	t All				1 of 1 item(s) selected
🗹 Layla'	's iPhone				
	_				

Give this provisioning profile the same name as your first profile, plus **.DocumentProvider** and click **[Generate]**.

Name this profile and generate.						
The name you provide w	ill be used to identify the profile in the portal.					
Profile Name:	MyBiz iOS Profile.DocumentProvider					
Type:	iOS Distribution					
App ID:	MyBiz iOS App DocumentProvider (XYDX7DCSUW.com.mybiz.iosapp.DocumentProvid					
Certificates:	1 Included					
Devices:	1 Included					
	Cancel Back Generate					

Just like the first provisioning profile, download it to your Mac computer, and then double-click to install it in Xcode.

# Third Ad Hoc Provisioning Profile

Return to the "Your provision profile is ready" screen, scroll to the bottom and click [Add Another]. On the following screen select [Ad Hoc] and click [Continue].



App ID: MyBiz iOS App DocumentProviderFileProvider (XYDX7DCSUW.com.mybi:~

Select the certificate that you created at the beginning of this process and click [ Continue ].



# Select certificates.

Select the certificates you wish to include in this provisioning profile. To use this profile to install an app, the certificate the app was signed with must be included.

0	<b>Carla Schroder</b> (iO Jun 25, 2016	S Distribution)				
				×		
		Cancel	Back	Continu	e	

Select the devices that you want to install and test your app on, then click [[ **Continue**]. These must be the same devices you selected for the first provisioning profile.



Give this provisioning profile the same name as your first profile plus **.DocumentProviderFileProvider** and click **[Generate]**. There is a 50-character limit, but don't worry about counting characters because it will be automatically truncated if you go over.

Name this profile and generate.					
The name you provide will be used to identify the profile in the portal.					
Profile Name:	MyBiz iOS Profile.DocumentProviderFileProvider				
Type:	iOS Distribution				
App ID:	MyBiz iOS App DocumentProviderFileProvider (XYDX7DCSUW.com.mybiz.iosapp.DocumentProvid				
Certificates:	1 Included				
Devices:	1 Included				
	Cancel Back Generate				

Download it to your Mac computer, and then double-click to install it in Xcode.

# Fourth Ad Hoc Provisioning Profile

Return to the "Your provision profile is ready" screen, scroll to the bottom and click [Add Another]. On the following screen select [Ad Hoc] and click [Continue].

Add iOS Provisioning Profile				
Select Type Configure Generate Download				
What type of provisioning profile do you need?				
Development				
OS App Development Create a provisioning profile to install development appson test devices.				
Distribution				
App Store Create a distribution provisioning profile to submit your app to the App Store.				
• Ad Hoc Create a distribution provisioning profile to install your app on a limited number of registered devices.				
This time select the <b>.ShareExtApp</b> app ID and click <b>[ Continue ]</b> .				

App ID:	MyBiz iOS App ShareExtApp (XYDX7DCSUW.com.mybiz.iosapp.ShareExtApp)
	MyBiz iOS App (XYDX7DCSUW.com.mybiz.iosapp)
	MyBiz iOS App DocumentProvider (XYDX7DCSUW.com.mybiz.iosapp.DocumentProvider)
	MyBiz iOS App DocumentProviderFileProvider (XYDX7DCSUW.com.mybiz.iosapp.DocumentProviderFileProvider)
	MyBiz iOS App ShareExtApp (XYDX7DCSUW.com.mybiz.iosapp.ShareExtApp)

Select the certificate that you created at the beginning of this process and click [ Continue ].



# Select certificates.

Select the certificates you wish to include in this provisioning profile. To use this profile to install an app, the certificate the app was signed with must be included.

o c	Carla Schroder (iO: un 25, 2016	5 Distribution)				
					×	
		Cancel	Bac	k	Continue	

Select the devices that you want to install and test your app on, then click [ **Continue** ]. These must be the same devices you selected for the first provisioning profile.



Give this provisioning profile the same name as your first profile plus **.ShareExtApp** and click **[Generate]**. There is a 50-character limit, but don't worry about counting characters because it will be automatically truncated if you go over.



# Name this profile and generate.

The name you provide will be used to identify the profile in the portal.

Profile Name:	MyBiz iOS Profile.ShareExtApp
Type:	iOS Distribution
App ID:	MyBiz iOS App ShareExtApp (XYDX7DCSUW.com.mybiz.iosapp.ShareExtApp)
Certificates:	1 Included
Devices:	1 Included

Download it to your Mac computer, and then double-click to install it in Xcode. You should now see all of your Ad Hoc provisioning profiles listed in your "iOS Provisioning Profiles".

iOS Provisio	iOS Provisioning Profiles	
7 profiles total.		
Name	Туре	▼ Status
MyBiz iOS Profile	iOS Distribution	Active
MyBiz iOS Profile.DocumentProvider	iOS Distribution	Active
MyBiz iOS Profile.DocumentProviderFileProvider	iOS Distribution	Active
MyBiz iOS Profile.ShareExtApp	iOS Distribution	Active

#### **Create Four App Store Profiles**

Creating your four App Store profiles is the same as creating your Ad Hoc profiles, except that when you start you check the App Store checkbox, and you won't select testing devices.



## Development



When you're finished, you'll have eight new provisioning profiles. Remember, when you build your app on ownBuilder you only send in the four Ad Hoc profiles, plus your P12 certificate.

iOS Provisioning Profiles		+ 🗾 Q
11 profiles total.		
Name	^ Type	Status
MyBiz iOS App-Store	iOS Distribution	<ul> <li>Active</li> </ul>
MyBiz iOS App-Store.DocumentProvider	iOS Distribution	<ul> <li>Active</li> </ul>
MyBiz iOS App-Store.DocumentProviderFileProvider	iOS Distribution	Active
MyBiz iOS App-Store.ShareExtApp	iOS Distribution	Active
MyBiz iOS Profile	iOS Distribution	Active
MyBiz iOS Profile.DocumentProvider	iOS Distribution	Active
MyBiz iOS Profile.DocumentProviderFileProvider	iOS Distribution	Active
MyBiz iOS Profile.ShareExtApp	iOS Distribution	<ul> <li>Active</li> </ul>

Go to the next page to learn how to create your P12 certificate <publishing\_ios\_app\_6>.

# **Creating a P12 Certificate**

In addition to emailing your four Ad Hoc provisioning profiles to support@owncloud.com, you must also include your P12 certificate. To create this, return to Keychain Access on your Mac computer and find your private key that you created at the beginning (see Create Certificate Signing Request).

• • •	к	eychain Access
Click to lock the le	ogin keychain.	
Keychains		
💣 login	Kind public key RSA 2048-bit	
💣 Local Items	Usage Encrypt, Derive, Verify	
System	₽	
System Roots		
	Name	^ Kind
	₽ <key></key>	public key
	₽ <key></key>	private key
	IMessage Encryption Key	public key
	iMessage Encryption Key	private key
	iMessage Signing Key	public key
Category	iMessage Signing Key	private key
All Items	🖗 ios-mybiz	public key
/ Passwords	ios-mybiz	private key
Secure Notes	iPhone Distribution: Cafla Schroder (XYDX7DCSUW)	certificate
Secure Notes		
My Certificates		
Y Keys		
Certificates		

Right-click on your private key and left-click **Export [your key name]**.

IMessage Signing Key		private key	
	iz	public key	
Verify ios-myb 😨 iPhot	Copy "ios-mybiz" Delete "ios-mybiz"		
	Export "ios-mybiz"		_
	Get Info Create a Certificate With "ios- Request a Certificate From a Create a Certificate Authority	-mybiz" Certificate Authority With " With "ios-mybiz"	ios-mybiz"

Enter any name you want, the location you want to save it to, and click [ Save ].

Save As:	MyBiz-iOS-12	•
Tags:		]
Where:	Documents	
File Format:	Personal Information Exchange (.p12)	0
		Cancel Save

In the next screen you have the option to enter a password. If you put a password on your P12 certificate you will have to include it when you send your certificate and provisioning profiles to support@owncloud.com. Click [ OK ].

	Enter a password which will be used to protect the exported items:		
	Password:	•••••	9
	Verify:	•••••	
		Password	Weak
		Show passw	vord
?			Cancel OK

On the next screen you must enter your login keychain password, which is your Mac login password, and click [ Allow ].

	Keychain Access wants to export key "ios- acme" from your keychain.
	Password:
?	Always Allow Deny Allow

Now your new P12 certificate should be in the directory you saved it in.



You have now completed all the necessary steps for signing your branded iOS app. The next step is to build your app with the ownBrander app on https://customer.owncloud.com.

# **Building Your iOS App With ownBrander**

# Build Your Branded iOS App

At long last you have arrived at the point where you can actually build your branded iOS app. Log into your account on customer.owncloud.com/owncloud and open the ownBrander app.



If you don't see the ownBrander app, open a support request with the [ **Open Case** ] button.

Your first ownBrander task is to review the iOS page on ownBrander for your image requirements. You will need a lot of them, in specific sizes and formats, and they're all listed on the ownBrander page.

There are three sections: Required, Suggested, and Advanced. The Required sections contains all of the required elements that you must configure. Suggested and Advanced allow additional customizations.

When you have completed and submitted your app, email your three provisioning profiles and P12 certificate to support@owncloud.com.

# **Required Section**

Enter your application name. This can be anything; in this example it is the same name used in our signing certificate examples.

ownClou	d - Enterprise Q
Common	Required
ios	All of the branding items in this section of the iOS tab are required. It will not
Suggested	items and also you provide to us (branding@owncloud.com) the needed certificates.
Advanced	Application name The desired name of your mobile app or desktop client. Once the app
Android	is released, this name cannot be modified because it is used to identify the app - both by end-users, devices, and also internally. This
Suggested	app name should be pulled by default from the Common tab in ownBrander, but it can be modified here for the iOS app if you choose.
Advanced	MyBiz iOS App ×

Next, enter your ownCloud server URL. This hard-codes it into your app. If you leave this blank then your users will have to enter it every time they use the app.

#### Server URL

Set a static server URL that cannot be changed by the user. If this option is not selected, users will have to enter a server URL manually to connect to the ownCloud server. This option and the URL should be pulled from the Common tab in ownBrander, but it can be modified here for the iOS app if you choose.

ownCloud server URL and path to which users connect. This URL should be pulled from the Common tab in ownBrander, but it can be modified here for the iOS app if you choose.

www.mybiz.com/owncloud	×
------------------------	---

Check **Server URL Visible** to make your ownCloud server URL the default, and to allow your users to enter a different URL.

#### Server URL visible

Set the URL to be visible and editable by the end user. If selected, the URL you entered above will be displayed, but users will be able to edit it manually.

And now, the all-important **Bundle ID**. Make sure that this is exactly the same as the **Bundle ID** you created on developer.apple.com (see Bundle ID).

## Bundle ID

The bundle ID is a unique identifier for your app. Typically this is the reverse domain notation of your app and your company name, such as com.examplecompany.iOS . The bundle ID needs to be unique to your app alone, so it is important to set the company identifier to a unique string. The bundle ID needs to match the bundle ID you enter in iTunes Connect before you can submit your app to the store. Further information about iOS bundle IDs is available at developer.apple.com

com.mybiz.iosapp

×

х

You must also enter the **App Group** you created.

#### APP Group

In order to take advantage of some of the iOS8 extensions we need you to create an app group and enable it on the Bundle ID. The App Group format is typically: group.BundleID (Bundle ID is the one set above)

group.com.mybiz.iosapps

Check **Show multi-account or disconnect** if you plan to allow your users to have more than one ownCloud account.

#### Show multi-account or disconnect

Multi-account enables users to connect to more than one ownCloud instance with their mobile app. If this option is not selected, the iOS app will show users a disconnect option instead of the add account option. Most customers choose to show users the disconnect button.

Check **Enable SAML** authentication if that is what you use on your ownCloud server. Otherwise leave it blank.

#### Enable SAML

Enable SAML authentication for end users. By default, the ownCloud app authenticates via a username and password. Check this box if SAML authentication will be used instead.

**Number of uploads shown** controls the length of the most recent uploads list on the app. The default is 30.

# Number of uploads shown

The number of uploads shown on the uploads view. In the app, when you upload a file to the server a list is created and stored in the uploads view. Thile the latest uploads are listed, this option allows you to specify the maximum number of files that you want to be shown in this view. The default is 30.



The next section is for uploading your custom artwork to be built into the app. The ownBuilder app tells you exactly which images you need, and their required size. You only need one Splash Screen image, and ownBrander will automatically resize and crop it for different-sized screens. You must also select a background color, which ensures that the splash screen image is always at the correct size ratio. (Click the example images on the right to enlarge them.)



#### Application icon

Icon for the app that is shown on the device Home screen. While many icon resolutions are needed for the different iOS devices, you only need to upload one size. ownBrander will automatically



create the others. Note: it is important to not have a transparent background. (width: 1024px height: 1024px) i

Delete image Upload

#### Splash screen image

This is the app splash screen image. ownBrander will rescale the image automatically to match specific iOS device resolutions screen image (width: 2048px height: 2048px) i

Upload

#### Splash screen background

This is the app splash screen background color. On some iOS devices, rescaling the splash screen image may lead to blank space which will be filled in with this background color

2



User agent		
mybiz-iosapp	×	

Check **Recommend** to open a Twitter, Facebook, and Email recommendation configurator.

#### Recommend

Options show after clicking on the recommend button in the settings page: Facebook, Twitter and Mail. The messages generated by ownCloud when one of the recommend options is selected by a user can be the standard ownCloud messages, which are translated into several languages, or you may choose to enter a custom message. If you choose to enter a custom message, this will not be translated beyond the message you enter here.

Show recommend in app

If you have online help, enter the URL here.

#### Help URL

Select this option to show a help URL in your app. Show help url?

Help URL. Enter the URL where users may go to find help for your app. Please, include the http:// prefix

https://mybiz.com/help

Activate the option feedback creates an option for your users to either enable or not enable the feedback option on their devices. If you enable this, enter your **Feedback email** address.

## Activate the option feedback

Select this option if you want the feedback option to be available on the App settings. When end-user selects this option, they will be able to send to you their feedback through email.

×

#### Feedback email

An email address where you can receive feedback from users

feedback@mybiz.com

Enter your **Imprint URL** (your "about" page)

Imprint URL Activate use of imprint so users may learn more about your company. Show imprint in app

URL where users may found more information about the company.

https://mybiz.com/about

Check **Show a "new account" link in app** to allow new users to request a new account.

Show a "new account" link in app

Select if you want to include a link for new users on the login view to request a new account (see login screenshot).

Upload an icon that will be displayed by default when there is no file preview to display.

BOKSI This image will be shown there is no file preview

This image will be shown on the iPad when there is no file previewed (width: 1024px height: 558px)  $m{i}$ 

Delete image Upload

By default, both internal sharing and sharing by link are enabled. You have the options to disable one or both of these.

□ Check this option if you don't want the internal sharing option to be shown in the app. Otherwise your users will be able to share any data with other users. By default, internal sharing option is shown

□ Check this option if you don't want the share by link option to be shown in the app. Otherwise your users will be able to share any data by link. By default, share by link option is shown

You may disable background transfers if you are using mobile device management (MDM), such as Mobile Iron, that does not support background jobs, or if you simply do not want to allow the app to work in the background. By default, the ownCloud iOS app supports background file transfers by taking advantage of Background Execution.

#### Disable background transfers

Check this option if you intend to wrap this app in an MDM that does not support background jobs, such as Mobile Iron, or if you don't want the app to work in the background. iOS allows a transfer - either an upload or a download - to operate in the background to 3 minutes after the app is closed.

The default version number of your branded app is the same as the official ownCloud app. You have the option to customize your version number. Once you do this, you will have to update it manually for new releases. This must be the same as the version number that you enter in iTunes. Your version number is visible to your users.

#### Version number

 Do you want to modify the release version number? The version number is a two-period-separated list of positive integers (as in 4.5.2). The version number is shown in the store and that version needs to match the version number you enter in iTunes Connect.
 Update the version number when you create a new app version in iTunes Connect.
 NOTE: once you modify the version number with this option, it will no longer be modified automatically for your branded app. You will have to increase the version number manually every time a new version is released.

You may also customize the build number, which defaults to 1.0.0. This must also be manually updated when you customize it. Your build number is used by iTunes to uniquely identify your app. When the build number changes, iTunes automatically syncs the updates for your users. The build number is not visible to your users.

#### **Build number**

Do you want to modify the build number? The build number is used by Apple to uniquely identify the app, and if you want to upload a new build of your app to iTunes Connect you must use a new build number. For iOS apps, iTunes will recognize that the build string changed and properly sync the new app build to iOS devices. This is different than the version number above which is a useful but cosmetic feature, whereas the build number is technically required. NOTE: once you modify this parameter, it will no longer be automatically modified on your branded app. You will have to increase it every time a new version is released. By default 1.0 is used. This number is not automatically updated

That completes the required elements of your branded iOS app.

#### **Suggested Section**

The Suggested section allows you to customize additional elements such as text and background colors, and icons. The Suggested items are all optional.

#### **Advanced Section**

The Advanced section allows you to optionally customize the color of messages such as connection status, error messages, letter separators, buttons, and additional icons.

#### **Generate iOS App**

When you have uploaded all of your images and completed your customizations, click the **Generate iOS App** button and take a well-deserved break. Remember to email your four Ad Hoc provisioning profiles and P12 certificate to support@owncloud.com.

Generate iOS App

You may go back and make changes, and when you click the **Generate iOS App** button the build system will use your latest changes.

Check your account on customer.owncloud.com in 48 hours to see your new branded ownCloud app.

# **Testing Your New Branded iOS App**

## **Distribute the File**

You'll distribute the file with the .ipa extension, like our example MyBiz iOS App-3.4.211.ipa, from your https://customer.owncloud.com/owncloud account to your beta testers. To do this you'll need a Mac computer, an iPhone or iPad registered in your Apple developer account, and the iTunes account associated with your Apple developer account.

1. Connect your registered iPhone or iPad to a Mac running iTunes.

- 2. Double-click your iOS .ipa file.
- 3. You should see your device in the upper left corner of your iTunes windows. Click on it.
- 4. Click the **[ Apps ]** button. Now you should see your app in the iTune apps list, with an Install button. Click it.
- 5. The Install button changes to Will Install.
- 6. Click the **[ sync ]** button in the lower-right corner to sync your device. This installs your app on your device.

Your other testers can now install and test your app on their registered iPhones and iPads just like any other app from iTunes.

If you have the Enterprise Apple developer account, there is no limit on the number of testing devices, and they do not have to be registered.

## **Getting Crash Reports From Testers**

iOS automatically records crash logs when apps crash. Your testers can retrieve and send these logs to you. They must follow these steps:

- 1. Connect the testing device to a Mac computer running iTunes.
- 2. The crash logs are automatically downloaded to ~/Library/Logs/CrashReporter/MobileDevice
- 3. Attach the relevant log files to email and send them to you.

# **Publishing Your New Branded iOS App**

## Publish for General Distribution on iTunes

At last, after following all the previous steps and passing beta testing, your branded iOS app is ready to publish for general distribution on iTunes. You need a Mac computer with Xcode installed (Xcode is a free download), and you need the eight provisioning profiles (4 Ad Hoc and 4 Apple Store) and p12 file that you created copied to the same computer that you are using to upload your app to iTunes. You will also need a number of screenshots of your app in specific sizes and resolutions, which are detailed in your iTunes Connect setup screen.



Apple must review and approve your app, and the approval process can take several days to several weeks.

Download the xcarchive.zip file from your account. Your friendly macOS computer will automatically unpack it and change the name to something like ownCloud iOS Client 02-07-15 10.30.xcarchive. Double-click on this file to automatically install it into Xcode. Go to Xcode and you will see it in the Archives listing under Window > Organizer.



Next, go back to the Apple Developer Member Center to log into iTunes Connect to set up your app storefront.

🗯 D	eveloper	
A	Programs & Add-ons	Your Account
	<b>SDKs</b> Download the SD	Ks and the latest beta software.
	Certificates, lo Manage your cert	dentifiers & Profiles tificates, identifiers, devices, and profiles for your apps.
	iTunes Conne Manage your app	ect s published on the App Store and Mac App Store.

After logging in click the blue **[ My Apps ]** button. This takes you to the main screen for managing your apps on iTunes.



Click the plus button on the top left to setup your new branded iOS app.

# iTunes Connect My Apps ~



This opens a screen where you will enter your app information. Make sure you get it right the first time, because it is difficult to delete apps, and Apple will not let you re-use your app name or SKU.

- Enter any name you want for your app. This is the name that will appear in your App Store listing.
- Choose your primary language.
- Select the bundle ID from the drop-down selector.
- Enter your app version number, which should match the version number as it appears in your Xcode organizer.
- The SKU is a unique ID for your app, and is anything you want.

Then click the [ Create ] button.

Name ?		Version ?
MyBiz IOS App		1.0
Primary Language ?		SKU ?
English	~	iosapp1
Bundle ID ?		
MyBiz iOS App - com.mybiz.iosapp	~	
Register a new bundle ID on the Developer Portal.		

Now go back to your Xcode organizer to upload your app; click the blue **[Submit to App Store]** button.

Archive Information
Owncloud iOs Client Jul 2, 2015, 1:30 AM
Submit to App Store
Validate Export
Details
Version 3.4.1 (1.0)
Identifier com.mybiz.iosapp
Type iOS App Archive

This takes a few minutes as it verifies your bundle ID and certificates, and then you will see an upload status.

Submitting arch	ive to the iOS App Store:	
	Uploading Archive	
	Uploading package to the iTunes Store	D

At long last, after working through this long complex process, you are almost ready to publish your app on iTunes.

## Setting up Your iTunes Storefront

There are just a few steps remaining. Now that you have uploaded your branded iOS app, you need to upload some screenshots, an optional demo video, and fill in some information for your app listing on your iTunes storefront. You should see something like this on your main screen (figure 8). You should click the **[Save]** button at the top right periodically to preserve your changes.

iTunes Connect My Apps ~		Carla Schröder 🗸 Carla Schröder
+ •••	Q, Search	All Statuses ~ 🛛 😫 🗮
MyBiz IOS App		
1.0 Prepare for Submission		

This screen displays all of your apps and their submission status. Click **[ Prepare for Submission ]** to get started on the submission process. The first screen is for entering screenshots of your app for various devices, and optionally a demonstration video. Click the little question marks to learn the required image specifications.

# Version Information

App Video Preview and Screenshots 🕐



Apple simplified the screenshot submission process. Please check this Video (in Safari) for details.

For the ownCloud client, we also don't use real screenshots, we use frames in different sizes instead. You can find templates to generate those assets. Here are examples for the Sketch app:

- https://github.com/LaunchKit/SketchToAppStore
- https://github.com/MengTo/AppStoreSketch

Then you must enter:

- Your app name
- A description
- Some keywords for iTunes searches; and
- Some optional URLs

Name	?

MyBiz IOS App

Description 🕐

Branded ownCloud iOS apps for MyBiz, LLC.	

mybiz owncloud ios
Support URL ?
https://mybiz.com/support
Marketing URL ?
https://mybiz.com/about
nttps://mybiz.com/about

https://mybiz.com/privacy

The next section is for Apple Watch. If you don't support Apple Watch you can skip this.

#### The General App Information section requires a:

- 1024 x 1024 logo
- Version
- Rating
- Category
- License
- Copyright, and
- Contact information

#### General App Information

App Icon  ?	Copyright ?	Copyright ?		
	2015 MyBiz, LLC			
MyBiz, LLC	Trade Representative Contact In Display Trade Representati Korean App Store. Carla Schroder	formation (?) ve Contact Information on the		
	First name	Last name		
1016672646	PO Box 100			
Marian @	Apt., suite, bldg. (optional)			
	Mytown	California		
1.0	12345	United States 🛛 🗸		
Category ?	123-456-7890	contact@mybiz.com		
Productivity				
Business	Routing App Coverage File ?			
Rating <mark>Edit</mark> Ages 4+	Choose File			
Additional Ratings	(Optional)			
License Agreement Edit Apple's Standard License Agreement				

In the **Build** section, click the plus button and select your app.

