

OpenWRT 22.3.0 编译N2N

来源: 本站 添加时间: 2022-05-02 点击:

现有两台斐讯K2G（联发科MIPS架构），已刷入Openwrt 22.3.0系统，需要安装n2n 测试基于p2p的vpn。最老的版本系统安装源自带n2n包，通过opkg install n2n即可安装，新版本openwrt已经没有n2n包了，需要手动编译。编译有两种方式 本地编译（在openwrt系统中编译，需要在openwrt中安装开发包，这个对存储空间要求大，k2g路由器只有8M的flash），交叉编译（在X86平台上通过SDK包编译软件后上传至Openwrt系统中进行安装）

先提供下载地址

openwrt 官网 <https://www.openwrt.org>

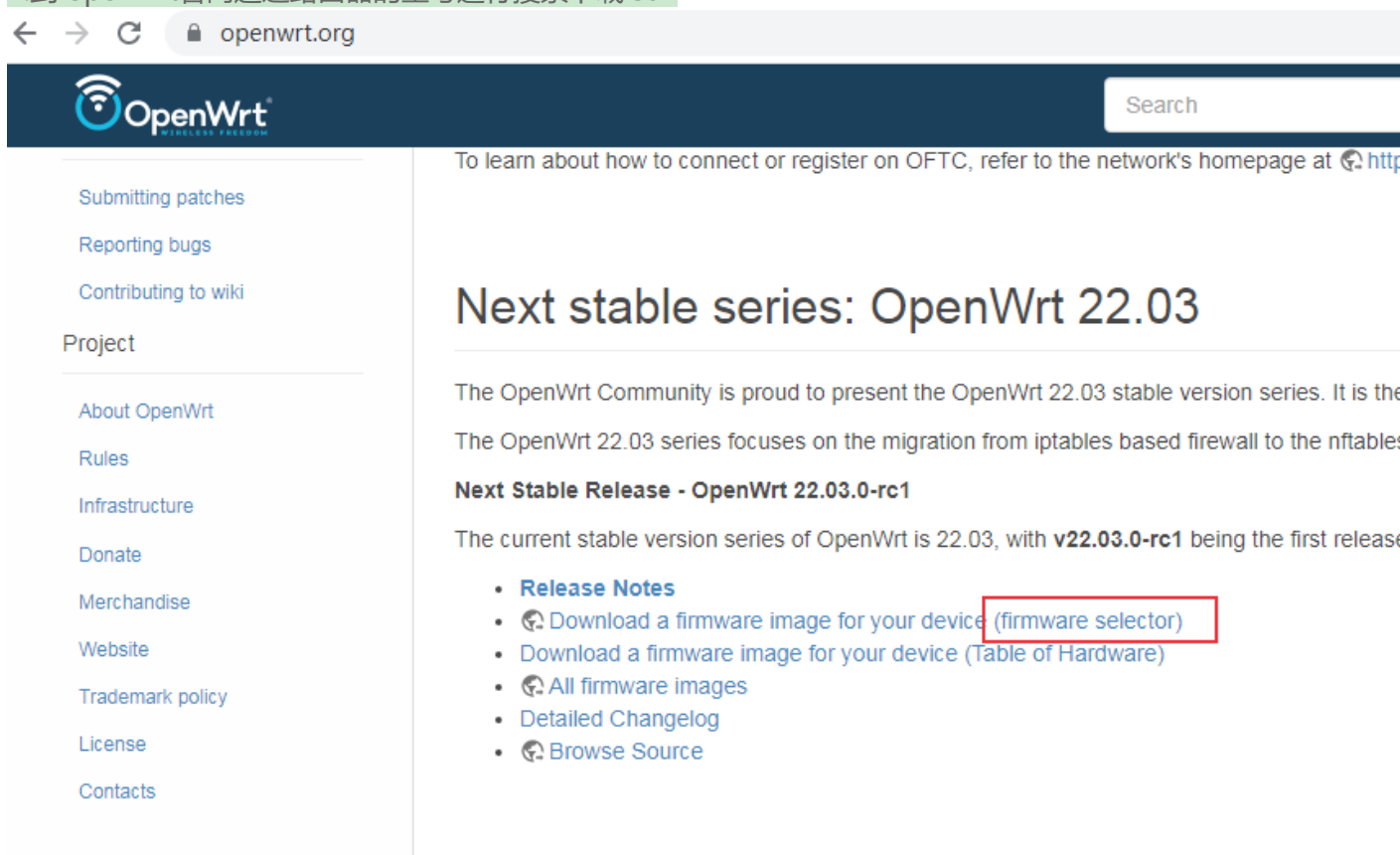
openwrt 官网编译指南 <https://openwrt.org/docs/guide-developer/toolchain/install-buildsystem>

