The Automated Build System

If you are building your own ROOter images there is automated build script available that will build images for a predefined number of routers using just one line in the Terminal.

You can also use the predefined config files of a router to create a custom image with extra packages not found in a standard ROOter. These custom images are created from the template config file for the router so all that is needed is to add the extra packages of your choice. This custom config file in no way will change the template config file so it is safe to make changes to your custom config file.

In order to use this automated build system it is necessary to install another package on your Linux computer. This is a package called **jshon** and can be installed from the Software Manager or from the Terminal command line.

To install from the Terminal enter :

sudo apt-get install jshon

The web site for this package is **http://kmkeen.com/jshon/**

Using the Build Script

This script is run from the Terminal as follows.

To see the help and a list of routers that are supported by the automated build system enter :

./build

This will output information about using the build script and a list of supported routers.

Usage : <router name> [flag config name]

<router name> is one of the names in the following list
[flag config name] are optional for working with custom config file for this router
[flag] : -e create or edit a custom config file
-eb create or edit a custom config file and then build the image
-b build an image using the custom config file
[config name] : name given to a custom config file for this router
if this config file does not exist then the template
config file will be used to create it

Supported Models are :

ALIX-2D13	*APU2C4*	*ARCHERA7V5*	*ARCHERC7V2*
ARCHERC7V4	*ARCHERC7V5*	*ARCHERC20V1*	*AR150*
AR300LITE	*AR750*	*AR750S*	*B1300*
GLMIFI	*MR3020V3*	*MYNET-N600*	*MYNET-N750*
R6220	*R7800*	*RASPPI*	*RASPPI2*

RASPPI3	*RBM11G*	*RBM33G*	*RT-AC58U*
SMARTBOXPRO	*TURBOPLUS*	*TURBOMODPLUS*	*WE826Q*
WE826T	*WE826WD*	*WG1602*	*WG209*
WG3526	*WRT1900AC*	*WRT1900ACS*	*WRT3200ACM*
WRT32X	*X750*	*X86-64*	*XMIFI3PRO*

To build a standard ROOter image for a router you enter :

./build *modelname*

where ***modelname*** is one of the names in the above list. The name can be in either upper cas or lowercase as it makes no difference.

This will build all the images needed for this router and will add the extra files needed to perform the flash. The archive file will be placed in the **images** folder.

Two sets of images are included in the archive file, images **with Load Balancing** and images **without Load Balancing**. Not all routers will have both sets of images as those with 8meg of flash do not have enough space and some have it by default.

Those images that have **-full** in their name are the ones with Load Balancing. This allows you to chose if you want Load Balancing or not.

To build images for all of the supported routers you enter :

./build *ALL*

This is not reccomended as a regular practice as it will take a long time to build all the images.

Creating Custom Images

If you wish to create a custom image for a router that contains extra packages not found in a standard ROOter you need to create a **custom config file** for this router. Each router can have as many custom config files as you like as long as they have different names.

Custom config files are created for a specific router and, upon creation, will contain the config file for the standard ROOter image for this router. To create and edit or edit an existing custom config file enter :

./build *modelname -e customname*

where ***modelname*** is the name of a router from the above list and **customname** is the name of your custom config file. All changes made to the custom config file will have no effect on the standard config file for this router. The changes are only in the custom config file.

To create a custom config file for an **Archer C7v5** named **custom-c7v5** you would enter :

./build archerc7v5 -e custom-c7v5

If the config file named **custom-c7v5** does not exist it will be created from the standard ROOter config file for the **Archer C7v5**. Changes are made to the config file by using the normal **OpenWrt Configuration program**, which is invoked normally by running **make menuconfig**.

The above command will only allow you to create and edit the custom config file. If you wish to creste/edit a custom config file and then build an image from it you would enter :

./build archerc7v5 -eb custom-c7v5

If you wish to just build an image from an existing custom config file enter :

./build archerc7v5 -b custom-c7v5

If the custom config file does not exist it will be created first and populated from the standard ROOter config file for this router.