Add Build		
Build	Upload Date	
3.4.1 (1.0)	July 06, 2015 4:10 PM	
		Cancel Done

The **App Review Information** requires contact information, and some information about your app to guide reviewers. Remember, everyone on iTunes can review your app, so it's in your best interest to be helpful. You may optionally provide a login for a demo account.

App Review Information

Contact Information ?		Notes ?	
CarlaSchroderPhone numbercontact@mybiz.com		Features include instant upload, sync, share, customizable	
		sync, and image previews.	
Demo Account ?			
demo@mybiz.com	guest		

The **Version Release** section allows you to choose between automatic release, which means your app will be published upon approval, or manual release, where you must release your app after it is approved.

# Pricing

Next, you must go to the **Pricing** page to set your price, and to select the territories you want your app to be available in.

MyBiz IOS App - Rights and Pricing				
Select the availability date and price tier for your app.				
Availability Date 07/J	ul v 8 v 2015 v ?			
Price Tier Free	e v ?	)		
View	Pricing Matrix			
Price Tier Effective Date Nov	v v Now v Now v ?	)		
Price Tier End Date Nor	ne v None v None v ?	)		
Price Tier Schedule				
Price Tier	Price Effective Date	Price End Date		
Free	Existing	None		
Discount for Educational Institutions 🥑 🔇				
Select the App Store Volume Purchase F available. Note that if you deselect all App Store territories worldwide.	Programs in which you want to territories, your app will be re	make your app Select All Deselect All moved from all		

# **Submit For Review**

When you have filled in all the required forms and provided the required screenshots, click **Save** and then **Submit for Review**. If anything needs to be corrected you will see messages telling you exactly what must be fixed.

The next screen is legalese; click the appropriate Yes or No boxes, and then click the **Submit** button.

You are now finished. No really, you are. When you return to your **My Apps** page you'll see that the status of your app has changed to "Waiting for review". In a few days, or perhaps many days, your app will either be approved or rejected. If it is rejected Apple will tell you what you need to do to get it approved.

# FAQ

Here are the most common answers to questions from the iOS App Review Team.

# iTunes Connect My Apps ~





1.0 Waiting For Review

When, at last, it is published on iTunes you may distribute the URL so that your users may install and use your app.

# FAQ iOS App Review Team

Information from Apple: https://developer.apple.com/support/app-review/

# The product contains cryptography, and whether it classifies for export exemptions.

No, the product does not contain cryptography. Although the app is ready to connect via SSL, this does not imply that the app includes any cryptography

# How does the app utilize Document Picker and File Provider extensions?

The ownCloud app takes advantage of the Document Provider extensions so that those apps that act as Document Picker may access to the ownCloud data, edit it and then changes are automatically uploaded back to the ownCloud server.

## **Background Audio**

#### **Questions:**

- What is the purpose of declaring Audio background mode? Please explain the need for this background mode and where the usage can be found in your binary.
- Your app declares support for audio in the UIBackgroundModes key in your Info.plist but did not include features that require persistent audio. The audio key is intended for use by applications that provide audible content to the user while in the background, such as music player or streaming audio applications. Please revise your app to provide audible content to the

user while the app is in the background or remove the "audio" setting from the UIBackgroundModes key.

#### Answer:

Sometimes, usually, the first time the ownCloud app is submitted, it is rejected because it is included the background mode, Apple rejected it because in the past some apps used this trick to avoid the app to be fully closed. Howerver, the ownCloud app used it only when music is played. This may be checked by Apple reviewers, what we suggest is to be proactive, instead of waiting for the app to be rejected because of that, adding an explanation line, something such as: You may notice that the app is ready to play music not only in foreground but also in background, for you to test it we have uploaded to the test account the file XXX

# Content Rights - Does your app contain, display, or access third-party content?

If the branded app has the help option enable, the answer is yes. Within the help, we are having access to an external web Otherwise, no

## Does this app use the Advertising Identifier (IDFA)?

No, no ads at all

## **IPv6 Connectivity**

#### **Question:**

We discovered one or more bugs in your app when reviewed on the iPad and the iPhone running iOS 10.2 on Wi-Fi connected to an IPv6 network -Specifically, the app does not connect to the server.

InformationfromApple:https://developer.apple.com/library/content/documentation/NetworkingInternetWeb/Conceptual/NetworkingOverview/UnderstandingandPreparingfortheIPv6Transition/UnderstandingandPreparingfortheIPv6Transition.html

Here you can check your server for IPv6 connectivity: http://ipv6-test.com/validate.php

## **Business questions from Apple**

- Does your app access any paid content or services?
- What are the paid content or services, and what are the costs?
- Who pays for the content or services?
- Where do they pay, and what's the payment method?
- If users create an account to use your app, are there fees involved?
- How do users obtain an account?

This is a standard question Apple has to avoid iTunes circumvention as for some stuff they want the 30% revenue share. (see In-App Purchase: https://developer.apple.com/in-app-purchase/)

# **Building Branded Android Apps**

# **Building Your App With ownBrander**

# Introduction

Follow along and begin creating your ownBrander Android app. Within the ownBrander you will find that most of the fields that require your input are self-explanatory. If you still have questions, or perhaps suggestions, feel free contact us.

Use your credentials to log in to customer.owncloud.com.

If you need credentials, do not hesitate to contact your account sales representative.



After successfully logging in to your account, navigate to the left side of your ownCloud instance and click on the inverted arrow to open the menu. Then click the ownBrander icon to open it.



Begin on the **Common Tab** and navigate to the **Required** area. Next, enter your application name and the URL of your ownCloud server in the corresponding fields.

ownCloue		Carlos Damken Testir
Common ←		
iOS	Welcome to the Common tab. This tab is where you will enter information that is common	n to all three ownCloud branded platforms; iOS
Optional	Android and Desktop. Information entered here will be transferred to the appropriate tabs, information on each individual tab later.	but do not worry - you may locally change this
Advanced		
Android	Required In this tab, all branding items are required. Please fill out these attributes and navigate to the	next page.
Optional		
Advanced	Application name	
Desktop	The desired name of your mobile app or desktop client. Once the app is released, this name used to identify the app - both by end-users and also internally.	e cannot be modified because it is
Optional	-> damkencloud X	
Web (beta)	Server URL	
Optional	https://cloud.damken.com/owncloud	

These entries define your global defaults for all of the platforms in ownBrander. You can change them when you create your apps.

When you create production apps, you must then use your real app name, and the URL must point to your real ownCloud server. (However, for testing purposes, these values can be anything.)

## **Configuring ownBrander Parameters**

Next, click on the **Android Tab**. Here you will find another **Required** area to fill out. You will also see two additional tabs: **Optional**, and **Advanced**. These are not mandatory for the processing of your branding experience.

ownCloud	Customer Carlos Damken Testing - Carlos Damken Testing -		
Common			
ios	Welcome to the Common tab. This tab is where you will enter information that is common to all three ownCloud branded platforms: IOS endroid and Deskton. Information entered here will be		
Optional	transferred to the appropriate tabs, but do not worry - you may locally change this information on each individual tab later.		
Advanced			
Android	Required In this tab, all branding items are required. Please fill out these attributes and navigate to the next page.		
Advanced	Application name		
Desktop	The desired name of your mobile app or desktop client. Once the app is released, this name cannot be modified because it is used to identify the app - both by end-users and also internally.		
Optional	damkencloud X		
Web (beta)	h		
× ,	Server URL		
Optional	🗹 Set a static server URL. If this option is not selected, users will have to enter a URL manually to connect to the ownCloud server.		

Start in the **Required** section and type in your application name, your Android package name and your account typ.

💮, ownClou	d <del>▼</del> Customer Resources	Carlos Damken Testing 🗸	
Common	Required		
iOS	All of the branding items in this sections of the iOS Client are required. It will not be possible to generate the Android app .apk file until you enter all of the requested items.		
Optional	Application name		
Advanced	The desired name of your mobile app or desktop client. Once the app is released, this name cannot be modified because it is used to identify the app - both by end-users and also internally. This app name should be pulled from the		
Android	Common tab in ownBrander, but it can be modified here for the Android app if you choose.		
Optional	Damken Cloud X		
Advanced	Android package name		
Desktop	The unique package name for your app, equivalent to the iOS Bundle ID. It is usually the reverse domain of your company, with an added " android" at the end. Note: this package name cannot be modified once the app is released.		
Optional	The package name defines your application's identity so if you change it, it is considered a different application by, for example, the Google Play store.		
Web (beta)	- com.damken.cloud.android		
Optional			
	Account type		
	The account type is an identifier of the account. Its aim is to distinguish this account from other accounts in the Android device when the app is installed. It is usually the app name plus the domain name. Once you filled in and click on "generate app" button; it won't be possible to modify it.		
	-> cloud.damken.com		
l			

Move on to styling your app.

#### Wizard for your Branding Images

Building an Android app requires just a few images (preferably PNG format). The wizard also provides you with the exact dimension requirements. Please make certain that your images fulfill the specifications.

Now you can upload your images into the pre-defined boxes.



#### Main app icon

Icon for the app that is shown on the device Home screen. While many icon resolutions are needed for the different Android devices, you only need to upload one size. ownBrander will automatically create the others. (width:

96px height: 96px) i



Proceed to the section regarding the signing of your Android client and click on the checkbox if you want this option. Provide the required information for the three fields (Key Store Password, Key Alias and Key Alias Password.) You will need these credentials in the Google Play Store Console.

# **Generating Your App**

After a first-time ownCloud branding or after performing any modifications (updating your app), click the **Generate Android App** button.

```
This button is used to start the creation of your app. Once you click this button, the settings and images will be used to automatically generate your app, after which the Android.apk will be uploaded to your customer.owncloud.com account. While this process can take up to 24 hours, the exact time it will take to create your app will vary based on system load. Note: clicking "Generate Android App" multiple times will only cause the process to start again, not speed the process. Also note, if you do find a mistake, you may click "Generate Android App" again, and your latest settings will be used.
Generate Android App
The version that it will be generated is: oc-android-2.18.1_oem
```

The following information will pop up - click ok.


## Download Your Branded App

After the above mentioned time frame, open your account at: customer.owncloud.com

The ownBrander produces three files required to build your app. These are automatically uploaded into your personal folder.

Choose the folder with your name to find the folders for your various branded clients.

🔅 ownCloud -	Customer Resources	<b>Q</b> Carlos Da	amken Testing 🗸
All files	You don't have permission to upload or create files here		
★ Favorites	Name 🔺	Size	Modified
Shared with you	* 🛃 Android app	288.1 MB	a month ago
External storage	> 🧟 carlos_damken < ownbrander	2.1 GB	4 hours ago

Choose the **Mobile App for Android** folder. This folder should contain the three files seen in the image below. The .aab file is of relevance for your app in the Google Play Console.

💮, ownCloud -		<b>Q</b> Carlos D	amken Testing 👻
All files	Carlos_damken You don't have permission to upload or create files here		
★ Favorites	□ Name	Size	Modified 👻
Shared with you	Mobile App for Android < ownbrander	245.8 MB	4 hours ago
External storage	Desktop Client < ownbrander	1.5 GB	a month ago
	Mobile App for IOS < ownbrander	327.3 MB	a year ago
	3 folders	2.1 GB	
🚯 ownCloud -	Customer Resources	<b>Q</b> Carlos D	amken Testing 👻
All files	A carlos_damken S Mobile App for Android S You don't have permission to upload or create files here		
★ Favorites	Name	Size	Modified 👻
Shared with you	damkencloud_2.1.8.1_834-release.aab	12.5 MB	4 hours ago
External storage	amkencloud_2.18.1.834-debug.apk < ownbrander	17.1 MB	4 hours ago
	damkencloud_2.18.1.834-release.apk < ownbrander	14.2 MB	4 hours ago

Now you must sign your app in the Google Play Store in order to distribute it to your users.

# **Distributing Your Branded Android App**

## Introduction

Now that you have created your branded Android app with ownCloud's ownBuilder service (building\_branded\_android\_client) how do you distribute it to your users? There are multiple ways: email, publish\_server, or publish\_google\_play. However you distribute it, the first step is to digitally sign your new app. Signing your app verifies authorship and authenticity.

When you create your branded Android app we supply you with two .apk files: one for debugging and testing, and one for deployment, like these examples:

acmecloud\_2.0.0-debug.apk acmecloud\_2.0.0-release-unsigned.apk

The second .apk file, acmecloud\_2.0.0-release-unsigned.apk, is the one you will sign and distribute.

## **Digitally Signing Android Apps**

Signing your app is required. You can do this in the ownBrander wizard <sign\_android\_app>, or after it is built and delivered to you. The most time-consuming part of signing the built app is installing the commands you need to sign it. You need three commands to sign your app: keytool, jarsigner, and zipalign. Follow these steps:

- 1. Install the signing commands
- 2. Create a self-signed certificate with keytool
- 3. Use jarsigner to sign the app, and to verify signing
- 4. Use zipalign to optimize your app

You only need to create a certificate once, and then use it to sign all of your branded ownCloud apps. If you publish your apps on Google Play they must all be signed with the same certificate.

### Installing the App Signing Tools

keytool and jarsigner are in Java runtimes. Linux users can get these in OpenJDK. For example, on current versions of Debian, Mint, and Ubuntu Linux you need to install two packages. The first one supplies keytool and the second one supplies jarsigner:

sudo apt-get install openjdk-8-jre-headless
sudo apt-get install openjdk-8-jdk

Plus some additional 32-bit packages:

sudo apt-get install libc6-i386 lib32stdc++6 \
 lib32gcc1 lib32ncurses5-dev zlib1g:i386

```
On SUSE systems, install this package:
```

sudo zypper install java-1\_7\_0-openjdk-devel

It is simpler to get these on CentOS and Red Hat Enterprise Linux, as they have created some nice wrapper scripts around keytool and jarsigner that you can install standalone:

```
sudo yum install keytool-maven-plugin.noarch
sudo yum install maven-jarsigner-plugin.noarch
```

Mac OS X and Windows users can download the Oracle JDK from Oracle's Java Download page.

If your operating system provides the zipalign package, you can install it with:

sudo apt install zipalign

In case zipalign is not provided as installable package for your OS, you can download it from source via the Android Software Development Kit. It is a large download, but once you have downloaded it you can copy the zipalign binary to any computer and use it. Go to Android Software Development Kit and click the "Download Android Studio" button.



Download the appropriate SDK Tools Only package for your operating system.

# Other Download Options

## SDK Tools Only

If you prefer to use a different IDE or run the tools from the command line or with build scripts the stand-alone Android SDK Tools. These packages provide the basic SDK tools for app deve see the SDK tools release notes.

Platform	Package	Size	SHA-1 Checksum
Windows	installer_r24.0.2-windows.exe (Recommended)	91428280 bytes	edac14e1541e97d6
	android-sdk_r24.0.2-windows.zip	139473113 bytes	51269c8336f936fc9
Mac OS X	android-sdk_r24.0.2-macosx.zip	87262823 bytes	3ab5e0ab0db5e7c4
Linux	android-sdk_r24.0.2-linux.tgz	140097024 bytes	b6fd75e8b06b0028

Unpack it and change to the unpacked directory, which is android-sdk-linux on Linux systems, android-sdk-macosx on Mac systems, and android-sdk-windows on Windows systems. There is one more step, and that is to install additional tools. Run this command from the unpacked directory:

tools/android update sdk --no-ui

This will take some time, as it is a large download. When it's finished you'll find zipalign in the build-tools directory. For convenience, you could copy zipalign to your home folder or other location of your choice, and to any other computer without installing the whole Android SDK.

#### **Digitally Signing Your App**

After installing your signing tools, signing your app takes just a few steps. In these examples the name of the app, as supplied by ownBuilder, is acmecloud\_1.7.0-release-unsigned.apk.

To create your certificate copy the following command, replacing acme-release-key.keystore and acme\_key with your own keystore name and alias, which can be anything you want. The keystore name and alias must both have a password, which can be same for both. Then enter your company information as you are prompted:

```
keytool -genkey -v \
    -keystore acme-release-key.keystore \
    -alias acme_key \
    -keyalg RSA -keysize 2048 \
```

Enter keystore password: Re-enter new password: What is your first and last name? [Unknown]: Acme Boss What is the name of your organizational unit? [Unknown]: Acme Headquarters What is the name of your organization? [Unknown]: Acme, Inc. What is the name of your City or Locality? [Unknown]: Anytown What is the name of your State or Province? [Unknown]: CA What is the two-letter country code for this unit? [Unknown]: US Is CN=Acme Boss, OU=Acme Headquarters, O="Acme, Inc.", L=Anytown, ST=CA, C=US correct? [no]: yes Generating 2,048 bit RSA key pair and self-signed certificate (SHA256withRSA) with a validity of 10,000 days for: CN=Acme Boss, OU=Acme Headquarters, O="Acme, Inc.", L=Anytown, ST=CA, C=US Enter key password for <acme\_key> (RETURN if same as keystore password): [Storing acme-release-key.keystore]

Now use jarsigner to sign your app. Replace acme-release-key.keystore and acme\_key with your own keystore name and alias:

```
jarsigner -verbose \
    -sigalg SHA1withRSA \
    -digestalg SHA1 \
    -keystore acme-release-key.keystore \
    acmecloud_1.7.0-release-unsigned.apk acme_key
```

```
Enter Passphrase for keystore:
    adding: META-INF/MANIFEST.MF
    adding: META-INF/ACME_KEY.SF
    adding: META-INF/ACME_KEY.RSA
    signing: res/anim/disappear.xml
    signing: res/anim/grow_from_bottom.xml
[...]
    jar signed.
Warning:
    No -tsa or -tsacert is provided and this jar is not timestamped.
Without a timestamp, users may not be able to validate this jar after the signer
```

You can ignore the warning at the end; you should see a jar signed message when it is finished.

Now you can verify that your app is signed:

jarsigner -verify -verbose -certs acmecloud\_1.7.0-release-unsigned.apk

sm 943 Thu Mar 12 12:47:56 PDT 2015
res/drawable-mdpi/abs\_\_dialog\_full\_holo\_light.9.png
X.509, CN=Acme Boss, OU=Acme Headquarters, O="Acme, Inc.", L=Anytown, ST=CA, C=US

This will spit out hundreds of lines of output. If it ends with the following it's good:

```
s = signature was verified
m = entry is listed in manifest
k = at least one certificate was found in keystore
i = at least one certificate was found in identity scope
jar verified.
```

The last step for preparing your .apk for release is to run zipalign on it. zipalign optimizes your file to use less memory. You must specify both an input and an output file, so this is good time to give your app a shorter name, and it should not say "unsigned". Our example file will be renamed to acmecloud\_1.7.0.apk:

zipalign -v 4 acmecloud\_1.7.0-release-unsigned.apk acmecloud\_1.7.0.apk

```
Verifying alignment of acmecloud_1.7.0.apk (4)...
50 META-INF/MANIFEST.MF (OK - compressed)
13277 META-INF/ACME_KEY.SF (OK - compressed)
27035 META-INF/ACME_KEY.RSA (OK - compressed)
28206 res/anim/disappear.xml (OK - compressed)
[..]
Verification succesful
```

Again, this emits a lot of output, and when you see **Verification succesful** at the end you know it succeeded, and it is ready to distribute.

### **Distribution via Email**

You can download your branded Android app from your account on customer.owncloud.com, and

send it as an email attachment to your users. (This is not the optimal way to distribute it as it is over 2 megabytes in size.) When they open your email on their Android phone or tablet, they must first click the the download arrow (bottom right of the screenshot) to download your app.



When the arrow changes to a green checkbox, it has been downloaded.



Now your user must click on the green checkbox, and this launches the app installer, and all they have to do is follow the installation wizard to install your branded app.

				t	<b>*</b>	AM Thu, N	lar 12
To:	tuxcarl	a@gmail.com					
	1	mybranded_android					ð
	Do y	ou want to install this app	lication? It v	vill get	acces	ss to:	
+++	PRI	ACY					
car		read phone status and iden	tity				
The +++	Ŷ	modify or delete the content	s of your SD c	ard			
	9	add or remove accounts					
		create accounts and set pas	sswords				-
		find accounts on the device					
		use accounts on the device					
	DEV	ICE ACCESS					
		full network access					
		Cancel		Nex	t		

When the installation is complete, the ownCloud Android App Manual contains instructions for using the app.

## Publish On Your ownCloud Server

You can distribute your branded app from your ownCloud server. Simply upload it to your ownCloud server and share it like any other file: you can create normal ownCloud shares with ownCloud users and groups, and you may create a link share to share it with anyone. (See the **Sharing Files** section of the ownCloud Web Manual to learn more about sharing files.)

## Publish to the Google Play Store

You may elect to publish your app in the Google Play store, either as a free or paid app. There are several steps to publishing a free app:

- 1. Create a Google Play Publisher account.
- 2. Sign your branded app with your own signing certificate.

3. Upload your signed branded app to your Google Play Publisher account.

As part of creating your Google Play Publisher account you will have to create some screenshots of your app in specific sizes, and create a store description.

#### Create a Google Play Publisher Account

Start at Google's Get Started With Publishing page. Have a credit card ready, because it costs \$25. If you already have a Google account, it is usually better to create a separate new account just for publishing apps to the Google Play Store.

Google's process for uploading apps is fairly streamlined, and the most time-consuming task is creating all the required graphics. After registering, you'll see the welcome screen for the Google Dev Console. Click **Publish an Android app on Google Play**.



This opens the **Add New Application** screen. Click the **Prepare Store Listing** button. (Note that as you navigate the various screens, you can click the Save Draft button to preserve your changes.)

#### ADD NEW APPLICATION

#### Default language \*

English (United States) – en-US

#### Title \*

Acme, Inc. Android App

22 of 30 characters

#### What would you like to start with?



On the next screen, enter your product description.

Acme,	Inc. Ai	ndroid App	Why can't I publish?
DRAFT	Delete app	3	Save draft Publish app
APK	0	STORE LISTING	
Store Listing	0		Fields marked with * need to be filled before publishing.
Pricing & Distribution	0	PRODUCT DETAILS	
In-app Products		English (United States) - en-US	Manage translations 🔻
Services & APIs		Title*	Arma Ina Andraid Ann
Optimization Tips		English (United States) – en-US	Acme, inc. Anoroxa App 22 of 30 characters
		Short description* English (United States) – en-US	Custom ownCloud synchronization app for Acme, Inc.
			51 of 80 characters
		Full description" English (United States) – en-US	Custom ownCloud synchronization app for Acme, Inc., with Acme, Inc. branding and cool artwork.
			94 of 4000 characters
			Please check out these tips on how to create policy compliant app descriptions to avoid some common reasons for any suspension

Then you'll have to upload a batch of graphics in various sizes for the **Graphic Assets** section, like these images for a smartphone and seven-inch tablet. You are required to upload at least two images.

#### Screenshots \*

Default - English (United States) - en-US

JPEG or 24-bit PNG (no alpha). Min length for any side: 320px. Max length for any side: 3840px. At least 2 screenshots are required overall. Max 8 screenshots per type. Drag to reorder or to move between types.

For your app to be showcased in the 'Designed for tablets' list in the Play Store, you need to upload at least one 7-inch and one 10-inch screenshot. If you previously uploaded screenshots, make sure to move them into the right area below.

Learn how tablet screenshots will be displayed in the store listing.

Phone		
	+ Add screenshot Drop image here.	
7-inch tablet		
Carree  Carre	+ Add screenshot Drop image here.	

