



Caixa Mágica

Aptoide Server Installation Guide

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[AD 1]Introduction

In this file, we will give a full example on how to create an “Aptoide repository”, based on our script – generate.ph – available in our web site: <http://aptoide.com>.

This document is a full overview of the installation, configuration of all the tools needed and the generation of the **info.xml** file.

Bare in mind, that you may create your repository in a number of other ways, provided that you follow the rules presented in the “XML File Definition” - also available in our web site.

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[AD 2]What do you need

In order to use our **generate.ph** script, you will need a server that can be accessible through the web running some Linux distribution.

Although you may use any other Operating System (OS) to create an Aptoide repository, in this approach, our script file uses some Linux specific commands.

[AD 1]Linux + Apache + PHP

You will also need Apache and the PHP shell client. Most servers have some sort of LAMP install, and that is just about what you need. No specific configurations in the Apache are needed.

The major difference is PHP shell client. The **generate.ph** file, is a script file coded in php. For you to run it, you need to execute it on a shell. More information on it can be found on <http://php.net/manual/en/features.commandline.php>.

[AD 2]Unizp

To get information out of the applications *.apk's, you will also need 'unzip' installed on your system. It should be installed in a way that it can be called in the directory that the script will be run.

[AD 3]Generate.ph and Google/Android aapt

If you were lucky, most of the requirements talked above, are already present in your system. To complete all the tools needed, you must get the **generate.ph** script from our site – go here: http://aptoide.com/srv_install.html – and the **aapt** tool.

The **aapt** tool is a part of the Google/Android SDK. It is used for many tasks, but in our case, we will use it to get informations from the applications. You may get the Google/Android SDK in their web site – <http://developer.android.com/sdk/index.html> – or, for convenience, you can get just the **aapt** tool here: http://aptoide.com/srv_install.html.

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[AD 3] Configuration

[AD 1] Linux + Apache + PHP

There are no specific configuration requirements for Linux, Apache and PHP client. The standard configuration files should be enough.

You just need to create a directory for your repository. As an example, say you have a web server, accessible through <http://myrepo.com>. That will put you in the server directory `/var/www/http`. Just put the apk's form the applications you want to distribute in there.

[AD 2] Unzip

The only extra configuration you need for the unzip tool is that it is accessible to run from the place were you will put your **generate.ph** file. Most of the time it will be configured by default. If not, change your **\$PATH** to it.

[AD 3] Generate.ph

This is the tool that will in fact “create” your repository. It is advised that it is in a different directory from the repository.

Open the **generate.ph** file and change the **\$DIR** variable to where your repository will be. To match the example above, your repository will be in `/var/www/html`, so it should look something like this:

```
#!/usr/bin/php -q
<?
/*
 * Directory where apk's are stored
 */
$DIR = "/var/www/html";
$ICON_DIR_OUT = "icons/";
$ICON_DIR = $DIR.$ICON_DIR_OUT;
$xml_path = $DIR."info.xml";
/*****/

exec('rm ' . $DIR . '*.xml');
exec('rm -rf ' . $ICON_DIR);
exec('mkdir ' . $ICON_DIR);
```

Don't forget to add the last "/" on the path.

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You should also make sure that the path to the php shell client is correct!

In the above picture, you can see that it starts with: “#!/usr/bin/php -q”. This is the path to the php client. Most standard installations put it there. You can see that by typing: “which php” and compare the results.

```
[root@smaug aptoide]$ which php
/usr/bin/php
```

If the output is different, change the file accordingly.

One final thought, make sure the script file is executable. You can force it by typing: “chmod +x generate.ph”.

[AD 4]Google/Android aapt

There is not much to say about this tool. It is pre-compiled and should be ready to run without further needs.

Make sure it's in the same directory as the **generate.ph** script file.

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[AD 4]Deploy it !

If you follow every topic, now you should have your **generate.ph** file and your **aapt** file in one directory, and all the *.apk files in your web server directory. You have also changed the **\$DIR** variable in the script file to your web server directory.

The last thing to do is running the **generate.ph** file!

