

IoT: Client Devices

Networking Support and Buildroot

Remember to save your .config files!

Networking

```
[ ] freeradius-client
[ ] geoip
    *** glib-networking needs a toolchain w/ wchar, threads ***
    *** gssdp needs a toolchain w/ wchar, threads ***
    *** gupnp needs a toolchain w/ wchar, threads ***
    *** gupnp-av needs a toolchain w/ wchar, threads ***
    *** gupnp-dlna needs a toolchain w/ wchar, threads ***
    *** ibrdcommon needs a toolchain w/ C++, threads ***
    *** ibrdtn needs a toolchain w/ C++, threads ***
[ ] libcgi
    *** libcgicc needs a toolchain w/ C++ ***
[ ] libcoap
[*] libcurl
[*] curl binary
[ ] libdnsmasq
[ ] libexosip2
[ ] libfcgi
[ ] libgsasl
[ ] libhttpparser
```

libcurl

Target packages -> Libraries -> Networking

libcurl and curl

WHY LIBCURL?

- ▶ Networking library
- ▶ Well supported and documented

WHY CURL?

- ▶ *Now we're making development changes!*
- ▶ We'll want to remove curl prior to deployment
- ▶ Very useful for network testing though

Build and Test Image

POST-BUILD CHANGES

- ▶ Add user account via **adduser**
 - ▶ **\$ adduser -h /<home_dir> -s /bin/sh <username>**
- ▶ Edit /etc/shadow for new account
 - ▶ <user>:\$1\$Cw/pSYOL\$16H24pCAifdyol19oRE1n1:**10933**:0:99999:7:::
- ▶ Test login
 - ▶ **\$ ssh -p 2222 <user>@localhost**

```
[ $ which curl
/usr/bin/curl
[ $ ls /usr/lib
libcrypto.so      libcurl.so.4      libssl.so.1.0.0   libz.so.1.2.8
libcrypto.so.1.0.0 libcurl.so.4.4.0  libz.so
libcurl.so        libssl.so         libz.so.1
$
```

Take a Look Around

We have both `/bin/curl` and `/usr/lib/libcurl.so`