You must also upload a 512x512-pixel logo, and a 1024x500 banner.

#### Hi-res icon \*

512 x 512 32-bit PNG (with alpha)







Now choose the store categories for your app.

#### CATEGORIZATION

Application type *	Applications	•
Category *	Productivity	•
Content rating *	Everyone	•
	Learn more about content rating.	

Then enter your contact information, which will be visible on your store listing.

Website	http://owncloud.com
Email *	carla@owncloud.com
	Please provide an email address where yo be publicly displayed with your app.

On the next line you may optionally link to your privacy policy. It is recommended to have a privacy policy.

When you're finished with the **Store Listing** page, go to the **Pricing and Distribution** page. You may make this a paid or free app. You cannot convert a free app to paid. You may convert a paid app to free, but then you can't convert it back to paid. You'll have numerous options for paid apps, such as Android Wear, Android TV, and various Google marketing tie-ins, and many more.

For now let's make this a free app, so click the Free button and select the countries you want to distribute it in.

≡ Acm And	ne, Inc. roid App	W	/hy can't I publish?
DRAF	T Delete app	Save draft	Publish app
PRICING & DISTRIBUT	ΓΙΟΝ		
This application is	Paid	Free	
	To publish paid merchant accou or Learn more	applications, you ne unt. Set up a mercha	eed to set up a ant account now
DISTRIBUTE IN THESE C You have selected <b>2 count</b>	OUNTRIES		
SELECT ALL COUNTR	31		
✓ United Kingdom			Show options
United States			Show options
Uruguay			
Uzbekistan			

Now you may upload your app.

## Uploading to Google Play Store

Now you can upload your app to your Google Play Store page. Go to the **APK** page and click **Upload your first APK to Production**. You don't need a license key for a free app.



## Acme, Inc. Android App

DRAFT Delete app

Why can't I publish?

Publish app

### APK

#### PRODUCTION

Publish your app on Google Play BETA TESTING Set up Beta testing for your app

#### ALPHA TESTING

Set up Alpha testing for your app



License keys are now managed for each application individually. If your application uses licensing services (e.g. if your app is a paid app, or if it uses in-app billing or APK expansion files), get your new license key on the Services & APIs page.

Upload your first APK to Production

Do you need a license key for your application?

Get license key

Drag-and-drop, or browse to select your app.

### UPLOAD NEW APK TO PRODUCTION

Drop your APK file here, or select a file.
Browse files



A successful upload looks like this:

■ Acme, Inc. com.acme.an. DRAFT Delet	<b>:. Android App</b> droid le app	Why can't I publish? Publish app
APK	SI	WITCH TO ADVANCED MODE
PRODUCTION Version 10700000	BETA TESTING Set up Beta testing for your app	ALPHA TESTING Set up Alpha testing for your app
PRODUCTION CONFIGURAT	ION Upload new APK to	Production
CURRENT APK uploaded on Ma	13, 2015, 10:17:55 AM	
Supported devices 8725 See list	Excluded devices O Manage excluded d	levices
▼ VERSION UPL	OADED ON STATU	S ACTIONS
10700000 (1.7.0) Mar	13, 2015 Draft in	Prod

Your app is not yet published, but only uploaded to your account. There is one more step to take before you can publish, and that is to go back to the **Pricing & Distribution** page and fill out the **Consent** section.

#### CONSENT

Marketing opt-out	Do not promote my application except in Google Play and in any Google-owned online or mobile properties. I understand that any changes to this preference may take sixty days to take effect.
Content guidelines *	This application meets Android Content Guidelines. Please check out these tips on how to create policy compliant app descriptions to avoid some common reasons for app suspension.
US export laws *	I acknowledge that my software application may be subject to United States export laws, regardless of my location or nationality. I agree that I have complied with all such laws, including any requirements for software with encryption functions. I hereby certify that my application is authorized for export from the United States under these laws. Learn more

Click the Save Draft button, and if you followed all the required steps you should now see a **Publish App** button.

=	1	Acme, Inc. Android App		
	Acriie Cloud	com.acme.android		
		<b>READY TO PUBLISH</b> Delete app	Save draft	Publish app

It will not be published immediately, but after review by Google, which usually takes just a few hours.



After it has been published, your store listing is updated as PUBLISHED, and it includes a link to your Play Store listing.

	Q cschroder-owncloud ▼
₩ 	E Acme, Inc. Android App com.acme.android View in Play store PUBLISHED March 13, 2015 Unpublish app Submit update
©# ₽	STORE LISTING         PRODUCT DETAILS         Fields marked with * need to be filled before publishing.
•	English (United States) – en-US Manage translations 💌
	Title*     Acme, Inc. Android App       English (United States) – en-US     22 of 30 characters

Now all you need to do is distribute the URL to your users, and they can install it either from their Web browsers, or from their Google Play Store apps. This is how it looks to your users.



## **Customize Download Link**

You may configure the URLs to your own download repositories for your ownCloud desktop clients and mobile apps in config/config.php. This example shows the default download locations:

```
<?php

"customclient_desktop" => "https://owncloud.com/desktop-app/",

"customclient_android" =>

"https://play.google.com/store/apps/details?id=com.owncloud.android",

"customclient_ios" =>

"https://itunes.apple.com/us/app/owncloud/id543672169?mt=8",
```

Simply replace the URLs with the links to your own preferred download repos.

You may test alternate URLs without editing config/config.php by setting a test URL as an environment variable:

export OCC\_UPDATE\_URL=https://test.example.com

When you're finished testing you can disable the environment variable:

unset OCC\_UPDATE\_URL

#### Publishing a Paid App in Google Play

If you would rather not give your branded app away you can sell it on Google Play. You may convert a paid app to free, but you may not convert a free app to paid.

You must establish a Google Wallet Merchant Account. On your Google Dev Console click the **Learn more** link under the Free/Paid button for a nice thorough review of the process and tools. It requires verifying your business information and bank account, and you should expect it to take 3-4 days.

PRICING & DISTRIBUTIO	N		
This application is	Paid	Free	
	To publish µ set up a me merchant a	paid applications, you nee erchant account. Set up a ccount now or Learn more	d to

When you're ready to set it up, click the **Set up a merchant account now** link under the Free/Paid button.

### Resources

- Get Started With Publishing
- Signing Your App Manually
- Developer Console

# **Branded Clients**

- Building a Branded Desktop Sync Client
- Building Branded Android Apps
- Building Branded iOS Apps

# **Building a Branded Desktop Sync Client**

## Introduction

To build a branded Desktop sync client, you need to supply your own artwork and use the ownBrander wizard in your account on customer.owncloud.com. The ownBrander wizard details the required image specifications.

## **Build Process**

In the ownBrander wizard at your account, start with the Common section at the top, and enter information common to all clients that you can build with ownBrander. You may override any settings inside the *Common* section of the *Client* sections.

Then go to the Desktop client section of ownBrander, which has two sections, Required and Optional.



Work your way through the wizard, enter required elements and any optional elements you wish. When you have completed the wizard, press the **[Generate Desktop Client]** button. You will either get messages warning of any items that need to be corrected, or a success message. It takes 24-48 hours to build your client. When finalized you will see it in your account on customer.owncloud.com.

## **Updating Your Branded Desktop Clients**

## Introduction

The Client Updater Server provides a Web service that will tell an ownCloud Desktop sync client whether or not an update is available. If an update is available, it will also provide metadata for the update, such as the Download URL, signatures or a fallback URL that the client can resort to in case the update goes wrong.

Clients for Mac OS X and Windows will update themselves automatically. Linux clients will not. You have two options for your Linux users:

- Set up your own download repository so your Linux users can update your branded clients with their package managers when they receive an update notification.
- Upload new versions of your branded client to your Web server. Your Linux users receive update notifications, then download and install the client manually.

There are times when you may want to disable update notifications. See the examples below to learn how to do this.

## Prerequisites

- 1. Configure *Update URL* in the *Desktop* section of your ownBrander account (available for *advanced* users only).
  - Example: https://mycloud.example.com/updates/ (note the forward slash at the end)
- 2. Generate branded clients.
- 3. Upload branded clients to your Web server.
  - Windows example: https://mycloud.example.com/install/mycloud-2.1.1.240-setup.exe
  - Mac OS X examples: https://mycloud.example.com/install/mycloud-2.1.1.787.pkg https://mycloud.example.com/install/mycloud-2.1.1.787.pkg.tbz https://mycloud.example.com/install/mycloud-2.1.1.787.pkg.tbz.sig
  - You should have a Web page with links to your branded clients, so your users can find and download them. For example, https://mycloud.example.com/install/ with Options +Indexes in your ownCloud .htaccess file.

## Install client-updater-server

1. Download client-updater-server-0.4.tar.xz from https://customer.owncloud.com/

- 2. Extract client-updater-server-0.4.tar.xz to your Web server. The index.php must be accessible at https://mycloud.example.com/updates/index.php.
- 3. Copy your ownCloud config/ownCloud.yml file, and name it according your Application short name as configured in ownBrander.

Example: config/mycloud.yml

## **Configure client-updater-server**

All configuration is done in your config/mycloud.yml:

```
throttle: 1 # 100% of the requests get served with the new version
platforms:
 win32msi:
    currentVersion: 2.5.0.10598
    currentVersionString: ownCloud Client 2.5.0 (build 10598)
    updateUrl: https://owncloud.com/desktop-app
    downloadUrl: http://download.owncloud.com/desktop/stable/ownCloud-2.5.0.10598.msi
 win32:
    currentVersion: 2.4.3.10188
    currentVersionString: ownCloud Client 2.4.3 (build 10188)
    updateUrl: https://owncloud.com/desktop-app
    downloadUrl: http://download.owncloud.com/desktop/stable/ownCloud-2.4.3.10188-
setup.exe
 linux:
    currentVersion: 1.8.0
    currentVersionString: ownCloud Client 1.7.1
    updateUrl: https://owncloud.com/desktop-app
 macos:
    currentVersion: 1.8.0.2139
    currentVersionString: ownCloud Client 1.8.0 (build 2139)
    downloadUrl: https://download.owncloud.com/desktop/stable/ownCloud-
1.8.0.2139.pkg.tbz
    pubDate: 2015-03-26
    signature: MCwCFFedScUKeRXYMS6vKVLw821B+/+1AhRbiCxHNzVVZFNXHSvB9GNHOuI5cw==
   minimumSystemVersion: 10.7.0
```

In earlier versions this configuration was written in PHP, which is still supported but no longer the default. The structure slightly changed and would look like this analoguely to the yml config config/mycloud.php:

<?php

\$updateInfo = [

```
'throttle' => 0.7, // 70% of the requests get served with the new version
    'platforms' => [
        'win32msi' => [
            'currentVersion' => '2.5.0.10598',
            'currentVersionString' => 'ownCloud Client 2.5.0 (build 10598)',
            'updateUrl' => 'https://owncloud.com/desktop-app',
            'downloadUrl' => 'http://download.owncloud.com/desktop/stable/ownCloud-
2.5.0.10598.msi',
        ],
        'win32' => [
            'currentVersion' => '2.4.3.10188',
            'currentVersionString' => 'ownCloud Client 2.4.3 (build 10188)',
            'updateUrl' => 'https://owncloud.com/desktop-app',
            'downloadUrl' => 'http://download.owncloud.com/desktop/stable/ownCloud-
2.4.3.10188-setup.exe',
        ],
        'linux' => array(
            'currentVersion' => '1.8.0',
            'currentVersionString' => 'ownCloud Client 1.7.1',
            'updateUrl' => 'https://owncloud.com/desktop-app',
        ),
        'macos' => array(
            'currentVersion' => '1.8.0.2139',
            'currentVersionString' => 'ownCloud Client 1.8.0 (build 2139)',
            'downloadUrl' => 'https://download.owncloud.com/desktop/stable/ownCloud-
1.8.0.2139.pkg.tbz',
            'pubDate' => '2015-03-26',
            'signature' =>
'MCwCFFedScUKeRXYMS6vKVLw821B+/+1AhRbiCxHNzVVZFNXHSvB9GNHOuI5cw==',
            'minimumSystemVersion' => '10.7.0',
        ),
    ]
];
```

(The former top-level config options were moved under a platforms key.)

### **Disabling Notifications**

There may be times when you wish to disable update notifications. To do this, make the 'currentVersion' and 'currentVersionString' older than the currently installed version. To reenable notifications, change these to release versions that are newer than the currently installed clients.

### Windows

- 'currentVersion' Exact version of the new client, including the build number
- 'currentVersionString' Name of the new client, same as "Application name" configured in ownBrander.

• 'updateUrl'

Human-readable Web site with links to your new client files.

'downloadUrl'

Full URL to download the \*.exe file. https needed.

### Mac OS X

- currentVersion' Exact version of the new client, including the build number.
- 'currentVersionString' Name of the new client, same as Application name configured in ownBrander.
- 'downloadUrl'
   Full URL to download the \*.pkg.tbz file. https needed.
- 'pubDate' Currently not used.
- 'signature' Content of mycloud-2.1.1.787.pkg.tbz.sig, adds some extra security to the Mac OS X updater.
- 'minimumSystemVersion' Minimum required Mac OS X version according to https://owncloud.com/desktop-app/

### Linux

- 'currentVersion' Exact version of the new client, including the build number
- 'currentVersionString'

Name of the new client, same as Application name configured in ownBrander.

• 'updateUrl'

Human-readable Web site with links to your new client files to manually install new client versions.

## Debugging client-updater-server

### Windows

This a example URL of a 2.5.0 client for Microsoft Windows: https://mycloud.example.com/updates/?version=2.5.0.10598&platform=win32&msi=true&oem=mycloud

You should see something like the following in your Web server logs:

```
[19/Feb/2016:14:33:35 +0100] "GET
/updates/?version=2.5.0.10598&platform=win32&msi=true&oem=mycloud HTTP/1.1" 200 185 "-
"
"Mozilla/5.0 (Windows) mirall/2.5.0 (mycloud)" microsecs:530450
```

The output should look like this if you call the URL manually:

#### Mac OS X

This a example URL of a 2.1.1 client for Mac OS X:

https://mycloud.example.com/updates/?version=2.1.1.687&platform=macos&oem=mycloud&sparkle=true

You should see something like the following in your Web server logs:

[19/Feb/2016:14:00:17 +0100] "GET /updates/?version=2.1.1.687&platform=macos&oem=mycloud&sparkle= true HTTP/1.1" 200 185 "-" "Mozilla/5.0 (Macintosh) mirall/2.1.1 (mycloud)" microsecs:1071 response\_size:2070 bytes\_received:306 bytes\_sent:2402

The output should look like this if you call the URL manually:

```
<?xml version="1.0" encoding="utf-8"?>
 <rss version="2.0"
 xmlns:sparkle="http://www.andymatuschak.org/xml-namespaces/sparkle"
 xmlns:dc="http://purl.org/dc/elements/1.1/">
 <channel>
     <title>Download Channel</title>
    <description>Most recent changes with links to updates.</description>
    <language>en</language><item>
     <title>MyCloud Client 2.1.1 (build 787)</title>
     <pubDate>Mon, 23 Feb 16 00:00:00 -0500</pubDate>
    <enclosure url="https://mycloud.example.com/install/</pre>
       mycloud-2.1.1.787.pkg.tbz" sparkle:version="2.1.1.787"
      type="application/octet-stream"
       sparkle:dsaSignature="MCwCFFedScUKeRXYMS6vKVLw821B+/+
         lAhRbiCxHNzVVZFNXHSvB9GNHOuI5cw=="/>
      <sparkle:minimumSystemVersion>10.7.0</sparkle:minimumSystemVersion>
  </item>
  </channel>
 </rss>
```

## **Deploy And Update Branded Linux Desktop Clients**

## Introduction

As an ownBrander user, you can enable the build of branded Linux in the "Desktop" section of your account. You can download a \*.tar file which contains everything to set up complete self-hosted Linux repositories for the selected Linux distributions.

## Setup

This is the content of mycloud-2.10.0.6752-linux.tar:

```
mycloud-2.10.0.6752-linux
     - CentOS 7
      L____ ...
     – Debian 10
      L____ ....
     - Debian_11
      L____ ....
     - Fedora_33
      L____ ....
     - Fedora 34
      L____ ...
      - Fedora_35
      L____ ....
     - Ubuntu_18.04
      L____ ...
      - Ubuntu 20.04
      L____ ...
      - Ubuntu 21.04
      L____ ....
     - Ubuntu_21.10
      L____ ...
      - download
      CentOS.html

Debian.html

          — Fedora.html
          — Ubuntu.html
          – allplatforms.html
            assets
           _
                - application.css
                - application.js
                – arch.png
                - centos.png
                - debian.png
                - download.html
                 - favicon.png
                - fedora.png

    global-navigation-data-en.js

                  globalnav-im.png
                 - header-logo.png
                 opensuse.png
```

```
repo.cfg
                 rhel.png
                sl.png
               - sle.png
               - ubuntu.png
               - univention.png
               - unknown.png
               – ymp-added-repos.txt
          · bin
          └──── repo-admin.py
          - download.json
          - example.sh
          index.html
          openSUSE.html
          - ymp
              – openSUSE_Leap_15.2
              └─── mycloud-client.ymp
              – openSUSE Leap 15.3
              └─── mycloud-client.ymp
              - openSUSE_ymp.html
      openSUSE Leap 15.2
      openSUSE_Leap_15.3
         - INSTALL.sh
         - PREINSTALL.sh
         libmycloudsync-devel-2.10.0-6752.x86_64.rpm
         – ocqt51210-libQt5Concurrent5-5.12.10-lp153.15.1.x86_64.rpm
         - ocqt51210-libQt5Core5-5.12.10-lp153.15.1.x86_64.rpm
         – ocqt51210-libQt5DBus5-5.12.10-lp153.15.1.x86 64.rpm
         – ocqt51210-libQt5Gui5-5.12.10-lp153.15.1.x86 64.rpm
         - ocqt51210-libQt5Network5-5.12.10-lp153.15.1.x86_64.rpm
         – ocqt51210-libQt5PrintSupport5-5.12.10-lp153.15.1.x86_64.rpm
         – ocqt51210-libQt5Sql5-5.12.10-lp153.15.1.x86 64.rpm
         - ocqt51210-libQt5Widgets5-5.12.10-lp153.15.1.x86_64.rpm
         – ocqt51210-libQt5Xml5-5.12.10-lp153.15.1.x86_64.rpm
         - ocqt51210-libqt5-qtsvg-5.12.10-lp153.2.1.x86_64.rpm
         - ocgt51210-libgt5-gttranslations-5.12.10-lp153.2.1.x86 64.rpm
         - ocqt51210-libqt5-qtwayland-5.12.10-lp153.18.1.x86_64.rpm
         - ocqt51210-qt5keychain1-0.12.0-lp153.3.1.x86_64.rpm
         - repodata
         3087af5cd89a88977dc9d04e5a3724c573b5b1da3da26bf39931c35f30f00b04-
primary.xml.gz
              - c0ee1520c439b5272490d193ceb9a31230b9cb7de16dd88565e1c8f6218f006b-
        ____
other.xml.gz
    da70c01f9d56865f5792e19529fe3b5cdbd5dd94162fbd3e117577ead7a422cf-
filelists.xml.gz
         repomd.xml
             — repomd.xml.asc
             — repomd.xml.key
         - mycloud-client-2.10.0-6752.x86_64.rpm
          mycloud-client-doc-2.10.0-6752.x86_64.rpm
```



The download folder provides detailed instructions for your users at download/index.html about how to install the branded Linux clients on the selected Linux distributions. All location information in the HTML files is set to download.example.com. All metadata in the repo is set to download.example.com too.

The download folder contains a shell script (/download/example.sh). This allows you to modify the HTML and the repo itself according to your repo location on your webserver.

#### download/example.sh

```
#! /bin/bash
#
# This example demonstrates how to call repo-admin.py
# You will need to call repo-admin.py with your download url.
# Basic auth username and password is supported as shown below.
#
# You can customitze the main html file and re-run repo-admin.py later.
#
cd $(dirname $0)
set -x
python bin/repo-admin.py \
  --url http://download.example.com/repo \
  -d 'download' \
  -p '.*-client' \
  -i 'index.html' \
  -f ..
```

Replace <a href="http://download.example.com/repo">http://download.example.com/repo</a> in the above example with the base URL of your repository and save the file with a new name. (download/mycloud.sh)

Then execute the script and check download/index.html on your webserver.

## **Building Your App With ownBrander**

### Introduction

Follow along and begin creating your ownBrander Android app. Within the ownBrander you will find that most of the fields that require your input are self-explanatory. If you still have questions, or perhaps suggestions, feel free contact us.

Use your credentials to log in to customer.owncloud.com.

If you need credentials, do not hesitate to contact your account sales representative.



After successfully logging in to your account, navigate to the left side of your ownCloud instance and click on the inverted arrow to open the menu. Then click the ownBrander icon to open it.



Begin on the **Common Tab** and navigate to the **Required** area. Next, enter your application name and the URL of your ownCloud server in the corresponding fields.

| ownClou    | d <del>v</del> Customer<br>Resources  | Carlos Damken Testing 🛨 |
|------------|---|-------------------------|
| Common     |   |                         |
| iOS        | Welcome to the Common tab. This tab is where you will enter information that is common to all three ownCloud branded plate  | orms: iOS               |
| Optional   | Android and Desktop. Information entered here will be transferred to the appropriate tabs, but do not worry - you may locally c<br>information on each individual tab later.                  | hange this              |
| Advanced   |   |                         |
| Android    | Required<br>In this tab, all branding items are required. Please fill out these attributes and navigate to the next page.   |                         |
| Optional   |   |                         |
| Advanced   | Application name  |                         |
| Desktop    | The desired name of your mobile app or desktop client. Once the app is released, this name cannot be modified because it is used to identify the app - both by end-users and also internally. |                         |
| Optional   | -> damkencloud ×  |                         |
| Web (beta) | Server URL  |                         |
| Optional   | https://cloud.damken.com/owncloud   |                         |
|            |   |                         |

These entries define your global defaults for all of the platforms in ownBrander. You can change them when you create your apps.

When you create production apps, you must then use your real app name, and the URL must point to your real ownCloud server. (However, for testing purposes, these values can be anything.)

## **Configuring ownBrander Parameters**

Next, click on the **Android Tab**. Here you will find another **Required** area to fill out. You will also see two additional tabs: **Optional**, and **Advanced**. These are not mandatory for the processing of your branding experience.

| ownCloud   | Customer Carlos Damken Testing - Carlos Damken Testing -   |
|------------|--|
| Common     |  |
| iOS        | We leave to the Common tab. This tab is where you will note information that is common to all these sum Cloud branded elaforms; IOC Android and Deckton, information entered here will be            |
| Optional   | transferred to the appropriate tabs, but do not worry - you may locally change this information on each individual tab later.  |
| Advanced   |  |
| Android    | Required<br>In this tab, all branding items are required. Please fill out these attributes and navigate to the next page.  |
| Optional   | Application name   |
| Desktop    | <br>The desired name of your mobile app or desktop client. Once the app is released, this name cannot be modified because it is used to identify the app - both by end-users and<br>also internally. |
| Optional   | damkencloud X  |
| Web (beta) | h  |
|            | Server URL   |
| Optional   | Set a static server URL. If this option is not selected, users will have to enter a URL manually to connect to the ownCloud server.  |

Start in the **Required** section and type in your application name, your Android package name and your account typ.



Move on to styling your app.

#### Wizard for your Branding Images

Building an Android app requires just a few images (preferably PNG format). The wizard also provides you with the exact dimension requirements. Please make certain that your images fulfill the specifications.

Now you can upload your images into the pre-defined boxes.



Proceed to the section regarding the signing of your Android client and click on the checkbox if you want this option. Provide the required information for the three fields (Key Store Password, Key Alias and Key Alias Password.) You will need these credentials in the Google Play Store Console.