Just do the comand bellow and hit enter:

```
[.....@smaug aptoide]$ ./generate.ph
```

If every thing went ok, you should see something like the picture below, were a debugging output will be present.

```
Name: Flashlight
Icon: res/drawable/icon.png
Icon(L): icons/android.flashlight
Date: 2009-11-20
=====

APK: icons
APK: Lunar_Lander.apk
Package (hasID): com.example.android.lunarlander
Version: 1
Name: Lunar Lander
Icon: res/drawable/app_lunar_lander.png
Icon(L): icons/com.example.android.lunarlander
Date: 2009-11-20
=====

APK: OI_Flashlight_1.0.2.apk
Package (hasID): org.openintents.flashlight
Version: 1.0.2
Name: OI Flashlight
Icon: res/drawable/icon_flashlight.png
Icon(L): icons/org.openintents.flashlight
Date: 2009-11-20
=====

APK: Snake.apk
Package (hasID): com.example.android.snake
Version: 1
Name: Snake
Icon: res/drawable/app_snake.png
Icon(L): icons/com.example.android.snake
Date: 2009-11-20
=====

APK: Widget.apk
Package (hasID): com.test.widget
Version: 1.0
Name: Widget
Icon: res/drawable/icon.png
Icon(L): icons/com.test.widget
Date: 2009-11-23
=====

XML FILE SUCCESSFULLY CREATED!
[.....@smaug aptoide]$
```

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The output you see, is the information collected by the script for every application present.

When it ends, you will see a new file on your repository: the **info.xml** file!

That is the file the Aptoide client will fetch and use to get applications from your repository.

You are now ready to give your server address to everyone.

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[AD 5]Common problems

[AD 1]The generate.ph script don't run

First make sure you have PHP client installed. You can get information about it in <http://www.php-cli.com/>. If you have PHP version > 4.3.0 it should be installed by default.

Try typing “php - -version”. You should get something like below:

```
[root@smaug aptoide]$ php --version
PHP 5.2.4 with Suhosin-Patch 0.9.6.2 (cli) (built: Jun 27 2008 15:21:19)
Copyright (c) 1997-2007 The PHP Group
Zend Engine v2.2.0, Copyright (c) 1998-2007 Zend Technologies
with Suhosin v0.9.20, Copyright (c) 2002-2006, by Hardened-PHP Project
```

Next try the “which php” command, and see if the output matches the path in your generate.ph file.

```
[root@smaug aptoide]$ which php
/usr/bin/php
```

[AD 2]The generate.ph give me erros

Depending on the error, one of the following should be the answer:

- **Unzip failed**

If you have unzip installed, you have to make sure it can be called in the same place were the script file is. On the directory where you have the generate.ph file, type “unzip -v”. You should get something like:

```
[root@smaug aptoide]$ unzip -v
UnZip 5.52 of 28 February 2005, by Info-ZIP. Maintained by C. Spieler. Send
bug reports using http://www.info-zip.org/zip-bug.html; see README for details.

Latest sources and executables are at ftp://ftp.info-zip.org/pub/infozip/ ;
see ftp://ftp.info-zip.org/pub/infozip/UnZip.html for other sites.

Compiled with gcc 4.2.2 20070909 (prerelease) (4.2.2-0.RC.lmdv2008.0) for Unix (Linux ELF) on Sep 16 2007.

UnZip special compilation options:
COPYRIGHT_CLEAN (PKZIP 0.9x unreducing method not supported)
LZW_CLEAN (PKZIP/Zip 1.x unshrinking method not supported)
SET_DIR_ATTRIB
TIMESTAMP
USE_EF_UT_TIME
USE_DEFLATE64 (PKZIP 4.x Deflate64(tm) supported)
VMS_TEXT_CONV
[deCrption, version 2.9 of 05 May 2000]

UnZip and ZipInfo environment options:
UNZIP: [none]
UNZIPOPT: [none]
ZIPINFO: [none]
ZIPINFOOPT: [none]
```

If you get a “command not found” but are sure you have installed it, add it's path to your system \$PATH .

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- **Don't have permission to write file / create directory**

When you run the **generate.ph** script, it will create a “.tmp” directory inside the directory it was run. This directory will be deleted after the script ends, and is used to allocate some application files – the icons for example.

You have to give permission to it to write. The simplest way is to make the directory were the file is, of type +W, or in a more restrictive way, only writable to the user who runs the script.

The script will also create the “icons/” directory on your repository root directory – e.g. in your web server root directory /var/www/http.

As before, you have to make sure it can write in there.

- **aapt not found**

The Google/Android tool **aapt** must be in the same directory as the **generate.ph** script.

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[AD 6]Didactic Example

This is a step-by-step example. We will create an repository and publish it.

Let's assume we have a server machine that can be accessible through <http://aptrepo.com>.

That link, points the Apache server root directory: `/var/www/http`.

We will copy **generate.ph** and **aapt** tool to that directory.

Next, we'll create a new directory inside the first one, and call it **repo**. Every *.apk file we want to distribute will be put inside it.

Next, we open **generate.ph** file, and change the **\$DIR** variable to `"/var/www/http/repo"`.

To finish, just run the **generate.ph** script file - `./generate.ph` – and the **info.xml** will be created inside the repo directory.

Publish your Aptoide repository as: `"http://aptrepo/repo"`.