TerraMaster APP Packaging Guide

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This guideline is applicable to pack APP installation packages based on x.86_64 and ARM_V8 platforms. The installation package is a file with extension .tpk.

Before you start, download the APP packaging tool named TerraMaster_APP_package_tools.zip from the TerraMaster official website. This tool can only be run under the x.86 environment.

1、Directory Structure Description

After downloading the APP packaging tool, decompress it. The following is the function description of the file directory after decompression.

Note: The directory structure and name can not be modified, otherwise the packing works may fail.

```
 1.   .
 2.   ├── amd_apps        #store your app code here
 3.   │   └── APP_ID       #name your app ID
 4.   │       ├── config.ini     #app desktop configuration
 5.   │       ├── etc
 6.   │       │   └── init.d
 7.   │       │       └── APP_ID     #app starting shell script
 8.   │       ├── APP_ID.lang        #app language config
 9.   │       ├── usr
10.   │       │   ├── local
11.   │       │   │   └── APP_ID      #app main directory
12.   │       │   └── www            #store app entrance webUI here
13.   │       │       ├── css
14.   │       │       │   └── APP_ID    #app style directory
15.   │       │       ├── images
16.   │       │       │   ├── APP_ID    #app icons directory
17.   │       │       │   └── icons
18.   │       │       │       └── APP_ID.svg  #app main icon，max 150x120 pl
19.   │       │       ├── include
20.   │       │       │   └── class
21.   │       │       │       └── APP_ID.class.php
22.   │       │       ├── js
23.   │       │       │   └── APP_ID
24.   │       │       └── mod
25.   │       │           └── 4.Application
26.   │       │               └── number.APP_ID.php  #app home page，(number >100 )
27.   │       └── version        #app version
28.   ├── arm_apps           #store ARMv8 app code
29.   ├── install-amd64        #x.86 platform installer, cannot be deleted!
30.   ├── install-arm64        #arm platform installer, cannot be deleted!
31.   ├── makeapp
32.   ├── phpencode
33.   │   └── screw
34.   └── TerraMaster_APP_packaging_guide_en.pdf
```

2、Packing Guide

Please strictly pack your application according to the following guidelines, otherwise, the packing may fail!

2.1、 Preparation

Give your APP an APP_ID (without special characters and spaces), such as skycloud.

The following uses the x.86_64 platform as an example to explain the APP source directory structure:

> Create a directory named APP_ID under the amd_apps directory.

```
1.  cd amd_apps/
2.  mkdir  APP_ID
```

Store the (x.86_64) source code in the amd_apps / APP_ID directory.
Go to APP source code directory

```
1.  cd APP_ID
```

In this directory, create three files : config.ini, APP_ID.lang, version
Fill in the APP version number in the version file, such as: 1.0.1

config.ini content format description:

```
1.   {
2.      "path": "/module/?mod=4.Application/number.APP_ID.php&t=0",
3.      "id": "APP_ID",     #app ID
4.      "exec": 1,         #applications with startup scripts value must be 1, otherwise 0
5.      "hideTitle": 1,    #menu default configuration hide title
6.      "width": 900,       #menu width
7.      "height": 580,      #menu height
8.      "icon": "/images/icons/APP_ID.svg",     #icon display on TOS desktop
9.      "content": "core.appNormal();"      #default item,don't need to modify
10.   }
```


APP_ID.lang content format description：

```
1.   [en-us] #English
2.   name = "APP title"        #app title
3.   auth = "TerraMaster"       #app developer
4.   version = "1.0.1"           #app version
5.   descript = ""             #app description
6.
7.   [zh-cn] #Chinese simplied
8.   ...
9.   [zh-hk] #Chinese tranditional
10.  ...
11.  [de-de] #German
12.  ...
13.  [fr-fr] #Franch
14.  ...
15.  [ja-jp] #Japanese
16.  ...
17.  [ko-kr] #Korean
18.  ...
19.  [es-es] #Spanish
20.  ...
21.  [it-it] #Italia
22.  ...
23.  [hu-hu] #Hungrian
24.  ...
25.  [pl-pl] #Polish
26.  ...
27.  [tr-tr] #Turkish
28.  ...
```

If your APP needs to start the daemon, create a startup script under etc / init.d /, refer to the APP_ID template to write:

```
1.    mkdir -p etc/init.d
2.    cd etc/init.d
3.    touch APP_ID
4.    chmod +x APP_ID
5.    cd ../../
```

Store your APP main program in the usr/local/APP_ID directory

```
1.    mkdir -p usr/local/APP_ID
```

Store the APP entrance interface under the directory usr/www/mod/4.Application/

```
1.    mkdir  -p  usr/www/mod/4.Application
2.    cd  usr/www/mod/4.Application
3.    touch  100.APP_ID.php
4.    cd  ../../../../
```

So far the basic preparation work is completed.

2.2、 Pack Your APP

Return to the root directory of the toolkit.

```
1.    cd   TerraMaster_APP_package_tools/
2.    ./makeapp  amd_apps/APP_ID
```

Under dist/amd_apps/, a .tpk application package starting with APP_ID will be generated.

2.3、 Install Your APP

After the package is completed, install and run it in the TOS to verify whether the package is working properly.

To install your app, go to TOS Desktop > Application Center > Settings, select "Manual Installation", select the installation package, and click OK.

--END--