## **Generating Your App**

After a first-time ownCloud branding or after performing any modifications (updating your app), click the **Generate Android App** button.

This button is used to start the creation of your app. Once you click this button, the settings and images will be used to automatically generate your app, after which the Android .apk will be uploaded to your customer.owncloud.com account. While this process can take up to 24 hours, the exact time it will take to create your app will vary based on system load. Note: clicking "Generate Android App" multiple times will only cause the process to start again, not speed the process. Also note, if you do find a mistake, you may click "Generate Android App" again, and your latest settings will be used.

R

Generate Android App

The version that it will be generated is: oc-android-2.18.1\_oem



## **Download Your Branded App**

After the above mentioned time frame, open your account at: customer.owncloud.com

The ownBrander produces three files required to build your app. These are automatically uploaded into your personal folder.

Choose the folder with your name to find the folders for your various branded clients.

| ś | ownCloud -       | Custome<br>Resource | ier<br>ces |                             |                         |   |              | <b>Q</b> Carlos D | Damken Testing <del>+</del> |
|---|------------------|---------------------|------------|-----------------------------|-------------------------|---|--------------|-------------------|-----------------------------|
|   | All files        |                     | 🔺 👌 You    | don't have permission to up | oad or create files her | e |              |                   |                             |
| * | Favorites        |                     |            | Name 🔺                      |                         |   |              | Size              | Modified                    |
| < | Shared with you  |                     | * <        | Android app                 |                         | k | <\$ Admin    | <br>288.1 MB      | a month ago                 |
| Ľ | External storage |                     | → <        | carlos_damken               |                         |   | < ownbrander | <br>2.1 GB        | 4 hours ago                 |

Choose the **Mobile App for Android** folder. This folder should contain the three files seen in the image below. The .aab file is of relevance for your app in the Google Play Console.

| de de la comunicación de la com |  |   | ٩                                | Carlos Damken Testing 🗸   |
|---|--|---|----------------------------------|---|
| All files   | $\blacksquare$ carlos_damken $>$ You don't have permission to upload or create files here  |   |                                  |   |
| ★ Favorites   | Name   |   | Siz                              | e Modified 👻  |
| Shared with you   | Mobile App for Android   | <ol> <li>ownbrander</li> </ol>  | 245.                             | 8 MB 4 hours ago  |
| 🖪 External storage  | Cesktop Client   | <ol> <li>ownbrander</li> </ol>  | ••• 1.                           | 5 GB a month ago  |
|   | Mobile App for IOS   | <s ownbrander<="" th=""><th>••• 327.</th><th>3 MB a year ago</th></s> | ••• 327.                         | 3 MB a year ago   |
|   | 3 folders  |   | 2.                               | 1 GB  |
|   |  |   |                                  |   |
|   |  |   |                                  |   |
| ownCloud -  | Customer<br>Resources  |   | م                                | Carlos Damken Testing 🕶   |
| All files   | Customer<br>Resources  A carlos_damken Mobile App for Android You don't have permission to uploa   | d or create files here  | ۹.                               | Carlos Damken Testing 🗸   |
| ownCloud      ownCloud     Favorites  | Customer<br>Resources  | d or create files here  | Q Siz                            | Carlos Damken Testing +<br>e Modified +   |
| ownCloud     ownCloud     All files     Favorites     Shared with you   | Customer<br>Resources  | d or create files here<br>d or create files here                      | Q<br>Siz                         | Carlos Damken Testing +<br>e Modified +<br>5 MB 4 hours ago                     |
| All files     Favorites     Shared with you     External storage  | Customer<br>Resources          Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: Carlos_damken > Mobile App for Android > You don't have permission to uploa         Image: | d or create files here<br>cownbrander<br>cownbrander                  | م م<br>512<br>*** 12:<br>*** 17: | Carlos Damken Testing +<br>e Modified +<br>5 MB 4 hours ago<br>1 MB 4 hours ago |

Now you must sign your app in the Google Play Store in order to distribute it to your users.

# **Distributing Your Branded Android App**

## Introduction

Now that you have created your branded Android app with ownCloud's ownBuilder service (building\_branded\_android\_client) how do you distribute it to your users? There are multiple ways: email, publish\_server, or publish\_google\_play. However you distribute it, the first step is to digitally sign your new app. Signing your app verifies authorship and authenticity.

When you create your branded Android app we supply you with two .apk files: one for debugging and testing, and one for deployment, like these examples:

acmecloud\_2.0.0-debug.apk acmecloud\_2.0.0-release-unsigned.apk

The second .apk file, acmecloud\_2.0.0-release-unsigned.apk, is the one you will sign and distribute.

## **Digitally Signing Android Apps**

Signing your app is required. You can do this in the ownBrander wizard <sign\_android\_app>, or after it is built and delivered to you. The most time-consuming part of signing the built app is installing the commands you need to sign it. You need three commands to sign your app: keytool, jarsigner, and zipalign. Follow these steps:

- 1. Install the signing commands
- 2. Create a self-signed certificate with keytool
- 3. Use jarsigner to sign the app, and to verify signing
- 4. Use zipalign to optimize your app

You only need to create a certificate once, and then use it to sign all of your branded ownCloud apps. If you publish your apps on Google Play they must all be signed with the same certificate.

### Installing the App Signing Tools

keytool and jarsigner are in Java runtimes. Linux users can get these in OpenJDK. For example, on current versions of Debian, Mint, and Ubuntu Linux you need to install two packages. The first one supplies keytool and the second one supplies jarsigner:

sudo apt-get install openjdk-8-jre-headless
sudo apt-get install openjdk-8-jdk

Plus some additional 32-bit packages:

sudo apt-get install libc6-i386 lib32stdc++6 \
 lib32gcc1 lib32ncurses5-dev zlib1g:i386

```
On SUSE systems, install this package:
```

sudo zypper install java-1\_7\_0-openjdk-devel

It is simpler to get these on CentOS and Red Hat Enterprise Linux, as they have created some nice wrapper scripts around keytool and jarsigner that you can install standalone:

```
sudo yum install keytool-maven-plugin.noarch
sudo yum install maven-jarsigner-plugin.noarch
```

Mac OS X and Windows users can download the Oracle JDK from Oracle's Java Download page.

If your operating system provides the zipalign package, you can install it with:

sudo apt install zipalign

In case zipalign is not provided as installable package for your OS, you can download it from source via the Android Software Development Kit. It is a large download, but once you have downloaded it you can copy the zipalign binary to any computer and use it. Go to Android Software Development Kit and click the "Download Android Studio" button.



Download the appropriate SDK Tools Only package for your operating system.

# Other Download Options

## SDK Tools Only

If you prefer to use a different IDE or run the tools from the command line or with build scripts the stand-alone Android SDK Tools. These packages provide the basic SDK tools for app deve see the SDK tools release notes.

| Platform | Package  | Size               | SHA-1 Checksum    |
|----------|--|--------------------|-------------------|
| Windows  | installer_r24.0.2-windows.exe<br>(Recommended) | 91428280<br>bytes  | edac14e1541e97d6  |
|          | android-sdk_r24.0.2-windows.zip                | 139473113<br>bytes | 51269c8336f936fc9 |
| Mac OS X | android-sdk_r24.0.2-macosx.zip                 | 87262823<br>bytes  | 3ab5e0ab0db5e7c4  |
| Linux    | android-sdk_r24.0.2-linux.tgz                  | 140097024<br>bytes | b6fd75e8b06b0028  |

Unpack it and change to the unpacked directory, which is android-sdk-linux on Linux systems, android-sdk-macosx on Mac systems, and android-sdk-windows on Windows systems. There is one more step, and that is to install additional tools. Run this command from the unpacked directory:

tools/android update sdk --no-ui

This will take some time, as it is a large download. When it's finished you'll find zipalign in the build-tools directory. For convenience, you could copy zipalign to your home folder or other location of your choice, and to any other computer without installing the whole Android SDK.

### **Digitally Signing Your App**

After installing your signing tools, signing your app takes just a few steps. In these examples the name of the app, as supplied by ownBuilder, is acmecloud\_1.7.0-release-unsigned.apk.

To create your certificate copy the following command, replacing acme-release-key.keystore and acme\_key with your own keystore name and alias, which can be anything you want. The keystore name and alias must both have a password, which can be same for both. Then enter your company information as you are prompted:

```
keytool -genkey -v \
    -keystore acme-release-key.keystore \
    -alias acme_key \
    -keyalg RSA -keysize 2048 \
```

Enter keystore password: Re-enter new password: What is your first and last name? [Unknown]: Acme Boss What is the name of your organizational unit? [Unknown]: Acme Headquarters What is the name of your organization? [Unknown]: Acme, Inc. What is the name of your City or Locality? [Unknown]: Anytown What is the name of your State or Province? [Unknown]: CA What is the two-letter country code for this unit? [Unknown]: US Is CN=Acme Boss, OU=Acme Headquarters, O="Acme, Inc.", L=Anytown, ST=CA, C=US correct? [no]: yes Generating 2,048 bit RSA key pair and self-signed certificate (SHA256withRSA) with a validity of 10,000 days for: CN=Acme Boss, OU=Acme Headquarters, O="Acme, Inc.", L=Anytown, ST=CA, C=US Enter key password for <acme\_key> (RETURN if same as keystore password): [Storing acme-release-key.keystore]

Now use jarsigner to sign your app. Replace acme-release-key.keystore and acme\_key with your own keystore name and alias:

```
jarsigner -verbose \
    -sigalg SHA1withRSA \
    -digestalg SHA1 \
    -keystore acme-release-key.keystore \
    acmecloud_1.7.0-release-unsigned.apk acme_key
```

```
Enter Passphrase for keystore:
    adding: META-INF/MANIFEST.MF
    adding: META-INF/ACME_KEY.SF
    adding: META-INF/ACME_KEY.RSA
    signing: res/anim/disappear.xml
    signing: res/anim/grow_from_bottom.xml
[...]
    jar signed.
Warning:
    No -tsa or -tsacert is provided and this jar is not timestamped.
Without a timestamp, users may not be able to validate this jar after the signer
```
You can ignore the warning at the end; you should see a jar signed message when it is finished.

Now you can verify that your app is signed:

jarsigner -verify -verbose -certs acmecloud\_1.7.0-release-unsigned.apk

sm 943 Thu Mar 12 12:47:56 PDT 2015
res/drawable-mdpi/abs\_\_dialog\_full\_holo\_light.9.png
X.509, CN=Acme Boss, OU=Acme Headquarters, O="Acme, Inc.", L=Anytown, ST=CA, C=US

This will spit out hundreds of lines of output. If it ends with the following it's good:

```
s = signature was verified
m = entry is listed in manifest
k = at least one certificate was found in keystore
i = at least one certificate was found in identity scope
jar verified.
```

The last step for preparing your .apk for release is to run zipalign on it. zipalign optimizes your file to use less memory. You must specify both an input and an output file, so this is good time to give your app a shorter name, and it should not say "unsigned". Our example file will be renamed to acmecloud\_1.7.0.apk:

zipalign -v 4 acmecloud\_1.7.0-release-unsigned.apk acmecloud\_1.7.0.apk

```
Verifying alignment of acmecloud_1.7.0.apk (4)...
50 META-INF/MANIFEST.MF (OK - compressed)
13277 META-INF/ACME_KEY.SF (OK - compressed)
27035 META-INF/ACME_KEY.RSA (OK - compressed)
28206 res/anim/disappear.xml (OK - compressed)
[..]
Verification succesful
```

Again, this emits a lot of output, and when you see **Verification succesful** at the end you know it succeeded, and it is ready to distribute.

## **Distribution via Email**

You can download your branded Android app from your account on customer.owncloud.com, and

send it as an email attachment to your users. (This is not the optimal way to distribute it as it is over 2 megabytes in size.) When they open your email on their Android phone or tablet, they must first click the the download arrow (bottom right of the screenshot) to download your app.



When the arrow changes to a green checkbox, it has been downloaded.



Now your user must click on the green checkbox, and this launches the app installer, and all they have to do is follow the installation wizard to install your branded app.

| 9                                 |                                |   |  | ¢    | <b>*</b> | AM Thu, N | lar 12 |
|-----------------------------------|--------------------------------|---|--|------|----------|-----------|--------|
| To:                               | tuxcar                         | la@gmail.com  |  |      |          |           |        |
| Za<br>Za                          | mybranded_android              |   |  |      |          |           |        |
|                                   | Do y                           | Do you want to install this application? It will get access to: |  |      |          |           |        |
| +++                               | PRIVACY                        |   |  |      |          |           |        |
| ACE<br>car                        | read phone status and identity |   |  |      |          |           |        |
| 1he<br>+++                        | Ŷ                              | modify or delete the contents of your SD card                   |  |      |          |           |        |
|                                   | add or remove accounts         |   |  |      |          |           |        |
| create accounts and set passwords |                                |   |  |      |          |           |        |
|                                   |                                | find accounts on the device                                     |  |      |          |           |        |
|                                   | use accounts on the device     |   |  |      |          |           |        |
|                                   | DEVICE ACCESS                  |   |  |      |          |           |        |
|                                   |                                | full network access   |  |      |          |           |        |
|                                   |                                | Cancel  |  | Next | t        |           |        |

When the installation is complete, the ownCloud Android App Manual contains instructions for using the app.

# Publish On Your ownCloud Server

You can distribute your branded app from your ownCloud server. Simply upload it to your ownCloud server and share it like any other file: you can create normal ownCloud shares with ownCloud users and groups, and you may create a link share to share it with anyone. (See the **Sharing Files** section of the ownCloud Web Manual to learn more about sharing files.)

## Publish to the Google Play Store

You may elect to publish your app in the Google Play store, either as a free or paid app. There are several steps to publishing a free app:

- 1. Create a Google Play Publisher account.
- 2. Sign your branded app with your own signing certificate.

3. Upload your signed branded app to your Google Play Publisher account.

As part of creating your Google Play Publisher account you will have to create some screenshots of your app in specific sizes, and create a store description.

### **Create a Google Play Publisher Account**

Start at Google's Get Started With Publishing page. Have a credit card ready, because it costs \$25. If you already have a Google account, it is usually better to create a separate new account just for publishing apps to the Google Play Store.

Google's process for uploading apps is fairly streamlined, and the most time-consuming task is creating all the required graphics. After registering, you'll see the welcome screen for the Google Dev Console. Click **Publish an Android app on Google Play**.



This opens the **Add New Application** screen. Click the **Prepare Store Listing** button. (Note that as you navigate the various screens, you can click the Save Draft button to preserve your changes.)

## ADD NEW APPLICATION

#### Default language \*

English (United States) – en-US

#### Title \*

Acme, Inc. Android App

22 of 30 characters

#### What would you like to start with?



On the next screen, enter your product description.

| محمد Acme,             | Inc. A     | ndroid App  | Why can't I publish?  |
|------------------------|------------|---|---|
| DRAFT                  | Delete apj | p   | Save draft Publish app  |
| АРК                    | 0          | STORE LISTING   |   |
| Store Listing          | 0          |   | Fields marked with * need to be filled before publishing.   |
| Pricing & Distribution | 0          | PRODUCT DETAILS                                       |   |
| In-app Products        |            | English (United States) - en-US                       | Manage translations 🔻   |
| Services & APIs        |            | Title*  | Acme Inc Activit Ann  |
| Optimization Tips      | 1          | English (United States) - en-US                       | 22 of 30 characters   |
|                        |            | Short description*<br>English (United States) – en-US | Custom ownCloud synchronization app for Acme, Inc.  |
|                        |            |   |   |
|                        |            | Full description*<br>English (United States) – en-US  | Custom ownCloud synchronization app for Acme, Inc., with Acme, Inc. branding and cool artwork.                                    |
|                        |            |   | 94 of 4000 characters   |
|                        |            |   | Please check out these tips on how to create policy compliant app descriptions to avoid some<br>common reasons for any suspension |

Then you'll have to upload a batch of graphics in various sizes for the **Graphic Assets** section, like these images for a smartphone and seven-inch tablet. You are required to upload at least two images.

#### Screenshots \*

Default - English (United States) - en-US

JPEG or 24-bit PNG (no alpha). Min length for any side: 320px. Max length for any side: 3840px. At least 2 screenshots are required overall. Max 8 screenshots per type. Drag to reorder or to move between types.

For your app to be showcased in the 'Designed for tablets' list in the Play Store, you need to upload at least one 7-inch and one 10-inch screenshot. If you previously uploaded screenshots, make sure to move them into the right area below.

Learn how tablet screenshots will be displayed in the store listing.

| Phone  |   |  |
|--|---|--|
| Carrier<br>Perver address Valge dt.<br>Perver address Valge dt.<br>Passanze<br>Passanze<br>Carrier<br>Steat to sen Obsel?  | +<br>Add screenshot<br>Drop image here. |  |
| 7-inch tablet  |   |  |
| Acree contractions of the second of the seco | +<br>Add screenshot<br>Drop image here. |  |

Feature Graphic \*

You must also upload a 512x512-pixel logo, and a 1024x500 banner.

#### Hi-res icon \*

512 x 512 32-bit PNG (with alpha)







Now choose the store categories for your app.

## CATEGORIZATION

| Application type * | Applications                                 | • |
|--------------------|--|---|
| Category *         | Productivity                                 | • |
| Content rating *   | Everyone<br>Learn more about content rating. | • |

Then enter your contact information, which will be visible on your store listing.

|         | http://owncloud.com  |  |  |
|---------|--|--|--|
| Email * | carla@owncloud.com   |  |  |
|         | Please provide an email address where yo<br>be publicly displayed with your app. |  |  |

On the next line you may optionally link to your privacy policy. It is recommended to have a privacy policy.

When you're finished with the **Store Listing** page, go to the **Pricing and Distribution** page. You may make this a paid or free app. You cannot convert a free app to paid. You may convert a paid app to free, but then you can't convert it back to paid. You'll have numerous options for paid apps, such as Android Wear, Android TV, and various Google marketing tie-ins, and many more.

For now let's make this a free app, so click the Free button and select the countries you want to distribute it in.

| ≡ Acm<br>And  | ne, Inc.<br>roid App                               | Why can't I publish?   |             |  |  |  |
|---|--|--|-------------|--|--|--|
| DRAF  | Delete app   | Save draft   | Publish app |  |  |  |
| PRICING & DISTRIBUT                                       | PRICING & DISTRIBUTION                             |  |             |  |  |  |
| This application is                                       | Paid   | Free   |             |  |  |  |
|   | To publish paid<br>merchant accou<br>or Learn more | To publish paid applications, you need to set up a merchant account. Set up a merchant account now or Learn more |             |  |  |  |
| DISTRIBUTE IN THESE C<br>You have selected <b>2 count</b> | OUNTRIES<br>ries                                   |  |             |  |  |  |
| SELECT ALL COUNTR   | 31   |  |             |  |  |  |
| United Kingdom Show options                               |  |  |             |  |  |  |
| United States Show options                                |  |  |             |  |  |  |
| Uruguay   |  |  |             |  |  |  |
| Uzbekistan  |  |  |             |  |  |  |

Now you may upload your app.

# Uploading to Google Play Store

Now you can upload your app to your Google Play Store page. Go to the **APK** page and click **Upload your first APK to Production**. You don't need a license key for a free app.



# Acme, Inc. Android App

DRAFT Delete app

Why can't I publish?

Publish app

APK

## PRODUCTION

Publish your app on Google Play BETA TESTING Set up Beta testing for your app

## ALPHA TESTING

Set up Alpha testing for your app



License keys are now managed for each application individually. If your application uses licensing services (e.g. if your app is a paid app, or if it uses in-app billing or APK expansion files), get your new license key on the Services & APIs page.

Upload your first APK to Production

Do you need a license key for your application?

Get license key

Drag-and-drop, or browse to select your app.

## UPLOAD NEW APK TO PRODUCTION

| Drop your APK file here, or select a file. |  |
|--|--|
| Browse files                               |  |



A successful upload looks like this:

| ■ Acme,<br>com.acm<br>DRAFT                                      | , <b>Inc. Android App</b><br>ne.android<br>Delete app                  | Why can't I publish?<br>Publish app                   |  |  |  |
|--|--|---|--|--|--|
| АРК  |  | SWITCH TO ADVANCED MODE                               |  |  |  |
| PRODUCTION<br>Version<br>10700000                                | BETA TESTING<br>Set up Beta testing for<br>your app                    | ALPHA TESTING<br>Set up Alpha testing for<br>your app |  |  |  |
| PRODUCTION CONFIGU   | PRODUCTION CONFIGURATION Upload new APK to Production                  |   |  |  |  |
| CURRENT APK uploaded or<br>Supported devices<br>8725<br>See list | n Mar 13, 2015, 10:17:55 AM<br>Excluded device<br>O<br>Manage excluded | es<br>d devices                                       |  |  |  |
| <ul><li>VERSION</li><li>10700000 (1.7.0)</li></ul>               | UPLOADED ON STAT<br>Mar 13, 2015 Draft                                 | IN ACTIONS  |  |  |  |

I

Your app is not yet published, but only uploaded to your account. There is one more step to take before you can publish, and that is to go back to the **Pricing & Distribution** page and fill out the **Consent** section.

## CONSENT

| Marketing opt-out    | Do not promote my application except in Google Play and in any<br>Google-owned online or mobile properties. I understand that any<br>changes to this preference may take sixty days to take effect.  |
|----------------------|--|
| Content guidelines * | This application meets Android Content Guidelines. Please check out these tips on how to create policy compliant app descriptions to avoid some common reasons for app suspension.   |
| US export laws *     | I acknowledge that my software application may be subject to<br>United States export laws, regardless of my location or nationality.<br>I agree that I have complied with all such laws, including any<br>requirements for software with encryption functions. I hereby<br>certify that my application is authorized for export from the United<br>States under these laws. Learn more |

Click the Save Draft button, and if you followed all the required steps you should now see a **Publish App** button.

| ≡ | <b>1</b>     | Acme, Inc. Android<br>App      |            |             |
|---|--------------|--------------------------------|------------|-------------|
|   | Acriie Cloud | com.acme.android               |            |             |
|   |              | READY TO PUBLISH<br>Delete app | Save draft | Publish app |

It will not be published immediately, but after review by Google, which usually takes just a few hours.



After it has been published, your store listing is updated as PUBLISHED, and it includes a link to your Play Store listing.



Now all you need to do is distribute the URL to your users, and they can install it either from their Web browsers, or from their Google Play Store apps. This is how it looks to your users.



# **Customize Download Link**

You may configure the URLs to your own download repositories for your ownCloud desktop clients and mobile apps in config/config.php. This example shows the default download locations:

```
<?php
    "customclient_desktop" => "https://owncloud.com/desktop-app/",
    "customclient_android" =>
    "https://play.google.com/store/apps/details?id=com.owncloud.android",
    "customclient_ios" =>
    "https://itunes.apple.com/us/app/owncloud/id543672169?mt=8",
```

Simply replace the URLs with the links to your own preferred download repos.

You may test alternate URLs without editing config/config.php by setting a test URL as an environment variable:

export OCC\_UPDATE\_URL=https://test.example.com

When you're finished testing you can disable the environment variable:

unset OCC\_UPDATE\_URL

### Publishing a Paid App in Google Play

If you would rather not give your branded app away you can sell it on Google Play. You may convert a paid app to free, but you may not convert a free app to paid.

You must establish a Google Wallet Merchant Account. On your Google Dev Console click the **Learn more** link under the Free/Paid button for a nice thorough review of the process and tools. It requires verifying your business information and bank account, and you should expect it to take 3-4 days.

| PRICING & DISTRIBUTIO | N  |      |
|-----------------------|--|------|
| This application is   | Paid   | Free |
|                       | To publish paid applications, you need to set up a merchant account. Set up a merchant account now or Learn more |      |

When you're ready to set it up, click the **Set up a merchant account now** link under the Free/Paid button.