清华大学镜像源 <https://mirrors.tuna.tsinghua.edu.cn/>

n2n github 官网仓库 <https://github.com/ntop/n2n/>

n2n-2.8 官方编译说明<https://github.com/ntop/n2n/tree/2.8-stable/packages/openwrt>

1.到 openwrt官网通过路由器的型号进行搜索下载 sdk



← → ↻ 🔒 openwrt.org

OpenWrt
WIRELESS FREEDOM

Search

To learn about how to connect or register on OFTC, refer to the network's homepage at [http](http://www.openwrt.org)

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Next stable series: OpenWrt 22.03

The OpenWrt Community is proud to present the OpenWrt 22.03 stable version series. It is the

The OpenWrt 22.03 series focuses on the migration from iptables based firewall to the nftables

Next Stable Release - OpenWrt 22.03.0-rc1

The current stable version series of OpenWrt is 22.03, with **v22.03.0-rc1** being the first release

- [Release Notes](#)
- [Download a firmware image for your device \(firmware selector\)](#)
- [Download a firmware image for your device \(Table of Hardware\)](#)
- [All firmware images](#)
- [Detailed Changelog](#)
- [Browse Source](#)

1.2下个页面输入设备型号，选择可用系统版本



下载适用于您设备的OpenWrt固件

输入设备的名称或型号, 然后选择推荐的内部版本或其他名称.

k2g 21.02.3

Phicomm K2G

文件夹 | 反馈 | OFS v3.8.0

1.3通过下面这个链接下载 sdk包

下载适用于您设备的OpenWrt固件

输入设备的名称或型号, 然后选择推荐的内部版本或其他名称.

Phicomm K2G

21.02.3

关于构建

型号: Phicomm K2G

平台: ramips/mt7620

版本: 21.02.3 (r16554-1d4dea6d4f)

日期: 2022-04-18 18:57:47

链接:

通过这个链接下载sdk包更准备

下载映像



具有最少文件系统的Linux内核. 对于首次安装或恢复很有用.
sha256sum: 7e3e5f9639596773ff7c93447d5b86303088e77a0d3edee7eac9cfa277a677e0

1.4复制下面这个链接，下载到编译平台（Centos 8 Stream）

downloads.openwrt.org/releases/21.02.3/targets/ramips/mt7620/

zyxel_keenetic-omni-ii-squashfs-sysupgrade.bin	fcf1e81537de413f390c54a87532b90419691572761110
zyxel_keenetic-omni-initramfs-kernel.bin	2979af81a4a5d7c92290473cdcee6dfd86ba6cda3cc2ec
zyxel_keenetic-omni-squashfs-factory.bin	2eb68eeaf28969210c0a2563b96f1289f84dac1d35f89a
zyxel_keenetic-omni-squashfs-sysupgrade.bin	abd562525f71948fb6610594e40b9526c184a2f217fd97
zyxel_keenetic-viva-initramfs-kernel.bin	25246c52c0e6dd57983a587e1edd163f84761d817ecb51
zyxel_keenetic-viva-squashfs-factory.bin	eaf2668940d7c657316ca114dce9716bf88ee13b88bbbe
zyxel_keenetic-viva-squashfs-sysupgrade.bin	e07a2292d5e6edc8b6bff1f578d77399ba76a269537be7

Supplementary Files

These are supplementary resources for the ramips/mt7620 target. They include build tools, the imagebuilder, sha2

Filename	sha256sum
kmods/	-
packages/	-
config.buildinfo	a7b825a4ff4182ebfcf4e698328086
feeds.buildinfo	88e761c91c696aee6cb67cdb95f25c
kernel-debug.tar.zst	2161e76f73fb48a5300f1a2258822a
openwrt-21.02.3-ramips-mt7620.manifest	eee6d7d63673fb92799a3f9eb1d908
openwrt-imagebuilder-21.02.3-ramips-mt7620.Linux-x86_64.tar.xz	0c83caa21c1147c7ed946780392c37
openwrt-sdk-21.02.3-ramips-mt7620_gcc-8.4.0_musl.Linux-x86_64.tar.xz	2f84c2d64ac70a1c54ec5e51ac95b4
profiles.json	0b90da27e45fb87460f9836bf61639
sha256sums	-