## Resources

- Get Started With Publishing
- Signing Your App Manually
- Developer Console

# **Update to Android App Bundle (after August 2021)**

## Introduction

Since August 2021, Google Play requires the Android App Bundle (.aab) for publishing new apps. <sup>[1]</sup>. With this change, the APK has been replaced as the standard publishing format. The ownBrander now generates 3 artifacts with every build:

- \*-release.aab: Android App Bundle for Play Store distribution after August 2021
- \*-release.apk: Needs signing. Use for distribution methods other than Play Store
- \*-debug.apk: Install directly to your device for debugging purposes

For the Android App Bundles, Play App Signing is required <sup>[2]</sup>. Play App Signing is a safety feature provided by Google. Every new release will automatically be signed by Google. (With this, apps no longer need to be signed locally.)

Navigate to the Google Play Console Page and click on the Play Console Button.

### https://play.google.com/console/about/

You will then land on the developer account sign-on page. https://play.google.com/console/ developers. After successful log-on, choose the appropriate developers account.

| $\leftrightarrow$ $\rightarrow$ G | O A https://play.google.com/console/developers |                                 |
|-----------------------------------|--|---------------------------------|
|                                   |  |                                 |
|                                   |  |                                 |
|                                   |  |                                 |
|                                   |  |                                 |
|                                   |  | •                               |
|                                   |  |                                 |
|                                   |  |                                 |
|                                   |  |                                 |
|                                   |  | Google Play Console             |
|                                   |  |                                 |
|                                   |  |                                 |
|                                   |  | Entwicklerkonto auswahlen       |
|                                   |  | 🍮 Damken Apps 🗲                 |
|                                   |  | Reues Entwicklerkonto erstellen |
|                                   |  |                                 |
|                                   |  |                                 |

The page should appear like this. Choose the designated app, which is to be signed and/or updated.

| ≡          | Google Play Console            | Q In der Play Console suchen   |          |            |                      |        |                              |               | c ()                      |
|------------|--------------------------------|--|----------|------------|----------------------|--------|------------------------------|---------------|---------------------------|
| 88         | Alle Apps                      | Alle Apps  |          |            |                      |        |                              |               | Ann and Ilan              |
|            | Posteingang 10                 | Hier findest du alle Apps und Spiele, auf die du in deinem Entwicklerkonto zugreifer   | kannst   |            |                      |        |                              |               | App erstellen             |
| $\odot$    | Richtlinienstatus              |  |          |            |                      |        |                              |               |                           |
| <b>≟</b> ≡ | Nutzer und<br>Berechtigungen   | Angepinnte Apps ⑦<br>Hier kannst du Apps anpinnen, um schnell auf sie zuzugreifen und die wichtigsten N  | lesswert | e zu sehen |                      | k      |                              |               |                           |
|            | Bestellverwaltung              |  |          |            |                      |        |                              |               |                           |
| <u>ب</u> + | Berichte herunterladen         | 2 Apps   |          |            |                      |        |                              |               |                           |
| 9          | Kontodetails                   | з дррз   |          |            |                      |        |                              |               |                           |
|            | Entwicklerseite                | Filtern nach   |          |            |                      |        | Q Nach App- oder Paketname s | uchen         |                           |
| ٩          | Verknüpfte<br>Entwicklerkonten | App Zielgruppe mit installier  | ter App  | App-Status | Status aktualisieren | Zuletz | aktualisiert                 |               |                           |
|            | Aktivitätsprotokoll            |  |          |            |                      |        |                              |               |                           |
| - 🔅        | Einrichten                     | <ul> <li>A set of a set of</li></ul> |          |            |                      |        |                              |               |                           |
|            | E-Mail-Listen                  | Damken Cloud App<br>com. damken.cloud.android  | 20       | Produktion |                      | 18. A  | ıg. 2021                     | ф             | App ansehen $\rightarrow$ |
|            | Preisvorlagen                  | A  |          |            |                      | 1.00   |                              | 1.1           |                           |
|            | Spielprojekte                  |  |          |            |                      |        |                              |               |                           |
|            | Lizenztest                     |  |          |            |                      |        | Zeilen anzeigen: 10 👻        | 1 bis 3 von 3 | < < > >                   |

# **Create New Release and Activate App Integrity**

Navigate to Production, click and continue by clicking the "create new release" button.

|     | ≡                                  | 🤛 Goog                    | lle Play Cor   | nsole                              |   |                                   |             |         |                                    |
|-----|------------------------------------|---------------------------|--|------------------------------------|---|-----------------------------------|-------------|---------|------------------------------------|
|     | <b>_</b>                           | Posteinganç               | g  | 7                                  |   |                                   |             |         |                                    |
|     | ılı                                | Statistiken               |  |                                    | 1   |                                   |             |         |                                    |
|     | Ē                                  | Veröffentlic<br>Übersicht | :hung –  | <u>77</u>                          |   |                                   |             |         |                                    |
|     | Relea                              | ase                       |  |                                    |   |                                   |             |         |                                    |
|     | 諮                                  | Release-Üb                | ersicht  |                                    |   |                                   |             |         |                                    |
|     | ፊ                                  | Produktion                | £  |                                    |   |                                   |             |         |                                    |
| =   | Go                                 | ogle Play Console         | Q In der Play Co   | onsole suchen                      |   |                                   | Ð           | 0       | Damken Cloud App                   |
| 11. | Dashboa<br>Posteinga<br>Statistike | rd<br>ang 5<br>an         | Produktion<br>Du kannst Produktions-R<br>Weitere Informationen | <b>)</b><br>Releases erstellen und | l verwalten, um deine App für alle Nutzer | r in den von dir ausgewählten Lär | idern verfü | gbar zu | Neuen Release erstellen<br>machen, |

Google Play Console will guide you through this. Follow the steps to validate your app-Integrity. Click the "activate" button.



Since this is a new release version candidate, and the key comes from the Java KeyStore, choose this option. Otherwise, choose according to your existing key scheme.

|   | ≡            | Google Play Console                  | Q In der Play Console suchen (2) The Cloud App  |
|---|--------------|--------------------------------------|---|
|   | ΗŪ           | Dashboard                            | Play App Signing  |
|   | Γ,           | Posteingang 5                        | · · · · · · · · · · · · · · · · · · ·   |
|   | ılı          | Statistiken                          | Google Play schützt den App-Signaturschlüssel für deine App und signiert  |
|   | ₽O           | Veröffentlichung – ार्थ<br>Übersicht | jeden Release. So wird Android-Geräten signalisiert, dass Updates<br>tatsächlich von dir stammen. Das ist außerdem eine Voraussetzung, um mit<br>dem Android App Bundle zu veröffentlichen. |
|   | Relea        | ise                                  | Weitere Informationen Ausblenden  |
|   | 晗            | Release-Übersicht                    |   |
|   | ₽            | Produktion                           |   |
| ¥ | ۲            | Test                                 |   |
|   |              | Offene Tests                         | Play App Signing aktivieren   |
|   |              | Geschlossener Test                   | O Einen Schlüssel aus Android Studio exportieren und hochladen  |
|   |              | Interne Tests                        |   |
|   |              | Vorregistrierung                     | C Einen Schlüssel aus dem Java KeyStore exportieren und hochladen   |
|   | ۲            | Pre-Launch-Bericht                   | C Finan Schlüssel evportiezen und hochladen (nicht aus dem Java KavStore)   |
| Þ | ılıa         | Reichweite und Geräte                |   |
|   | ( <u>æ</u> ) | App Bundle Explorer                  |   |

Follow the instructions pertaining to the chosen key scheme. (Here: JavaKeyStore) Download the PEPK-Tool as instructed.

#### Play App Signing aktivieren

| 0 | C Einen Schlüssel aus Android Studio exportieren und hochladen |   |  |  |  |  |
|---|--|---|--|--|--|--|
| ۲ | Eine   | en Schlüssel aus dem Java KeyStore exportieren und hochladen  |  |  |  |  |
|   | 1.   | PEPK-Tool herunterladen Lade das Play Encrypt Private Key-Tool (PEPK-Tool) herunter. Quellcode herunterladen  |  |  |  |  |
| 0 | 2.   | Verwende den unten stehenden 🛃 fehl zur Ausführung des Tools, um deinen privaten Schlüssel zu exportieren und zu verschlüsseln.<br>Ersetze die Argumente und gib deine Passwörter für Schlüsselspeicher und Schlüssel ein, wenn du dazu aufgefordert wirst. |  |  |  |  |
|   |  |   |  |  |  |  |

#### Gather your keystore parameters:

- KeyStore Alias
- Key Store Password
- Key Alias Password

These are the parameters you previously used to sign your app. Perhaps you kept them stored in the ownBrander.

Input the command below into an open terminal window. As seen in the screen after the command, you can click on the copy to clipboard icon (Step 2) to copy the entire command block, but you must modify the "foo" parts of the command as follows:

- foo.keystore must be replaced by the keystore name (here: damken)
- Alias is the app name (here: damkencloud) aka the Key Alias.

java -jar pepk.jar --keystore=foo.keystore --alias=foo --output

| :   | enc  | crypted_private_key_path  |  |  |  |  |  |  |
|---|------|---|--|--|--|--|--|--|
| Pla   | у Ар | p Signing   |  |  |  |  |  |  |
| Einen Schlüssel aus dem Java KeyStore exportieren und hochladen |      |   |  |  |  |  |  |  |
|   | 1.   | PEPK-Tool herunterladen Lade das Play Encrypt Private Key-Tool (PEPK-Tool) herunter. Quellcode herunterladen  |  |  |  |  |  |  |
|   | 2.   | Verwende den unten stehenden Befehl zur Ausführung des Tools, um deinen privaten Schlüssel zu exportieren und zu verschlüsseln.<br>Ersetze die Argumente und gib deine Passwörter für Schlüsselspeicher und Schlüssel ein, wenn du dazu aufgefordert wirst. |  |  |  |  |  |  |
|   |      | <pre>\$ java -jar pepk.jarkeystore=foo.keystorealias=foooutput=encrypted_private_key_path -</pre>   |  |  |  |  |  |  |
|   |      |   |  |  |  |  |  |  |
|   | 3.   |   |  |  |  |  |  |  |
|   | 4.   | Generiere einen neuen Uploadschlüssel, um die Sicherheit zu erhöhen (optional). Anleitungen anzeigen 🗸  |  |  |  |  |  |  |

After executing the above command, you will be prompted to enter both "your keystore password" and then "your key alias password". Keep in mind that these passwords remain invisible while you type them. (Multiple entries or typos lead to errors.)

You can also check your signing parameters in ownBrander, if you have uploaded them for previous versions.

|           | your keystore password | × |
|-----------|------------------------|---|
| Key Alias |                        |   |
|           | your key alias         | × |

In case you download the PEPK tool on macOS, you'll need additional permissions in the macOS "Security & Privacy" settings:



Proceed by clicking on the button to upload your private key.

3. 1 Privaten Schlüssel hochladen

Double-click the file to upload it. After a successful upload, click on the "save" button (bottom right of the page).

The following is a depiction of the upload file.



You will be redirected to the "Terms of Use" page. Click "Accept" after reading them.

Navigate back to "Production". The certificate is now displayed.

| Release           | Zertifikat des Uploadschlüssels   |
|-------------------|---|
| Release-Übersicht | Dies ist das öffentliche Zertifikat für deinen privaten Uploadschlüssel. Mir<br>damit Google erkennt, dass die Updates tatsächlich von dir stammen. Mit |
| A Produktion      | bei API-Anbietern registrieren.   |
| (h)               |   |

In the "Production" bar move to the release review button.



Notice the check-mark by the "App Integrity" field.

| - Veröffentlichung – 🕅 |  |
|------------------------|--|
| obersicht              | App-Integrität   |
| Release                | O Von Google Play signierte Releases   |
| Release-Übersicht      | Google verwendet deinen ausgewählten App-Signaturschlüssel, um deine Releases zu unterzeichnen |

# **Upload Android App Bundle**

Proceed by clicking on "upload" in order to upload the **\*-release.aab** file you previously downloaded from your shared account (personal folder) on customer.owncloud.com.

|     | damkencloud_2.18.1_8 | 34-release.aab | 13,1 MB Document Today at 12:22             |
|-----|----------------------|----------------|---|
| £   | Produktion           | App Bundles    |   |
| • 🕑 | Test                 |                |   |
|     | Offene Tests         |                |   |
|     | Geschlossener Test   |                |   |
|     | Interne Tests        |                | App Bundles zum Hochladen hier ablegen      |
|     | Vorregistrierung     |                | 📩 Hochladen 进 Aus der Bibliothek hinzufügen |

You should see Google's colors changing during the upload process, then a preview of the app release candidate.

| £   | Produktion         | App Bundles   |
|-----|--------------------|---|
| • 🕑 | Test               |   |
|     | Offene Tests       | $\mathbf{O}$  |
|     | Geschlossener Test | damkencloud_2.18.1_834-release.aab wird hochgeladen |
|     | Interne Tests      | Abbrechen   |
|     | Vorregistrierung   | k   |

The new version is available and should be thoroughly examined before releasing it to the production environment.

| Release           | Dateityp   | Version           | API-Level     | Ziel-SDK | Bildschirm-Layouts | ABIs | Funktionen |
|-------------------|------------|-------------------|---------------|----------|--------------------|------|------------|
| Release-Übersicht | App bundle | 21801001 (2.18.1) | 21 oder höher | 29       | 4                  | Alle | 1: : →     |

Optionally, you may choose to provide your users with information regarding the change log so they know which changes have been implemented.



#### If available from a previous release, just copy it.

Versionshinweise

Aus einem vorherigen Release kopieren



After saving any modifications, proceed by clicking the "check release" button.

Änderungen gespeichert. Du kannst jetzt deinen Release prüfen, bevor er eingeführt wird.
 Änderungen verwerfen
 Speichern
 Release überprüfen

You may see some warning signs. (If of importance, check to see in what regards they are.) Scroll down.

Produktionsrelease erstellen
Fehler, Warnungen und Meldungen

A 1 Warnung
Mehr anzeigen 
V

#### Änderungen an deinen unterstützten Geräten

Im Gerätekatalog ausgeschlossene Geräte sind nicht aufgeführt

|        | Gerätetyp                                 | Zuvor unterstützte Geräte | Geräte nicht mehr unterstützt | Neu unterstützte Ger  | äte     |               |
|--------|---|---------------------------|-------------------------------|-----------------------|---------|---------------|
| ٠      | Telefon                                   | 12.000                    | 842                           |                       | 0       | $\rightarrow$ |
|        | Tablet                                    | 4.211                     | ▶ 389                         |                       | 0       | →             |
|        | TV  | 11                        | 0                             |                       | 0       |               |
|        | Am Körper tragbar                         | 58                        | 0                             |                       | 0       |               |
|        | Auto                                      | 6                         | 0                             |                       | 0       |               |
| Du kan | nst deinen Release priifen, hevor er eine | aeführt wird              | Release hearbeiten            | Produktion-Finführung | eginnen |               |

If you opt for a complete roll-out in all of the chosen distribution countries, just click the "Begin Production Release" button.

| Produktionsrelease erstell                               | en   |   |                                |
|--|--|---|--------------------------------|
| Installationen auf aktiven Geräten                       | 23   |   |                                |
| Prozentsatz für Roll-out *                               | 100,0 %  |   |                                |
| Länderverfügbarkeit                                      | <ul> <li>In allen Zielländern verfügbar</li> </ul> |   |                                |
|  | C Länder/Regionen auswählen                        |   |                                |
| Installationen, auf die die Einführu<br>ausgerichtet ist | ng 23  |   |                                |
|  |  |   |                                |
| © 20   | 21 Google - Mobile App - Nutzungsbedingungen -     | Datenschutz · Vertriebsvereinbarung für E | ntwickler                      |
| Du kannst deinen Release prüfen,                         | bevor er eingeführt wird                           | Release bearbeiten                        | Produktion-Einführung beginnen |

Review the chosen distibution and hit the "Release" button. Thereafter, you will receive a release status notification.



Notice, that Play App Signing has been successfully implemented.

# **Play App Signing**

Aktiviert • Google verwaltet deinen App-Signaturschlüssel. Mehr anzeigen

Afterwards, you can find the status of your release/update release candidate in the tab "Release-Overview" or "Release Dashboard?"

|     | ODELSICIT         |               |                  |            |                             |                      |                 |   |
|-----|-------------------|---------------|------------------|------------|-----------------------------|----------------------|-----------------|---|
| Del |                   | Neueste Relea | ises 🕐           |            |                             |                      |                 |   |
| Rei | ase               | Release       | Aktuelle Version | Track      | Release-Status              | Zuletzt aktualisiert | Länder/Regionen |   |
| 앎   | Release-Übersicht | 21801001      | 21201001         | Produktion | ⊘ Bei Google Play verfügbar | 18. Aug. 2021        | 175             | _ |
| ₼   | Produktion        | (2.18.1)      | 21001001         | FIOUUKUOII | Vollständiger Roll-out      | 12:39                | von 176         | - |

# **Building and Distributing Your Branded iOS App**

## Introduction

Building and distributing your branded iOS ownCloud app involves a large number of interdependent steps. The process is detailed in this chapter over several pages. Follow these instructions exactly and in order, and you will have a nice branded iOS app that you can distribute to your users.

## **Prerequisites**

- A Mac OS X computer with Xcode (free download) and Keychain Access (included in Utilities). This computer is essential to the entire process and will be linked to to your iOS Developer account. You will use it create and store distribution certificates, and to upload your app to iTunes Connect.
- An iOS developer account on developer.apple.com/ios, which costs \$99 per year. Or an Enterprise account for \$299/yr. The developer account limits you to testing on 100 devices of each type (Apple TV, Apple Watch, iPad, iPhone, iPod Touch) which must be registered in your account. The Enterprise account allows testing on unlimited, unregistered devices.
- An ownCloud Enterprise Subscription, with the ownBrander app enabled on customer.owncloud.com
- Some iPhones or iPads for testing your app. Again, if you have the \$99 developer account each device must have its UDID registered in your account on developer.apple.com.

## Procedure

You need the Apple tools to build eight provisioning profiles (4 Ad Hoc and 4 App Store) and a P12 certificate. You will email the four Ad Hoc profiles and P12 certificate to support@owncloud.com after building your app with the ownBrander app on customer.owncloud.com. You must create the provisioning profiles and P12 certificate first, before building your app, because you must supply a unique **bundle ID** and an **app group** to build your app. These are created in your account on developer.apple.com, and with Keychain Access on your Mac computer.

We use the 4 Ad Hoc provisioning profiles and P12 certificate to complete building your app, and then in 24-48 hours your new branded app is loaded into your account on customer.owncloud.com.

The next step is to test your app. When it passes testing, the final step is to upload it to your iTunes Connect account for distribution.

You will need a lot of graphics for building your app, and for your iTunes store listing, in specific sizes and file formats. The ownBrander app and iTunes detail all the image specifications you will need.

# **Create Certificate Signing Request**

Start by creating a .certSigningRequest (CSR) file on your Mac, using Keychain Access. Open Finder, and then open Keychain Access from the Utilities folder.



Next, open **Keychain Access > Certificate Assistant > Request a Certificate From a Certificate Authority**.

| Ś. | Keychain Access   | File Edit       | View Window                          | Help                     |                            |                          |          |      |
|----|-------------------|-----------------|--------------------------------------|--------------------------|----------------------------|--------------------------|----------|------|
|    | About Keychain    | Access          |                                      | Keyeb                    | ain Annana                 |                          |          |      |
|    | Preferences       | 36,             |                                      | Neych                    | am Access                  |                          | Q Search | 0    |
| 1  | Keychain First A  | id ℃≋A          |                                      |                          |                            |                          |          |      |
|    | Certificate Assis | tant 🕨 🕨        | Open                                 |                          |                            |                          |          |      |
| Π. | Ticket Viewer     | .Ω.≌K           | Create a Certifi                     | cate                     |                            |                          |          |      |
|    | Services          | +               | Create a Certifi<br>Create a Certifi | cate Auth<br>cate For \$ | ority<br>Someone Else as a | Certificate Authority    | L        |      |
| 11 | Hide Keychain A   | ccess %H        | Request a Cert                       | ficate Fro               | om a Certificate Au        | thority                  |          |      |
|    | Hide Others       | HS7             | Set the default                      | Certificat               | e Authority                |                          | xpires   | Key  |
|    | Show All          |                 | Evaluate a Cert                      | ificate                  |                            |                          |          | logi |
|    | Ouit Kaushala A   |                 | stant State Eccountion               |                          | application password       | Apr. 1, 2015, 9:19:30 AM |          | logi |
| 14 | Quit Keychain A   |                 | te Storage                           |                          | application password       | Apr 1, 2015, 9:59:15 AM  |          | logi |
| -  | Category          | / ids: identity | v-rsa-key-pair-signature             | ev1                      | application password       | Apr 1, 2015, 9:19:35 AM  |          | logi |
|    | All items         | / ida: identity | y-raa-private-key                    |                          | application password       | Apr 1, 2015, 9:19:35 AM  |          | logi |
|    | Passwords         | / ids: identity | y-rea-public-key                     |                          | application password       | Apr 1, 2015, 9:19:35 AM  |          | logi |
|    | Secure Notes      | 🔏 ids: unregis  | stered-message-protect               | tion-key                 | application password       | Today, 11:17 AM          |          | logi |
|    | My Certificates   | ¶ IMessage E    | Encryption Key                       |                          | public key                 |                          |          | logi |
| 1  | ( Keys            | P iMessage E    | Encryption Key                       |                          | private key                |                          |          | logi |
| E  | Certificates      | 🦞 iMessage 8    | Signing Key                          |                          | public key                 |                          |          | logi |
|    |                   | 🦞 iMeasage S    | Signing Key                          |                          | private key                |                          |          | logi |
|    |                   |                 |                                      |                          |                            |                          |          |      |
|    |                   |                 |                                      |                          |                            |                          |          |      |
|    |                   |                 |                                      |                          |                            |                          |          |      |
|    |                   |                 |                                      |                          |                            |                          |          |      |
|    |                   |                 |                                      |                          |                            |                          |          |      |
|    |                   |                 |                                      |                          |                            |                          |          |      |
|    |                   | + i Copy        | )                                    |                          | 12 items                   |                          |          |      |

Enter the email address that you use in your Apple developer account, and enter a common name. The common name can be anything you want, for example a helpful descriptive name like "ios-mybiz". Check [Saved to disk] and [Let me specify key pair information], then click [Continue].

|   | Certificate                             | Assistant   |
|---|---|---|
| ( | Certificate Informa                     | ition   |
|   | Enter information to Continue to reque  | for the certificate you are requesting. Click st a certificate from the CA.                         |
|   | User Email Address:                     | carla@bratgrrl.com  |
|   | Common Name:                            | ios-mybiz   |
| U | CA Email                                | Required  |
| _ | Request is:                             | Emailed to the CA   |
|   |   | Saved to disk   |
|   |   | Let me specify key pair information   |
|   |   | Continue  |
|   | Common Name:<br>CA Email<br>Request is: | ios-mybiz  Required  Emailed to the CA Saved to disk  Let me specify key pair information  Continue |

Give your CSR a helpful descriptive name, such as **iosapp.certSigningRequest**, and choose the location to save it on your hard drive, then click **[Save]**.

|          | Certificate Assista       | nt          |
|----------|---------------------------|-------------|
|          |                           |             |
| Save As: | iosapp.certSigningRequest | <b>~</b>    |
| Tags:    |                           |             |
| Where:   | Documents                 | <b>\$</b>   |
|          |                           |             |
|          |                           | Cancel Save |

In the next window, set the **Key Size** value to **2048 bits** and **Algorithm** to **RSA**, and click **[Continue]**. This will create and save your certSigningRequest file (CSR) to your hard drive.

| ł  | Key Pair Information  |
|----|---|
|    | Specify the key size and algorithm used to create your key pair.  |
| P. | The key pair is made up of your private and public keys. The<br>private key is the secret part of the key pair and should be<br>kept secret. The public key is made publicly available as part<br>of the digital certificate. |
|    | Key Size: 2048 bits 🗘<br>Algorithm: RSA 🗘   |
|    | Learn More  |
|    | Continue  |

In the next screen your certificate creation is verified. Click a button to view it, or click **[Done]** to go to the next step.

| Conclusion             |                               |
|------------------------|-------------------------------|
| Your certificate reque | est has been created on disk. |
| ificate                | Show In Finder                |
|                        | Done                          |

You also get a corresponding public and private key pair, which you can see in the **Login** > **Keys** section of Keychain.

| Keychains       | i dun                         |             |
|-----------------|-------------------------------|-------------|
| 💣 login         | <key></key>                   |             |
| 💣 Local Items   | Usage Encrypt, Derive, Verify |             |
| System          |                               |             |
| System Roots    |                               |             |
|                 | Name                          | ^ Kind      |
| Category        | <pre></pre>                   | public key  |
| All Items       | ₽ <key></key>                 | private key |
| / Paceworde     | IMessage Encryption Key       | public key  |
|                 | IMessage Encryption Key       | private key |
| Secure Notes    | IMessage Signing Key          | public key  |
| My Certificates | P iMessage Signing Key        | private key |
| 🃍 Keys          | 💡 ios-mybiz                   | public key  |
| Certificates    | ူ ios-mybiz                   | private key |

Double-click on your new private key to open the Access Control dialog. Check [Allow all applications to access this item].

| •                                    | ios-m                     | ybiz                  |                    |
|--------------------------------------|---------------------------|-----------------------|--------------------|
|                                      | Attributes A              | ccess Control         |                    |
|                                      |                           |                       |                    |
| <ul> <li>Allow all applic</li> </ul> | ations to access this ite | m Access to this item | is not restricted. |
| Confirm before                       | allowing access           |                       |                    |
| Ask for Keyd                         | hain password             |                       |                    |
|                                      |                           |                       |                    |
| Always allow acces                   | ss by these applications  | :                     |                    |
| Name                                 |                           |                       |                    |
|                                      |                           |                       |                    |
|                                      |                           |                       |                    |
|                                      |                           |                       |                    |
|                                      |                           |                       |                    |
|                                      |                           |                       | ave Changes        |
|                                      |                           |                       | ave onanges        |
|                                      |                           |                       |                    |
|                                      |                           |                       |                    |

Now login to the **Member Center** on https://developer.apple.com/. Click [ Certificates, Identifiers & Profiles ].

| Seveloper  | Member Center  |
|--|--|
| A Programs & Add-ons Your Account  |  |
|  | Hi, Carla Schroder   Sign out  |
| <b>SDKs</b><br>Download the SDKs and the latest beta software.   | Forums<br>Find answers and discuss with other developers and Apple<br>engineers.     |
| Certificates, identifiers & Profiles<br>Manage your certificates, identifiers, devices, and profiles<br>for your apps. | Bug Reporting<br>Submit bugs or request enhancements to APIs and<br>developer tools. |
| <b>ITunes Connect</b><br>Manage your apps published on the App Store and Mac<br>App Store.                             | Technical Support<br>Request technical support with the development of your<br>app.  |

Then click **iOS Apps > Certificates**.



Next, click the **[ add ]** button (the little plus sign) in the top right corner of the **iOS Certificate** page.



Under "What type of certificate do you need?" check **[App Store and Ad Hoc]**, then click the **[Continue]** button at the bottom of the page.

| Add iOS Certificate   | + 9   |
|---|---|
| Select Type Request Generate Download   |   |
| What type of certificate do you need?   |   |
| Development   |   |
| i OS Ann Development  |   |
| Sign development versions of your iOS app.  |   |
|   |   |
| Apple Push Notification service SSL (Sandbox)   |   |
| Establish connectivity between your notification server and the Apple Push Notificatio<br>environment. A separate certificate is required for each app you develop.   | n service sandbox   |
| Production  |   |
| Froduction  |   |
| App Store and Ad Hoc     Sign your IOS app for submission to the App Store or for Ad Hoc distribution.  |   |
| The next screen, <b>About Creating a Certificate Signing Reque</b><br>creating a CSR in Keychain Access. You already did this, so g<br>Certificate", to upload the CSR you already created, then click the <b>[</b> | est (CSR) has information about<br>go to the next screen. "Add iOS<br>Generate] button. |
| Generate your certificate.  |   |
|   |   |

When your CSR file is created, a public and private key pair is automatically generated. Your private key is stored on your computer. On a Mac, it is stored in the login Keychain by default and can be viewed in the Keychain Access app under the "Keys" category. Your requested certificate is the public half of your key pair.

#### Upload CSR file.

Select .certSigningRequest file saved on your Mac.



Your new certificate is named **ios\_distribution.cer**. Download it to your Mac; then find it and double-click on it to install it properly in Keychain.

| ~           |
|-------------|
| Certificate |
| - <u> </u>  |
| <b>•</b>    |

#### Download, Install and Backup

Download your certificate to your Mac, then double click the .cer file to install in Keychain Access. Make sure to save a backup copy of your private and public keys somewhere secure.



After installing it, you should see it stored with its corresponding private key in Keychain.

|                                      | Name   | Kind            |
|--------------------------------------|--|-----------------|
| Category                             | ₽ <key></key>                                  | public key      |
| All Items All Passwords Secure Notes | ₽ <key></key>                                  | private key     |
|                                      | IMessage Encryption Key                        | public key      |
|                                      | iMessage Encryption Key                        | private key     |
|                                      | iMessage Signing Key                           | public key      |
| My Certificates                      | iMessage Signing Key                           | private key     |
| 💡 Keys                               | ios-mybiz                                      | public key      |
| Certificates                         | v 🖗 ios-mybiz                                  | private key     |
|                                      | iPhone Distribution: Carla Schroder (XYDX7DCSI | UW) certificate |
|                                      |  |                 |

Remember to make backups of your keys and certificates and keep them in a safe place.

# **Create Bundle IDs**

## **Create Bundle IDs**

The next step is to create four **Bundle IDs**. These are unique identifiers for your branded iOS app. You must also create an **App Group** and place your three **Bundle IDs** in your **App Group**. You will need your base **Bundle ID** and **App Group** when you build your app with the ownBrander app on customer.owncloud.com.

## **Create App ID**

Now you must create your App ID. Go to **Identifiers** > **App IDs** and click the **[ plus button ]** (top right) to open the "Register iOS App ID" screen. Fill in your **App ID Description**, which is anything you want, so make it helpful and descriptive. The **App ID Prefix** is your Apple Developer Team ID, and is automatically entered for you.

|  | Register iOS App ID                                     | + Q |  |
|--|---|-----|--|
|  |   |     |  |
| ID Regis   | tering an App ID  |     |  |
| The App ID string contains two parts separated by a period (.)—an App ID Prefix that is defined as your Team ID by default and an App ID Suffix that is defined as a Bundle ID search string. Each part of an App ID has different and important uses for your app. Learn More |   |     |  |
| App ID Descrip   | tion  |     |  |
| Name:  | MyBiz IOS App   |     |  |
|  | You cannot use special characters such as @, &, *, ', " |     |  |
| App ID Prefix  |   |     |  |
| Value:   | XYDX7DCSUW (Team ID)                                    |     |  |

Scroll down to the **App ID Suffix** section and create your **Bundle ID**. Your **Bundle ID** is the unique identifier for your app. Make a note of it because you will need it as you continue through this process. The format for your **Bundle ID** is reverse-domain, e.g. *com.MyCompany.MyProductName*.

| App ID Suffix  |
|--|
| <ul> <li>Explicit App ID         If you plan to incorporate app services such as Game Center, In-App Purchase, Data Protection, and iCloud, or want a provisioning profile unique to a single app, you must register an explicit App ID for your app.     </li> <li>To create an explicit App ID, enter a unique string in the Bundle ID field. This string should match the Bundle ID of your app.</li> </ul> |
| Bundle ID: com.mybiz.iosapp  |
| We recommend using a reverse-domain name style string (i.e., com.domainname.appname). It cannot contain an asterisk (*).   |

The next section, **App Services**, is where you select the services you want enabled in your app. You can edit this anytime after you finish creating your **App ID**. Check **App Groups**, make your other selections and then click the **[Continue]** button at the bottom. Now you can confirm all of your information. If everything is correct click **[Submit]**; if you need to make changes use the **[Back]** button.

| App ID Description:               | MyBiz iOS App               |
|-----------------------------------|-----------------------------|
| ldentifier:                       | XYDX7DCSUW.com.mybiz.iosapp |
| App Groups:                       | Configurable                |
| Associated Domains:               | Disabled                    |
| Data Protection:                  | Disabled                    |
| Game Center:                      | Enabled                     |
| HealthKit:                        | Disabled                    |
| HomeKit:                          | Disabled                    |
| Wireless Accessory Configuration: | Disabled                    |
| iCloud:                           | Disabled                    |
| In-App Purchase:                  | Enabled                     |
| Inter-App Audio:                  | Disabled                    |
| Apple Pay:                        | Disabled                    |
| Passbook:                         | Disabled                    |
| Push Notifications:               | Disabled                    |
| VPN Configuration & Control:      | Disabled                    |
|                                   |                             |
|                                   |                             |
|                                   |                             |
| Cancel                            | Back Submit                 |

When you are finished you will see a confirmation. Click the **[ Done ]** button at the bottom.



# **Create App Group**

The next step is to create an App Group and put your App ID in it. Go to **Identifiers** > **App Groups** and click the **[ plus button ]** (top right).

| App Groups  | (+)Q |
|---|------|
|   |      |
| Cetting Started with App Groups   |      |
| App Groups allow access to group containers that are shared among multiple related apps, and allows certain additional interprocess communication between apps. |      |
| <b>Register App Groups</b><br>Team agents and admins can manually register App Groups. Continue   |      |

Create a description for your app group, and a unique identifier in the format *group.com.MyCompany.MyAppGroup*. Then click **[ Continue ]** 

| ID Registe  | ring an App Group  |  |  |
|---|--|--|--|
| Registering your App Gr<br>related apps, and allows   | oup allows access to group containers that are shared among multiple certain additional interprocess communication between the apps. |  |  |
| App Groups Desc   | ription  |  |  |
| Description:  | MyBiz iOS Apps   |  |  |
|   | You cannot use special characters such as @, &, *, ', "  |  |  |
| Identifier<br>Enter a unique identifier for your App Group, starting with the string 'group'. |  |  |  |
| ID:   | group.com.mybiz.iosapps  |  |  |
|   | We recommend using a reverse-domain name style string (i.e.,   |  |  |
|   | controlmannanc.appnancy.   |  |  |
|   | Cancel Continue  |  |  |

Review the confirmation screen, and if everything looks correct click the [ Register ] button.

| ID Cor            | Confirm your App Group.  |  |
|-------------------|--|--|
| Ensure your App G | roup information is correct.                                     |  |
| Na<br>Identi      | me: <b>MyBiz iOS Apps</b><br>ier: <b>group.com.mybiz.iosapps</b> |  |

You'll see a final confirmation screen; click [ Done ].

| ID Registration complete. |                      |   |
|---------------------------|----------------------|---|
|                           | Name:<br>Identifier: | MyBiz iOS Apps<br>group.com.mybiz.iosapps |

When you click on [ App Groups ] you will see your new app group.

| Certificates, Identifiers & Profiles |                    |                         |  |
|--------------------------------------|--------------------|-------------------------|--|
| iOS Apps 🔻                           |                    | App Groups              |  |
| 🆑 Certificates                       | 1 App Groups Total |                         |  |
| = All                                | Name *             | ID                      |  |
| Pending                              | MyBiz iOS Apps     | group.com.mybiz.iosapps |  |
| Development                          |                    |                         |  |
| Production                           |                    |                         |  |
| Identifiers                          |                    |                         |  |
| App IDs                              |                    |                         |  |
| Pass Type IDs                        |                    |                         |  |
| Website Push IDs                     |                    |                         |  |
| iCloud Containers                    |                    |                         |  |
| App Groups                           |                    |                         |  |
| Merchant IDs                         |                    |                         |  |

Now go back to **Identifiers** > **App IDs** and click on your **[App ID]**. This opens a screen that displays all your app information. Click the **[Edit]** button at the bottom.
| 1 App IDs Total |   |                |                |
|-----------------|---|----------------|----------------|
| Name            | * ID  |                |                |
| MyBiz iOS App   | соп   | n.mybiz.iosapp |                |
| ID              | Name: MyBiz iOS App<br>Prefix: XYDX7DCSUW<br>ID: com.mybiz.iosapp |                |                |
|                 | Application Services:   |                |                |
|                 | Service   | Development    | Distribution   |
|                 | App Group   | Configurable   | 😑 Configurable |
|                 | Associated Domains  | Oisabled       | Oisabled       |
|                 | Data Protection   | Oisabled       | Oisabled       |
|                 | Game Center   | Enabled        | Enabled        |
|                 | HealthKit   | Disabled       | Oisabled       |
|                 | HomeKit   | Disabled       | Oisabled       |
|                 | Wireless Accessory<br>Configuration                               | Disabled       | Disabled       |
|                 | iCloud  | Disabled       | Disabled       |
|                 | In-App Purchase   | Enabled        | Enabled        |
|                 | Inter-App Audio   | Disabled       | Oisabled       |
|                 | Apple Pay   | Disabled       | Disabled       |
|                 | Passbook  | Oisabled       | Oisabled       |
|                 | Push Notifications  | Oisabled       | Oisabled       |
|                 | VPN Configuration & Control                                       | Oisabled       | O Disabled     |
|                 | Edit  |                |                |

Click the [ Edit ] button next to [ App Groups ].

|      |           | iOS App ID Settings + Q                     |
|------|-----------|---|
| Setu | ip and co | nfigure services for this App ID.           |
|      | ID        | Name: MyBiz IOS App<br>ID: com.mybiz.iosapp |
|      | Enable    | Service                                     |
|      | ۵         | Configurable. App Group IDs (0)             |

Check your app and click the [ Continue ] button.

| ID           | App Group Assignment.               |           |                         |
|--------------|-------------------------------------|-----------|-------------------------|
| Select the A | pp Groups you wish to assign to the | e bundle. |                         |
|              |                                     |           |                         |
| Select /     | All                                 |           | 1 of 1 item(s) selected |

The next screen asks you to "Review and confirm the App Groups you have selected". Click the **[Assign]** button to confirm. The next screen announces "You have successfully updated the App Groups associations with your App ID", and you must click yet another button, the **[Done]** button at the bottom.

## Create a DocumentProvider Bundle ID

Now you must return to **Identifiers** > **App IDs** and click the **[plus button]** to create a DocumentProvider Bundle ID. Follow the same naming conventions as for your App ID, then click **[Continue]**.



### Registering an App ID

The App ID string contains two parts separated by a period (.)—an App ID Prefix that is defined as your Team ID by default and an App ID Suffix that is defined as a Bundle ID search string. Each part of an App ID has different and important uses for your app. Learn More

#### App ID Description

Name: MyBiz iOS App DocumentProvider You cannot use special characters such as @, &, \*, ', '

#### App ID Prefix

Value: XYDX7DCSUW (TeamID)

#### App ID Suffix

#### Explicit App ID

If you plan to incorporate app services such as Game Center, In-App Purchase, Data Protection, and iCloud, or want a provisioning profile unique to a single app, you must register an explicit App ID for your app.

To create an explicit App ID, enter a unique string in the Bundle ID field. This string should match the Bundle ID of your app.

Bundle ID: com.mybiz.iosapp.DocumentProvider

We recommend using a reverse-domain name style string (i.e., com.domainname.appname). It cannot contain an asterisk (\*).

#### Confirm your new App ID and click [Submit].



Confirm your App ID.

To complete the registration of this App ID, make sure your App ID information is correct, and click the submit button.

| App ID Description: | MyBiz iOS App DocumentProvider            |
|---------------------|---|
| ldentifier:         | XYDX7DCSUW.com.mybiz.iosapp.DocumentProvi |
| App Groups:         | Disabled                                  |

You will see one more confirmation: "Registration complete. This App ID is now registered to your account and can be used in your provisioning profiles." Click **[ Done ]**.

Now you need to add it to your App Group. Go to **Identifiers** > **App IDs** and click on your new **[DocumentProvider Bundle ID]** to open its configuration window, and then click the **[Edit]** button at the bottom.

|                                | iOS App IDs                       |
|--------------------------------|-----------------------------------|
| 2 App IDs Total                |                                   |
| Name                           | ID                                |
| MyBiz iOS App                  | com.mybiz.iosapp                  |
| MyBiz iOS App DocumentProvider | com.mybiz.iosapp.DocumentProvider |

### Select [ App Groups ] and click the [ Edit button ].

| ID        | Name: MyBiz iOS App Document                  | Provider<br>Provider    | )                       |
|-----------|---|-------------------------|-------------------------|
| Enable    | Service                                       |                         |                         |
| •         | ← Configurable. App Group IDs (               | 0)                      | Edit                    |
| Select yo | our group and click <b>[ Continue ]</b> .     |                         |                         |
| ID        | App Group Assignment.                         |                         |                         |
| Selectth  | e App Groups you wish to assign to the bundle | e.                      |                         |
| 🖌 Se      | lect All                                      |                         | 1 of 1 item(s) selected |
| 🖌 My      | /Biz iOS Apps                                 | group.com.mybiz.iosapps | ~                       |

Once again you will asked if you really mean it. On the confirmation screen click **[Assign]**, and you'll see the message "You have successfully updated the App Groups associations with your App ID."

## Create a DocumentProviderFileProvider Bundle ID

One more time, go to Identifiers > App IDs and click the [plus button] to create a DocumentProviderFileProvider Bundle ID. Follow the same naming conventions as for your App ID, then click [ Continue ].



The App ID string contains two parts separated by a period (.)-an App ID Prefix that is defined as your Team ID by default and an App ID Suffix that is defined as a Bundle ID search string. Each part of an App ID has different and important uses for your app. Learn More

### App ID Description

Name: MyBiz iOS App DocumentProviderFileProvider You cannot use special characters such as @, &, \*, ', "

### App ID Prefix

Value: XYDX7DCSUW (TeamID)

### App ID Suffix

### Explicit App ID

If you plan to incorporate app services such as Game Center, In-App Purchase, Data Protection, and iCloud, or want a provisioning profile unique to a single app, you must register an explicit App ID for your app.

To create an explicit App ID, enter a unique string in the Bundle ID field. This string should match the Bundle ID of your app.

Bundle ID: com.mybiz.iosapp.DocumentProviderFileProvider

We recommend using a reverse-domain name style string (i.e., com.domainname.appname). It cannot contain an asterisk (\*).

Confirm your new App ID and click [Submit].



To complete the registration of this App ID, make sure your App ID information is correct, and click the submit button.

> App ID Description: MyBiz iOS App DocumentProviderFileProvider Identifier: XYDX7DCSUW.com.mybiz.iosapp.DocumentProvi...

You will see one more confirmation; review it and click **[Done]**. Now you need to add it to your App Group. Go to **Identifiers > App IDs** and click on your new **[DocumentProviderFileProvider Bundle ID]** to open its configuration window, and then click the **[Edit]** button.

| iOS Ap                                     | p IDs + Q                                     |
|--|---|
| 3 App IDs Total                            |   |
| Name                                       | ID  |
| MyBiz iOS App                              | com.mybiz.iosapp                              |
| MyBiz IOS App DocumentProvider             | com.mybiz.iosapp.DocumentProvider             |
| MyBiz iOS App DocumentProviderFileProvider | com.mybiz.iosapp.DocumentProviderFileProvider |

Select [ App Groups ] and click the [ Edit ] button.

| ID       | Name: MyBiz iOS App DocumentProviderFileProvider<br>ID: com.mybiz.iosapp.DocumentProviderFileProvider |      |
|----------|---|------|
| Enable   | Service   |      |
| <b>v</b> | App Groups     Configurable. App Group IDs (0)  | Edit |

Select your group and click [ Continue ].



Select the App Groups you wish to assign to the bundle.

|   | Select All     | 1                        | of 1 item(s) selected |
|---|----------------|--------------------------|-----------------------|
|   | MyBiz iOS Appo | group com pubit io conne | ^                     |
| ~ | MyBiz IOS Apps | group.com.mybiz.iosapps  | ~                     |
| 9 |                |                          | $\sim$                |

On the confirmation screen click [Assign], and you'll see the message "You have successfully updated the App Groups associations with your App ID."

## Create a ShareExtApp Bundle ID

This supports Apple's ShareIN extension.

Yet again, go to Identifiers > App IDs and click the [ plus button ] to create a ShareExtApp Bundle ID. Follow the same naming conventions as for your App ID, then click [ Continue ].

### App ID Description

Name: MyBix iOS App ShareExtApp You cannot use special characters such as @, &, \*, ', "

### App ID Prefix

Value: XYDX7DCSUW (Team ID)

### App ID Suffix



If you plan to incorporate app services such as Game Center, In-App Purchase, Data Protection, and iCloud, or want a provisioning profile unique to a single app, you must register an explicit App ID for your app.

To create an explicit App ID, enter a unique string in the Bundle ID field. This string should match the Bundle ID of your app.

Bundle ID: com.mybiz.iosapp.ShareExtApp

We recommend using a reverse-domain name style string (i.e., com.domainname.appname). It cannot contain an asterisk (\*).

Confirm your new App ID and click [ Submit ].



To complete the registration of this App ID, make sure your App ID information is correct, and click the submit button.



You will see one more confirmation; review it and click **[Done]**. Now you need to add it to your App Group. Go to **Identifiers** > **App IDs** and click on your new **[ShareExtApp Bundle ID]** to open its configuration window, and then click the **[Edit]** button.

|                                     | iOS App IDs  | + Q |
|-------------------------------------|--|-----|
| 4 App IDs Total                     |  |     |
| Name ^                              | ID   |     |
| MyBiz iOS App                       | com.mybiz.iosapp                                       |     |
| MyBiz iOS App DocumentProvider      | com.mybiz.iosapp.DocumentProvider                      |     |
| MyBiz iOS App DocumentProviderFileP | $com.mybiz.iosapp.Document {\sf ProviderFileProvider}$ |     |
| MyBiz iOS App ShareExtApp           | com.mybiz.iosapp.ShareExtApp                           |     |

Select [ App Groups ] and click the [ Edit ] button.

| iOS App ID Settings   | + Q  |
|---|------|
| Setup and configure services for this App ID.                       |      |
| Name: MyBiz iOS App ShareExtApp<br>ID: com.mybiz.iosapp.ShareExtApp |      |
| Enable Service  |      |
| Configurable. App Group IDs (0)                                     | Edit |
| Select your group and click [ Continue ].                           |      |



Select the App Groups you wish to assign to the bundle.

| Select All     | 1 of 1 item(s) selected |
|----------------|-------------------------|
| MvBiz iOS Apps | aroup.com.mybiz.iosapps |
|                | v                       |

On the confirmation screen click **[Assign]**, and you'll see the message "You have successfully updated the App Groups associations with your App ID."

## Four Completed App IDs

Now you should have four new App IDs, and all of them should belong to your App Group.

| iOS App IDs                               |    |   |  |
|---|----|---|--|
| 4 App IDs Total                           |    |   |  |
| Name                                      | *  | ID  |  |
| MyBiz iOS App                             |    | com.mybiz.iosapp                              |  |
| MyBiz iOS App DocumentProvider            |    | com.mybiz.iosapp.DocumentProvider             |  |
| MyBiz iOS App DocumentProviderFileProvide | er | com.mybiz.iosapp.DocumentProviderFileProvider |  |
| MyBiz iOS App ShareExtApp                 |    | com.mybiz.iosapp.ShareExtApp                  |  |

# **Setting up Testing Devices**

The \$99 Apple Developer account allows you to test your iOS apps on a maximum of 100 devices of each type:

| Apple TV    | 100 |
|-------------|-----|
| Apple Watch | 100 |
| iPad        | 100 |
| iPhone      | 100 |
| iPod Touch  | 100 |

And you must register the UDID of each device in your Apple developer account. If you have the \$299 Enterprise account then you can install your app on any device without registering it.

The easiest way to find UDIDs is to connect to your iTunes account. Then connect your iOS device to your Mac computer. Your device will appear on the left sidebar in iTunes. Click on this to display your device information. Then click on the serial number, and you will see your UDID.



Return to your account on Developer.apple.com, go to **IOS Apps** > Devices > All, and click the plus button on the top right to register a new device. You can make the name anything you want, and the UDID must be the UDID copied from iTunes.

| Regis  | stering a New Device or Multiple Devices   |                                     |
|--|--|-------------------------------------|
| elease Software  | e Reminder   |                                     |
|  | and a pro- release astronomith ampleuras, contractors, and member  | ers of your                         |
| ay only share Ap<br>zation who are re  | egistered as Apple developers and have a demonstrable need to kn   | ow or use                           |
| may only share Ap<br>nization who are re<br>e software to deve   | egistered as Apple developers and have a demonstrable need to kn<br>elop and test applications on your behalf.   | ow or use                           |
| may only share Ap<br>nization who are re<br>e software to deve<br>uthorized distributi   | egistered as Apple developers and have a demonstrable need to kn<br>elop and test applications on your behalf.   | e) is prohibited                    |
| may only share Ap<br>nization who are re<br>e software to deve<br>uthorized distributi<br>may result in the te<br>inal liability.  | egistered as Apple developers and have a demonstrable need to kn<br>alop and test applications on your behalf.<br>ion of Apple confidential information (including pre-release softwar<br>ermination of your Apple Developer Program. It may also subject yo   | e) is prohibited<br>buto civil and  |
| may only share Ap<br>nization who are re<br>e software to deve<br>uthorized distributi<br>may result in the te<br>inal liability.  | egistered as Apple developers and have a demonstrable need to kn<br>alop and test applications on your behalf.<br>ion of Apple confidential information (including pre-release softwar<br>ermination of your Apple Developer Program. It may also subject yo   | e) is prohibited<br>but o civil and |
| may only share Ap<br>nization who are re<br>e software to deve<br>uthorized distributi<br>may result in the te<br>inal liability.  | egistered as Apple developers and have a demonstrable need to kn<br>elop and test applications on your behalf.<br>ion of Apple confidential information (including pre-release softwar<br>ermination of your Apple Developer Program. It may also subject yo   | e) is prohibited<br>but o civil and |
| may only share Ap<br>nization who are re<br>e software to deve<br>uthorized distributi<br>may result in the te<br>inal liability.<br>Register Device                               | egistered as Apple developers and have a demonstrable need to kn<br>elop and test applications on your behalf.<br>ion of Apple confidential information (including pre-release softwar<br>ermination of your Apple Developer Program. It may also subject yo   | e) is prohibited<br>bu to civil and |
| may only share Ap<br>nization who are re<br>e software to deve<br>uthorized distributi<br>may result in the te<br>inal liability.<br>Register Device<br>Name your device           | egistered as Apple developers and have a demonstrable need to kn<br>alop and test applications on your behalf.<br>ion of Apple confidential information (including pre-release softwar-<br>ermination of your Apple Developer Program. It may also subject yo  | e) is prohibited<br>but o civil and |
| may only share Ap<br>nization who are re<br>e software to deve<br>uthorized distributi<br>may result in the te<br>inal liability.<br>Register Device<br>Name your device<br>Name:  | egistered as Apple developers and have a demonstrable need to kn<br>elop and test applications on your behalf.<br>ion of Apple confidential information (including pre-release softwar<br>ermination of your Apple Developer Program. It may also subject your apple and enter its Unique Device Identifier (UDID).                | e) is prohibited<br>bu to civil and |
| may only share Ap<br>nization who are re-<br>e software to deve<br>uthorized distributi<br>may result in the te<br>inal liability.<br>Register Device<br>Name your device<br>Name: | egistered as Apple developers and have a demonstrable need to kn<br>elop and test applications on your behalf.<br>ion of Apple confidential information (including pre-release softwar<br>ermination of your Apple Developer Program. It may also subject yo<br>e and enter its Unique Device Identifier (UDID).<br>Layla's iPhone | e) is prohibited<br>bu to civil and |

and then upload the file:

Device ID Device Name A123456789012345678901234567890123456789 NAME1 B123456789012345678901234567890123456789 NAME2

Click **Download sample files** to see examples of plain text and markup files.

| Register Multiple Devices<br>Upload a file containing the or<br>can be included in your file a<br>Download sample files | devices you wish to register. Please note that a maximum of 100 devices<br>nd it may take a few minutes to process. |
|---|---|
| Choose File   |   |
|   | Cancel  |

format,

When you are finished entering your device IDs click the **Continue** button. Verify, and then click **Done**.

# **Create Provisioning Profiles**

# Next Step

The next phase of this glorious journey is to create eight provisioning profiles: 4 Ad Hoc and 4 App Store <app\_store\_profiles\_label>. You will email the four Ad Hoc profiles, and your P12 certificate <publishing\_ios\_app\_6> (which you will create after your provisioning profiles), to support@owncloud.com after building your branded app with the ownBrander app on customer.owncloud.com. **Do not send us the App Store profiles.** All eight of these profiles must be stored on your Mac PC.

# First Ad Hoc Provisioning Profile

Go to **Provisioning Profiles** > **All**, then click the **[plus button]** (top right) to open the *Add iOS Provisioning Profile* screen. Select **[Ad Hoc]** and click **[Continue]**.

| Add iOS Provisioning Profile   |
|--|
| Select Type Configure Generate Download  |
| What type of provisioning profile do you need?   |
| Development  |
| Create a provisioning profile to install development appson test devices.  |
| Distribution   |
| App Store<br>Create a distribution provisioning profile to submit your app to the App Store.                         |
| Ad Hoc     Create a distribution provisioning profile to install your app on a limited number of registered devices. |

On the **Select App ID** screen select the first of the three App IDs that you created and click **[Continue]**. (The first one has the shortest name, if you followed the naming conventions in this manual.)



If you plan to use services such as Game Center, In-App Purchase, and Push Notifications, or want a Bundle ID unique to a single app, use an explicit App ID. If you want to create one provisioning profile for multiple apps or don't need a specific Bundle ID, select a wildcard App ID. Wildcard App IDs use an asterisk (\*) as the last digit in the Bundle ID field. Please note that iOS App IDs and Mac App IDs cannot be used interchangeably.

App ID: MyBiz iOS App (XYDX7DCSUW.com.mybiz.iosapp)

Select the certificate that you created at the beginning of this process and click [ Continue ].



Select certificates.

Select the certificates you wish to include in this provisioning profile. To use this profile to install an app, the certificate the app was signed with must be included.

| ۰ | Carla Schroder (iOS Distribution) |
|---|-----------------------------------|
|   | Jun 25, 2016                      |

Select the devices that you want to install and test your app on, then click [ Continue ].



Select the devices you wish to include in this provisioning profile. To install an app signed with this profile on a device, the device must be included.

| Select All     |        |      |          | 1 of 1 item(s) selected |
|----------------|--------|------|----------|-------------------------|
| Layla's iPhone |        |      |          |                         |
|                |        |      |          |                         |
|                |        |      |          |                         |
|                | Cancel | Back | Continue |                         |

Name your provisioning profile with a descriptive **Profile Name** and click [ Generate ].



# Name this profile and generate.

The name you provide will be used to identify the profile in the portal.

| Profile Name: | MyBiz iOS Profile                          |
|---------------|--|
| Type:         | iOS Distribution                           |
| App ID:       | MyBiz iOS App(XYDX7DCSUW.com.mybiz.iosapp) |
| Certificates: | 1 Included                                 |
| Devices:      | 1 Included                                 |

When it has generated, download your new profile to your Mac computer.



Your provisioning profile is ready.

### Download and Install

Download and double click the following file to install your Provisioning Profile.



Name: MyBiz iOS Profile Type: iOS Distribution App ID: XYDX7DCSUW.com.mybiz.iosapp Expires Jun 25, 2016

Download

Find it on your Mac (usually the Download folder) and double-click to install it in Xcode.

| <ul> <li></li> <li>&gt;</li> </ul> |                                   |
|------------------------------------|-----------------------------------|
| Favorites                          | Name                              |
| All My Files                       | ios_distribution.cer              |
| iCloud Drive                       | MyBiz_iOS_Profile.mobileprovision |
| MirDrop                            |                                   |
| Applications                       |                                   |
| Desktop                            |                                   |
| <b>O</b> Downloads                 |                                   |

## Second Ad Hoc Provisioning Profile

Return to the "Your provision profile is ready" screen, scroll to the bottom and click [Add Another]. On the following screen select [Ad Hoc] and click [Continue].

| Add iOS Provisioning Profile  | + 🗭        |
|---|------------|
| Select Type Configure Generate Download   |            |
| What type of provisioning profile do you need?  |            |
| Development<br>OS App Development<br>Create a provisioning profile to install development appson test devices.  |            |
| Distribution App Store Create a distribution provisioning profile to submit your app to the App Store. Ad Hoc Create a distribution provisioning profile to install your app on a limited number of registered. | 1 devices. |

This time select the **.DocumentProvider** app ID and click **[ Continue ]**.

| App ID 🗸 | MyBiz iOS App (XYDX7DCSUW.com.mybiz.iosapp)<br>MyBiz iOS App DocumentProvider (XYDX7DCSUW.com.mybiz iosapp DocumentProvider) |  |  |  |  |  |  |
|----------|--|--|--|--|--|--|--|
|          | MyBiz iOS App DocumentProviderFileProvider (XYDX7DCSUW.com.mybiz.iosapp.Document   |  |  |  |  |  |  |
|          |  |  |  |  |  |  |  |
|          |  |  |  |  |  |  |  |
|          |  |  |  |  |  |  |  |
|          |  |  |  |  |  |  |  |
|          |  |  |  |  |  |  |  |

Select the certificate that you created at the beginning of this process and click [ Continue ].

| PROV                         | Select co                            | ertificates.                        |                                      |  |                   |
|------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|--|-------------------|
| Select the o<br>install an a | certificates you<br>pp, the certific | u wish to includ<br>cate the app wa | e in this provisi<br>s signed with m | oning profile. To us<br>ust be included. | e this profile to |
| <ul> <li>Carla</li> </ul>    | Schroder (iOS D                      | istribution)                        |                                      |  |                   |
| Jun 25                       | 5,2016                               |                                     |                                      |  |                   |
|                              |                                      |                                     |                                      | ¥  |                   |
|                              | ſ                                    | Cancel                              | Back                                 | Continue                                 |                   |

Select the devices that you want to install and test your app on, then click **[ Continue ]**. These must be the same devices you selected for the first provisioning profile.

| PROV Se                                | elect devices.   |  |                               |
|--|--|--|-------------------------------|
| Select the device<br>this profile on a | es you wish to include in t<br>device, the device must b | his provisioning profile.<br>e included. | To install an app signed with |
| Select All                             |  |  | 1 of 1 item(s) selected       |
| Layla's iPho                           | ne   |  |                               |
|  | Cancel   | Back                                     | nue                           |

Give this provisioning profile the same name as your first profile, plus **.DocumentProvider** and click **[Generate]**.

| Name this profile and generate.  |   |  |  |  |  |
|--|---|--|--|--|--|
| The name you provide will be used to identify the profile in the portal. |   |  |  |  |  |
| Profile Name:  | Profile Name: MyBiz iOS Profile.DocumentProvider                              |  |  |  |  |
| Type:  | iOS Distribution  |  |  |  |  |
| App ID:  | MyBiz iOS App DocumentProvider<br>(XYDX7DCSUW.com.mybiz.iosapp.DocumentProvid |  |  |  |  |
| Certificates:  | 1 Included  |  |  |  |  |
| Devices:   | 1 Included  |  |  |  |  |
|  |   |  |  |  |  |
|  | Cancel Back Generate  |  |  |  |  |

Just like the first provisioning profile, download it to your Mac computer, and then double-click to install it in Xcode.

# Third Ad Hoc Provisioning Profile

Return to the "Your provision profile is ready" screen, scroll to the bottom and click [Add Another]. On the following screen select [Ad Hoc] and click [Continue].



App ID: MyBiz iOS App DocumentProviderFileProvider (XYDX7DCSUW.com.mybi:~

Select the certificate that you created at the beginning of this process and click [ Continue ].



# Select certificates.

Select the certificates you wish to include in this provisioning profile. To use this profile to install an app, the certificate the app was signed with must be included.

| 0 | <b>Carla Schroder</b> (iO<br>Jun 25, 2016 | S Distribution) |      |         |   |  |
|---|---|-----------------|------|---------|---|--|
|   |   |                 |      | ×       |   |  |
|   |   | Cancel          | Back | Continu | e |  |

Select the devices that you want to install and test your app on, then click [[ **Continue**]. These must be the same devices you selected for the first provisioning profile.



Give this provisioning profile the same name as your first profile plus **.DocumentProviderFileProvider** and click **[Generate]**. There is a 50-character limit, but don't worry about counting characters because it will be automatically truncated if you go over.

| Name this profile and generate.  |   |  |  |  |
|--|---|--|--|--|
| The name you provide will be used to identify the profile in the portal. |   |  |  |  |
| Profile Name:  | Profile Name: MyBiz iOS Profile.DocumentProviderFileProvider                              |  |  |  |
| Type   | iOS Distribution  |  |  |  |
| App ID:  | MyBiz iOS App DocumentProviderFileProvider<br>(XYDX7DCSUW.com.mybiz.iosapp.DocumentProvid |  |  |  |
| Certificates   | 1 Included  |  |  |  |
| Devices  | 1 Included  |  |  |  |
|  |   |  |  |  |
| (  | Cancel Back Generate  |  |  |  |

Download it to your Mac computer, and then double-click to install it in Xcode.

# Fourth Ad Hoc Provisioning Profile

Return to the "Your provision profile is ready" screen, scroll to the bottom and click [Add Another]. On the following screen select [Ad Hoc] and click [Continue].

| Add iOS Provisioning Profile   |  |  |  |  |
|--|--|--|--|--|
| Select Type Configure Generate Download  |  |  |  |  |
| What type of provisioning profile do you need?   |  |  |  |  |
| Development<br>O IOS App Development<br>Create a provisioning profile to install development apps on test devices.   |  |  |  |  |
| Distribution <ul> <li>App Store Create a distribution provisioning profile to submit your app to the App Store. </li> <li>Ad Hoc Create a distribution provisioning profile to install your app on a limited number of registered devices.</li></ul> |  |  |  |  |
| This time select the <b>.ShareExtApp</b> app ID and click <b>[ Continue ]</b> .  |  |  |  |  |

| App ID: | MyBiz iOS App ShareExtApp (XYDX7DCSUW.com.mybiz.iosapp.ShareExtApp)                                   |
|---------|---|
|         | MyBiz iOS App (XYDX7DCSUW.com.mybiz.iosapp)   |
|         | MyBiz iOS App DocumentProvider (XYDX7DCSUW.com.mybiz.iosapp.DocumentProvider)                         |
|         | MyBiz iOS App DocumentProviderFileProvider (XYDX7DCSUW.com.mybiz.iosapp.DocumentProviderFileProvider) |
|         | MyBiz iOS App ShareExtApp (XYDX7DCSUW.com.mybiz.iosapp.ShareExtApp)                                   |
|         |   |

Select the certificate that you created at the beginning of this process and click [ Continue ].



## Select certificates.

Select the certificates you wish to include in this provisioning profile. To use this profile to install an app, the certificate the app was signed with must be included.

| • Carla Schroder (id<br>Jun 25, 2016 | OS Distribution) |      |          |  |
|--------------------------------------|------------------|------|----------|--|
|                                      |                  |      | ×        |  |
|                                      | Cancel           | Back | Continue |  |

Select the devices that you want to install and test your app on, then click **[ Continue ]**. These must be the same devices you selected for the first provisioning profile.



Give this provisioning profile the same name as your first profile plus **.ShareExtApp** and click **[Generate]**. There is a 50-character limit, but don't worry about counting characters because it will be automatically truncated if you go over.



# Name this profile and generate.

The name you provide will be used to identify the profile in the portal.

| Profile Name: | MyBiz iOS Profile.ShareExtApp  |
|---------------|--|
| Type:         | iOS Distribution   |
| App ID:       | MyBiz iOS App ShareExtApp<br>(XYDX7DCSUW.com.mybiz.iosapp.ShareExtApp) |
| Certificates: | 1 Included   |
| Devices:      | 1 Included   |

Download it to your Mac computer, and then double-click to install it in Xcode. You should now see all of your Ad Hoc provisioning profiles listed in your "iOS Provisioning Profiles".

| iOS Provisio                                   | iOS Provisioning Profiles |          |
|--|---------------------------|----------|
| 7 profiles total.                              |                           |          |
| Name   | Туре                      | ▼ Status |
| MyBiz iOS Profile                              | iOS Distribution          | Active   |
| MyBiz iOS Profile.DocumentProvider             | iOS Distribution          | Active   |
| MyBiz iOS Profile.DocumentProviderFileProvider | iOS Distribution          | Active   |
| MyBiz iOS Profile.ShareExtApp                  | iOS Distribution          | Active   |

### **Create Four App Store Profiles**

Creating your four App Store profiles is the same as creating your Ad Hoc profiles, except that when you start you check the App Store checkbox, and you won't select testing devices.



### Development



When you're finished, you'll have eight new provisioning profiles. Remember, when you build your app on ownBuilder you only send in the four Ad Hoc profiles, plus your P12 certificate.

| iOS Provisioning P                               | rofiles          | + 🗷 Q                      |
|--|------------------|----------------------------|
| 11 profiles total.                               |                  |                            |
| Name   | ^ Туре           | Status                     |
| MyBiz iOS App-Store                              | iOS Distribution | <ul> <li>Active</li> </ul> |
| MyBiz iOS App-Store.DocumentProvider             | iOS Distribution | Active                     |
| MyBiz iOS App-Store.DocumentProviderFileProvider | iOS Distribution | Active                     |
| MyBiz iOS App-Store.ShareExtApp                  | iOS Distribution | Active                     |
| MyBiz iOS Profile                                | iOS Distribution | Active                     |
| MyBiz iOS Profile.DocumentProvider               | iOS Distribution | Active                     |
| MyBiz iOS Profile.DocumentProviderFileProvider   | iOS Distribution | Active                     |
| MyBiz iOS Profile.ShareExtApp                    | iOS Distribution | <ul> <li>Active</li> </ul> |

Go to the next page to learn how to create your P12 certificate <publishing\_ios\_app\_6>.

# **Creating a P12 Certificate**

In addition to emailing your four Ad Hoc provisioning profiles to support@owncloud.com, you must also include your P12 certificate. To create this, return to Keychain Access on your Mac computer and find your private key that you created at the beginning (see Create Certificate Signing Request).

| • • •                | ĸ  | Keychain Access |
|----------------------|--|-----------------|
| Click to lock the la | ogin keychain.                                   |                 |
| Keychains            |  |                 |
| 💕 login              | (C) Kind public key BSA 2048-bit                 |                 |
| 💣 Local Items        | Usage Encrypt, Derive, Verify                    |                 |
| System               | $\Phi$   |                 |
| C System Roots       |  |                 |
|                      | Name   | ^ Kind          |
|                      | <pre></pre>                                      | public key      |
|                      | <pre></pre>                                      | private key     |
|                      | iMessage Encryption Key                          | public key      |
|                      | IMessage Encryption Key                          | private key     |
|                      | P iMessage Signing Key                           | public key      |
| Category             | P iMessage Signing Key                           | private key     |
| All Items            | P ios-mybiz                                      | public key      |
| / Passwords          | ios-mybiz  | private key     |
|                      | iPhone Distribution: Carla Schroder (XYDX7DCSUW) | certificate     |
| Secure Notes         |  |                 |
| My Certificates      |  |                 |
| Y Keys               |  |                 |
| Certificates         |  |                 |

Right-click on your private key and left-click **Export [your key name]**.

| P iMessa   | ge Signing Key  | private key  |              |
|------------|---|--|--------------|
| ios-my     | biz   | public key   |              |
| V 🖗 ios-my | Copy "ios-mybiz"<br>Delete "ios-mybiz"  |  |              |
| _          | Export "ios-mybiz"  |  |              |
|            | Get Info<br>Create a Certificate With "ios-<br>Request a Certificate From a C<br>Create a Certificate Authority N | mybiz"<br>Certificate Authority With '<br>With "ios-mybiz" | "ios-mybiz"… |

Enter any name you want, the location you want to save it to, and click [ Save ].

| Save As:     | MyBiz-iOS-12                         | •           |
|--------------|--------------------------------------|-------------|
| Tags:        |                                      | ]           |
| Where:       | Documents                            |             |
|              |                                      |             |
| File Format: | Personal Information Exchange (.p12) | <b></b>     |
|              |                                      | Cancel Save |

In the next screen you have the option to enter a password. If you put a password on your P12 certificate you will have to include it when you send your certificate and provisioning profiles to support@owncloud.com. Click [ OK ].

|   | Enter a password which will be used to protect the exported items: |           |           |
|---|--|-----------|-----------|
|   | Password:  | •••••     | 9         |
|   | Verify:  | •••••     |           |
|   |  | Password  | Weak      |
|   |  | Show pass | word      |
| ? |  |           | Cancel OK |

On the next screen you must enter your login keychain password, which is your Mac login password, and click [ Allow ].

|   | Keychain Access wants to export key "ios-<br>acme" from your keychain. |
|---|--|
| R | To allow this, enter the "login" keychain password.                    |
|   | Password:  |
| ? | Always Allow Deny Allow  |

Now your new P12 certificate should be in the directory you saved it in.



You have now completed all the necessary steps for signing your branded iOS app. The next step is to build your app with the ownBrander app on https://customer.owncloud.com.

# **Building Your iOS App With ownBrander**

# Build Your Branded iOS App

At long last you have arrived at the point where you can actually build your branded iOS app. Log into your account on customer.owncloud.com/owncloud and open the ownBrander app.



If you don't see the ownBrander app, open a support request with the [ **Open Case** ] button.

Your first ownBrander task is to review the iOS page on ownBrander for your image requirements. You will need a lot of them, in specific sizes and formats, and they're all listed on the ownBrander page.

There are three sections: Required, Suggested, and Advanced. The Required sections contains all of the required elements that you must configure. Suggested and Advanced allow additional customizations.

When you have completed and submitted your app, email your three provisioning profiles and P12 certificate to support@owncloud.com.

# **Required Section**

Enter your application name. This can be anything; in this example it is the same name used in our signing certificate examples.

| ownClou   | d - Enterprise Q  |
|-----------|---|
| Common    | Required  |
| ios       | All of the branding items in this section of the iOS tab are required. It will not  |
| Suggested | items and also you provide to us (branding@owncloud.com) the needed certificates.   |
| Advanced  | Application name<br>The desired name of your mobile app or desktop client. Once the app   |
| Android   | is released, this name cannot be modified because it is used to<br>identify the app - both by end-users, devices, and also internally. This |
| Suggested | app name should be pulled by default from the Common tab in<br>ownBrander, but it can be modified here for the iOS app if you choose.       |
| Advanced  | MyBiz iOS App ×   |

Next, enter your ownCloud server URL. This hard-codes it into your app. If you leave this blank then your users will have to enter it every time they use the app.

### Server URL

Set a static server URL that cannot be changed by the user. If this option is not selected, users will have to enter a server URL manually to connect to the ownCloud server. This option and the URL should be pulled from the Common tab in ownBrander, but it can be modified here for the iOS app if you choose.

ownCloud server URL and path to which users connect. This URL should be pulled from the Common tab in ownBrander, but it can be modified here for the iOS app if you choose.

| www.mybiz.com/owncloud | × |
|------------------------|---|
|                        |   |

Check **Server URL Visible** to make your ownCloud server URL the default, and to allow your users to enter a different URL.

### Server URL visible

Set the URL to be visible and editable by the end user. If selected, the URL you entered above will be displayed, but users will be able to edit it manually.

And now, the all-important **Bundle ID**. Make sure that this is exactly the same as the **Bundle ID** you created on developer.apple.com (see Bundle ID).

## Bundle ID

The bundle ID is a unique identifier for your app. Typically this is the reverse domain notation of your app and your company name, such as com.examplecompany.iOS . The bundle ID needs to be unique to your app alone, so it is important to set the company identifier to a unique string. The bundle ID needs to match the bundle ID you enter in iTunes Connect before you can submit your app to the store. Further information about iOS bundle IDs is available at developer.apple.com

com.mybiz.iosapp

×

х

You must also enter the **App Group** you created.

### APP Group

In order to take advantage of some of the iOS8 extensions we need you to create an app group and enable it on the Bundle ID. The App Group format is typically: group.BundleID (Bundle ID is the one set above)

group.com.mybiz.iosapps

Check **Show multi-account or disconnect** if you plan to allow your users to have more than one ownCloud account.

### Show multi-account or disconnect

Multi-account enables users to connect to more than one ownCloud instance with their mobile app. If this option is not selected, the iOS app will show users a disconnect option instead of the add account option. Most customers choose to show users the disconnect button.

Check **Enable SAML** authentication if that is what you use on your ownCloud server. Otherwise leave it blank.

### Enable SAML

Enable SAML authentication for end users. By default, the ownCloud app authenticates via a username and password. Check this box if SAML authentication will be used instead.

**Number of uploads shown** controls the length of the most recent uploads list on the app. The default is 30.

## Number of uploads shown

The number of uploads shown on the uploads view. In the app, when you upload a file to the server a list is created and stored in the uploads view. Thile the latest uploads are listed, this option allows you to specify the maximum number of files that you want to be shown in this view. The default is 30.



The next section is for uploading your custom artwork to be built into the app. The ownBuilder app tells you exactly which images you need, and their required size. You only need one Splash Screen image, and ownBrander will automatically resize and crop it for different-sized screens. You must also select a background color, which ensures that the splash screen image is always at the correct size ratio. (Click the example images on the right to enlarge them.)



### Application icon

Icon for the app that is shown on the device Home screen. While many icon resolutions are needed for the different iOS devices, you only need to upload one size. ownBrander will automatically



create the others. Note: it is important to not have a transparent background. (width: 1024px height: 1024px) i

Delete image Upload

## Splash screen image

6

This is the app splash screen image. ownBrander will rescale the image automatically to match specific iOS device resolutions screen image (width: 2048px height: 2048px) i

Upload

## Splash screen background

This is the app splash screen background color. On some iOS devices, rescaling the splash screen image may lead to blank space which will be filled in with this background color



| User agent   |   |  |
|--------------|---|--|
| mybiz-iosapp | × |  |

Check **Recommend** to open a Twitter, Facebook, and Email recommendation configurator.

### Recommend

Options show after clicking on the recommend button in the settings page: Facebook, Twitter and Mail. The messages generated by ownCloud when one of the recommend options is selected by a user can be the standard ownCloud messages, which are translated into several languages, or you may choose to enter a custom message. If you choose to enter a custom message, this will not be translated beyond the message you enter here.

Show recommend in app

If you have online help, enter the URL here.

### Help URL

Select this option to show a help URL in your app. Show help url?

Help URL. Enter the URL where users may go to find help for your app. Please, include the http:// prefix

https://mybiz.com/help

Activate the option feedback creates an option for your users to either enable or not enable the feedback option on their devices. If you enable this, enter your **Feedback email** address.

### Activate the option feedback

Select this option if you want the feedback option to be available on the App settings. When end-user selects this option, they will be able to send to you their feedback through email.

×

### Feedback email

An email address where you can receive feedback from users

feedback@mybiz.com

Enter your **Imprint URL** (your "about" page)

Imprint URL Activate use of imprint so users may learn more about your company. Show imprint in app

URL where users may found more information about the company.

https://mybiz.com/about

Check **Show a "new account" link in app** to allow new users to request a new account.

Show a "new account" link in app

Select if you want to include a link for new users on the login view to request a new account (see login screenshot).

Upload an icon that will be displayed by default when there is no file preview to display.



Generic icon for iPad This image will be shown on the iPad when there is no file previewed (width: 1024px height: 558px) i

Delete image Upload

By default, both internal sharing and sharing by link are enabled. You have the options to disable one or both of these.

□ Check this option if you don't want the internal sharing option to be shown in the app. Otherwise your users will be able to share any data with other users. By default, internal sharing option is shown

□ Check this option if you don't want the share by link option to be shown in the app. Otherwise your users will be able to share any data by link. By default, share by link option is shown

You may disable background transfers if you are using mobile device management (MDM), such as Mobile Iron, that does not support background jobs, or if you simply do not want to allow the app to work in the background. By default, the ownCloud iOS app supports background file transfers by taking advantage of Background Execution.

### Disable background transfers

Check this option if you intend to wrap this app in an MDM that does not support background jobs, such as Mobile Iron, or if you don't want the app to work in the background. iOS allows a transfer - either an upload or a download - to operate in the background to 3 minutes after the app is closed.

The default version number of your branded app is the same as the official ownCloud app. You have the option to customize your version number. Once you do this, you will have to update it manually for new releases. This must be the same as the version number that you enter in iTunes. Your version number is visible to your users.

### Version number

 Do you want to modify the release version number? The version number is a two-period-separated list of positive integers (as in 4.5.2). The version number is shown in the store and that version needs to match the version number you enter in iTunes Connect.
 Update the version number when you create a new app version in iTunes Connect.
 NOTE: once you modify the version number with this option, it will no longer be modified automatically for your branded app. You will have to increase the version number manually every time a new version is released.

You may also customize the build number, which defaults to 1.0.0. This must also be manually updated when you customize it. Your build number is used by iTunes to uniquely identify your app. When the build number changes, iTunes automatically syncs the updates for your users. The build number is not visible to your users.

### **Build number**

Do you want to modify the build number? The build number is used by Apple to uniquely identify the app, and if you want to upload a new build of your app to iTunes Connect you must use a new build number. For iOS apps, iTunes will recognize that the build string changed and properly sync the new app build to iOS devices. This is different than the version number above which is a useful but cosmetic feature, whereas the build number is technically required. NOTE: once you modify this parameter, it will no longer be automatically modified on your branded app. You will have to increase it every time a new version is released. By default 1.0 is used. This number is not automatically updated

That completes the required elements of your branded iOS app.

### **Suggested Section**

The Suggested section allows you to customize additional elements such as text and background colors, and icons. The Suggested items are all optional.

### **Advanced Section**

The Advanced section allows you to optionally customize the color of messages such as connection status, error messages, letter separators, buttons, and additional icons.

### **Generate iOS App**

When you have uploaded all of your images and completed your customizations, click the **Generate iOS App** button and take a well-deserved break. Remember to email your four Ad Hoc provisioning profiles and P12 certificate to support@owncloud.com.

Generate iOS App

You may go back and make changes, and when you click the **Generate iOS App** button the build system will use your latest changes.

Check your account on customer.owncloud.com in 48 hours to see your new branded ownCloud app.

# **Testing Your New Branded iOS App**

### **Distribute the File**

You'll distribute the file with the .ipa extension, like our example MyBiz iOS App-3.4.211.ipa, from your https://customer.owncloud.com/owncloud account to your beta testers. To do this you'll need a Mac computer, an iPhone or iPad registered in your Apple developer account, and the iTunes account associated with your Apple developer account.

1. Connect your registered iPhone or iPad to a Mac running iTunes.

- 2. Double-click your iOS .ipa file.
- 3. You should see your device in the upper left corner of your iTunes windows. Click on it.
- 4. Click the **[ Apps ]** button. Now you should see your app in the iTune apps list, with an Install button. Click it.
- 5. The Install button changes to Will Install.
- 6. Click the **[ sync ]** button in the lower-right corner to sync your device. This installs your app on your device.

Your other testers can now install and test your app on their registered iPhones and iPads just like any other app from iTunes.

If you have the Enterprise Apple developer account, there is no limit on the number of testing devices, and they do not have to be registered.

# **Getting Crash Reports From Testers**

iOS automatically records crash logs when apps crash. Your testers can retrieve and send these logs to you. They must follow these steps:

- 1. Connect the testing device to a Mac computer running iTunes.
- 2. The crash logs are automatically downloaded to ~/Library/Logs/CrashReporter/MobileDevice
- 3. Attach the relevant log files to email and send them to you.

# **Publishing Your New Branded iOS App**

# Publish for General Distribution on iTunes

At last, after following all the previous steps and passing beta testing, your branded iOS app is ready to publish for general distribution on iTunes. You need a Mac computer with Xcode installed (Xcode is a free download), and you need the eight provisioning profiles (4 Ad Hoc and 4 Apple Store) and p12 file that you created copied to the same computer that you are using to upload your app to iTunes. You will also need a number of screenshots of your app in specific sizes and resolutions, which are detailed in your iTunes Connect setup screen.



Apple must review and approve your app, and the approval process can take several days to several weeks.

Download the xcarchive.zip file from your account. Your friendly macOS computer will automatically unpack it and change the name to something like ownCloud iOS Client 02-07-15 10.30.xcarchive. Double-click on this file to automatically install it into Xcode. Go to Xcode and you will see it in the Archives listing under Window > Organizer.



Next, go back to the Apple Developer Member Center to log into iTunes Connect to set up your app storefront.

| 🗯 D | eveloper                             |  |
|-----|--------------------------------------|--|
| A   | Programs & Add-ons                   | Your Account   |
|     |                                      |  |
|     | <b>SDKs</b><br>Download the SD       | Ks and the latest beta software.   |
|     | Certificates, Io<br>Manage your cert | lentifiers & Profiles<br>ificates, identifiers, devices, and profiles for your apps. |
|     | iTunes Conne                         | ct<br>s published on the App Store and Mac App Store.                                |

After logging in click the blue **[ My Apps ]** button. This takes you to the main screen for managing your apps on iTunes.



Click the plus button on the top left to setup your new branded iOS app.
# iTunes Connect My Apps ~



This opens a screen where you will enter your app information. Make sure you get it right the first time, because it is difficult to delete apps, and Apple will not let you re-use your app name or SKU.

- Enter any name you want for your app. This is the name that will appear in your App Store listing.
- Choose your primary language.
- Select the bundle ID from the drop-down selector.
- Enter your app version number, which should match the version number as it appears in your Xcode organizer.
- The SKU is a unique ID for your app, and is anything you want.

Then click the [ Create ] button.

| MyBiz IOS App                                     |   | 1.0     |  |
|---|---|---------|--|
| Primary Language ?                                |   | SKU 🤉   |  |
| English   | ~ | iosapp1 |  |
| Bundle ID ?                                       |   |         |  |
| MyBiz iOS App - com.mybiz.iosapp                  | ~ |         |  |
| Register a new bundle ID on the Developer Portal. |   |         |  |

Now go back to your Xcode organizer to upload your app; click the blue **[Submit to App Store]** button.

| Archive Information                         |  |  |
|---|--|--|
| Owncloud iOs Client<br>Jul 2, 2015, 1:30 AM |  |  |
| Submit to App Store                         |  |  |
| Validate Export                             |  |  |
| Details                                     |  |  |
| Version 3.4.1 (1.0)                         |  |  |
| Identifier com.mybiz.iosapp                 |  |  |
| Type iOS App Archive                        |  |  |
|   |  |  |

This takes a few minutes as it verifies your bundle ID and certificates, and then you will see an upload status.

| Uploading Archive                     |  |
|---------------------------------------|--|
| Uploading package to the iTunes Store |  |
|                                       |  |
|                                       |  |
|                                       | Uploading Archive<br>Uploading package to the iTunes Store |

At long last, after working through this long complex process, you are almost ready to publish your app on iTunes.

# Setting up Your iTunes Storefront

There are just a few steps remaining. Now that you have uploaded your branded iOS app, you need to upload some screenshots, an optional demo video, and fill in some information for your app listing on your iTunes storefront. You should see something like this on your main screen (figure 8). You should click the **[Save]** button at the top right periodically to preserve your changes.

| iTunes Connect My Apps ~   |           | Carla Schröder 🛩<br>Carla Schröder |  |
|----------------------------|-----------|------------------------------------|--|
| + •••                      | Q. Search | All Statuses ~ 🛛 😫 🗮               |  |
|                            |           |                                    |  |
| MyBiz IOS App              |           |                                    |  |
| 1.0 Prepare for Submission |           |                                    |  |

This screen displays all of your apps and their submission status. Click **[ Prepare for Submission ]** to get started on the submission process. The first screen is for entering screenshots of your app for various devices, and optionally a demonstration video. Click the little question marks to learn the required image specifications.

# Version Information

App Video Preview and Screenshots 🕐



Apple simplified the screenshot submission process. Please check this Video (in Safari) for details.

For the ownCloud client, we also don't use real screenshots, we use frames in different sizes instead. You can find templates to generate those assets. Here are examples for the Sketch app:

- https://github.com/LaunchKit/SketchToAppStore
- https://github.com/MengTo/AppStoreSketch

Then you must enter:

- Your app name
- A description
- Some keywords for iTunes searches; and
- Some optional URLs

| Name | ? |
|------|---|
|      |   |

MyBiz IOS App

Description 🕐

| mybiz owncloud ios        |  |
|---------------------------|--|
| Support URL 🕐             |  |
| https://mybiz.com/support |  |
|                           |  |
| Marketing URL ?           |  |

https://mybiz.com/privacy

The next section is for Apple Watch. If you don't support Apple Watch you can skip this.

#### The General App Information section requires a:

- 1024 x 1024 logo
- Version
- Rating
- Category
- License
- Copyright, and
- Contact information

#### General App Information

| App Icon ?   | Copyright ?  |  |  |
|--|--|--|--|
|  | 2015 MyBiz, LLC  |  |  |
| MyBiz, LLC   | Trade Representative Contact In<br>Display Trade Representati<br>Korean App Store.<br>Carla Schroder | formation 🕐<br>ve Contact Information on the |  |
|  | First name   | Last name                                    |  |
| 1016672646   | PO Box 100   |  |  |
| Martine @  | Apt., suite, bldg. (optional)  |  |  |
|  | Mytown   | California                                   |  |
| 1.0  | 12345  | United States -                              |  |
| Category ?   | 123-456-7890   | contact@mybiz.com                            |  |
| Productivity ~   |  |  |  |
| Business ~   | Routing App Coverage File ?  |  |  |
| Rating Edit<br>Ages 4+                                       | Choose File  |  |  |
| Additional Ratings   | (Optional)   |  |  |
| License Agreement Edit<br>Apple's Standard License Agreement |  |  |  |

In the **Build** section, click the plus button and select your app.

| Add Build                       |                       |             |
|---------------------------------|-----------------------|-------------|
| Build                           | Upload Date           |             |
| <ul> <li>3.4.1 (1.0)</li> </ul> | July 06, 2015 4:10 PM |             |
|                                 |                       | Cancel Done |

The **App Review Information** requires contact information, and some information about your app to guide reviewers. Remember, everyone on iTunes can review your app, so it's in your best interest to be helpful. You may optionally provide a login for a demo account.

App Review Information

| Contact Information                              |                            | Notes ?  |  |
|--|----------------------------|--|--|
| Carla  | Schroder                   | Features include instant upload, sync, share, customizable |  |
| Phone number                                     | contact@mybiz.com          | sync, and image previews.                                  |  |
|  |                            |  |  |
| Demo Account ?                                   |                            |  |  |
| demo@mybiz.com                                   | guest                      |  |  |
| Phone number<br>Demo Account ?<br>demo@mybiz.com | contact@mybiz.com<br>guest | sync, and image previews.                                  |  |

The **Version Release** section allows you to choose between automatic release, which means your app will be published upon approval, or manual release, where you must release your app after it is approved.

# Pricing

Next, you must go to the **Pricing** page to set your price, and to select the territories you want your app to be available in.

| MyBiz IOS App - Rights and Pricing   |                      |                |  |  |
|--|----------------------|----------------|--|--|
| Select the availability date and price tier for your app.  |                      |                |  |  |
| Availability Date 07/Jul v 8 v 2015 v ?  |                      |                |  |  |
| Price Tier   | Free                 |                |  |  |
| Price Tier Effective Date Now V Now V ?  |                      |                |  |  |
| Price Tier End Date  | None v None v ?      |                |  |  |
| Price Tier Schedule  |                      |                |  |  |
| Price Tier   | Price Effective Date | Price End Date |  |  |
| Free   | Existing             | None           |  |  |
| Discount for Educational Institutions  (?) Select the App Store Volume Purchase Programs in which you want to make your app Select All Deselect All Deselect All Deselect All Deselect All |                      |                |  |  |
| App Store territories worldwide.   |                      |                |  |  |

# **Submit For Review**

When you have filled in all the required forms and provided the required screenshots, click **Save** and then **Submit for Review**. If anything needs to be corrected you will see messages telling you exactly what must be fixed.

The next screen is legalese; click the appropriate Yes or No boxes, and then click the **Submit** button.

You are now finished. No really, you are. When you return to your **My Apps** page you'll see that the status of your app has changed to "Waiting for review". In a few days, or perhaps many days, your app will either be approved or rejected. If it is rejected Apple will tell you what you need to do to get it approved.

# FAQ

Here are the most common answers to questions from the iOS App Review Team.

# iTunes Connect My Apps ~





1.0 Waiting For Review

When, at last, it is published on iTunes you may distribute the URL so that your users may install and use your app.

# **Additional Server Configuration**

# Add Support for Apple Universal Links

#### What is Universal Links?



When you support universal links, iOS users can tap a link to your website and be seamlessly redirected to your installed app, without going through Safari. If your app isn't installed, tapping a link to your website opens your website in Safari. For more details, see <u>Support Universal Links</u>.

There's some special changes that need to be made. Quoting from Apple's official documentation on Universal Link Support:

Adding support for universal links is easy. There are three steps you need to take:

- 1. Create an apple-app-site-association file that contains JSON data about the URLs that your app can handle.
- 2. Upload the apple-app-site-association file to your HTTPS web server. You can place the file at the root of your server or in the .well-known subdirectory.
- 3. Prepare your app to handle universal links.

The apple-app-site-association data is generated by ownBrander and must be served statically over HTTPS.



You can safely place it in the root folder of your ownCloud installation (e.g., /var/www/owncloud).

#### What is apple-app-site-association?

The apple-app-site-association directory is either a subdirectory of your ownCloud URL or of the /.well-known/ directory, and **must** be served over HTTPS. Data generated by ownBrander is accessed via this subdirectory.



The name "apple-app-site-association" is mandatory.

The file which gets accessed when using this subdirectory is also named apple-app-site-association without any extension. When this subdirectory is accessed, the web server must set the content type to application/json. The physical path used when accessing this directory must be defined in your web server config. In the examples below, the path for the file is /var/www/owncloud/.



When using a physical path to the file inside your ownCloud directory, this file must be present when you upgrade ownCloud, or you chose a different path outside the ownCloud root.

#### **Apache Configuration**

To achieve the second requirement, some changes will also need to be made to your Apache configuration. If you configured your installation with the official Admin Manual, your Apache owncloud.conf file must include the following:

```
# Create an alias for the file (for compatibility reasons):
AliasMatch "^/(\.well-known/)?apple-app-site-association$" "/var/www/owncloud/apple-
app-site-association"
<Directory /var/www/owncloud/>
Options +FollowSymlinks
AllowOverride All
# Set the right mime-type for the file:
<Files apple-app-site-association>
Header set Content-type "application/json"
</Files>
[...]
</Directory>
```



See the AliasMatch documentation for more details

Also, a new RewriteCond directive, included in the code block below, needs to be included in your .htaccess (or VirtualHost configuration), so that no other redirections will apply to any of these two paths.

```
RewriteCond %\{REQUEST_URI} !^/(.well-known/)?apple-app-site-association$
```

#### **NGINX Configuration**

For NGINX, the directives to be added are:

```
location ~* ^/(\.well-known/)?apple-app-site-association {
    # uncomment and update the root configuration line below,
    # in case the path to your ownCloud installation is in a different location.
    # root '/var/www/owncloud';
    default_type 'application/json';
}
```



If you're behind a firewall, additional access rules will be required to whitelist the URLs.

# FAQ iOS App Review Team

Information from Apple: https://developer.apple.com/support/app-review/

# The product contains cryptography, and whether it classifies for export exemptions.

No, the product does not contain cryptography. Although the app is ready to connect via SSL, this does not imply that the app includes any cryptography

# How does the app utilize Document Picker and File Provider extensions?

The ownCloud app takes advantage of the Document Provider extensions so that those apps that act as Document Picker may access to the ownCloud data, edit it and then changes are automatically uploaded back to the ownCloud server.

# **Background Audio**

#### **Questions:**

- What is the purpose of declaring Audio background mode? Please explain the need for this background mode and where the usage can be found in your binary.
- Your app declares support for audio in the UIBackgroundModes key in your Info.plist but did not include features that require persistent audio. The audio key is intended for use by applications that provide audible content to the user while in the background, such as music player or streaming audio applications. Please revise your app to provide audible content to the

user while the app is in the background or remove the "audio" setting from the UIBackgroundModes key.

#### Answer:

Sometimes, usually, the first time the ownCloud app is submitted, it is rejected because it is included the background mode, Apple rejected it because in the past some apps used this trick to avoid the app to be fully closed. Howerver, the ownCloud app used it only when music is played. This may be checked by Apple reviewers, what we suggest is to be proactive, instead of waiting for the app to be rejected because of that, adding an explanation line, something such as: You may notice that the app is ready to play music not only in foreground but also in background, for you to test it we have uploaded to the test account the file XXX

# Content Rights - Does your app contain, display, or access third-party content?

If the branded app has the help option enable, the answer is yes. Within the help, we are having access to an external web Otherwise, no

# Does this app use the Advertising Identifier (IDFA)?

No, no ads at all

# **IPv6 Connectivity**

#### **Question:**

We discovered one or more bugs in your app when reviewed on the iPad and the iPhone running iOS 10.2 on Wi-Fi connected to an IPv6 network -Specifically, the app does not connect to the server.

InformationfromApple:https://developer.apple.com/library/content/documentation/NetworkingInternetWeb/Conceptual/NetworkingOverview/UnderstandingandPreparingfortheIPv6Transition/UnderstandingandPreparingfortheIPv6Transition.html

Here you can check your server for IPv6 connectivity: http://ipv6-test.com/validate.php

# **Business questions from Apple**

- Does your app access any paid content or services?
- What are the paid content or services, and what are the costs?
- Who pays for the content or services?
- Where do they pay, and what's the payment method?
- If users create an account to use your app, are there fees involved?
- How do users obtain an account?

This is a standard question Apple has to avoid iTunes circumvention as for some stuff they want the 30% revenue share. (see In-App Purchase: https://developer.apple.com/in-app-purchase/)

[1] https://developer.android.com/guide/app-bundle

[2] https://android-developers.googleblog.com/2021/06/the-future-of-android-app-bundles-is.html