如果下载速度慢，就到清华大学镜像源下载，到相同的目录下载防止下载错误

1.6 在centos 8 /root目录下 解压 该sdk包

#tar -xvf openwrt-sdk*

2.1安装Cenotos平台基本编译工具，ubuntu也有相应的说明

参照:https://openwrt.org/docs/guide-developer/toolchain/install-buildsystem

执行以下命令

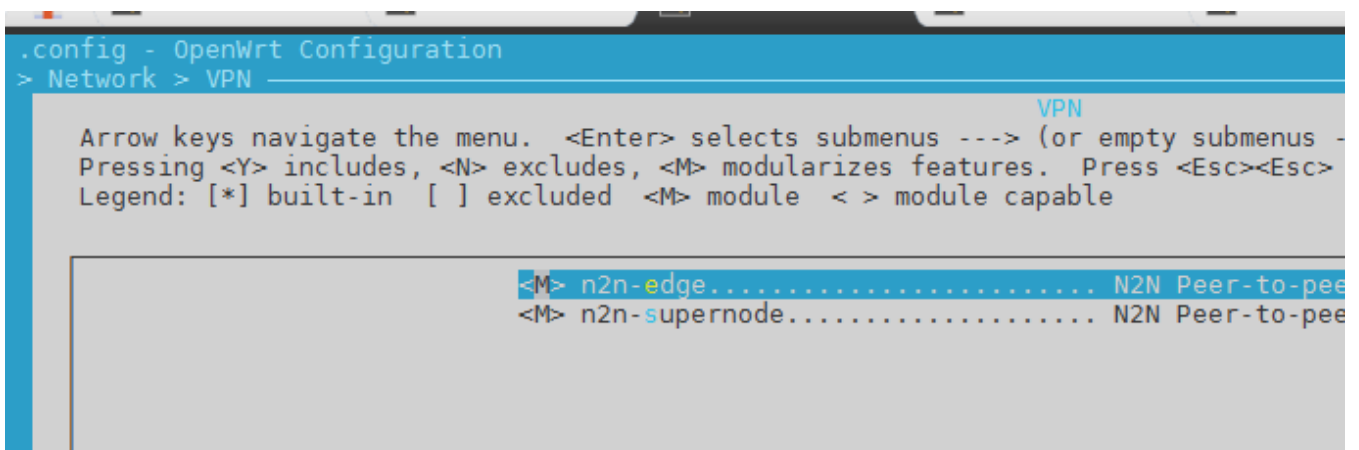
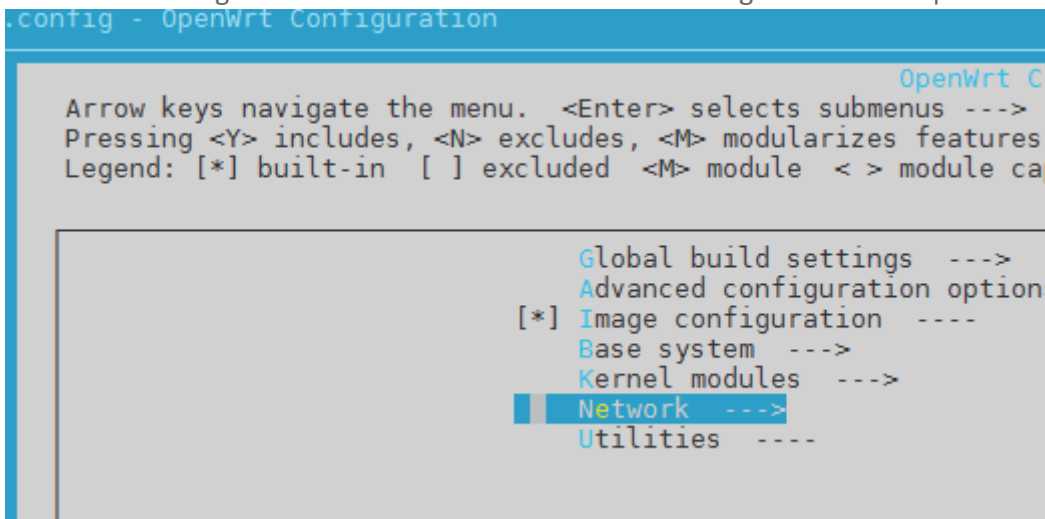
```
sudo dnf --setopt install_weak_deps=False --skip-broken install
bash-completion bzip2 gcc gcc-c++ git make ncurses-devel patch
rsync tar unzip wget which diffutils python2 python3 perl-base
perl-Data-Dumper perl-File-Compare perl-File-Copy perl-FindBin
perl-Thread-Queue
```

2.2 sdk目录下 更新feed,下载n2n 并且拷贝openwrt平台源码到 sdk目录下

```
./scripts/feeds update -a
git clone https://github.com/ntop/n2n n2n
cp -r n2n/packages/openwrt package/n2n
```

2.3 通过make命令选择需要编译的软件包，并保存（M代表选择，package下有n2n文件夹，系统默认就是选择的

make menuconfig # select Network -> VPN -> n2n-edge and n2n-supernode



光标移至Save 回车保存

2.4正式编译 V=s 表示多线程编译

```
make package/n2n/compile V=s
```

2.5 编译结果无错误说明编译成功，即可搜到生成的ipk文件

```
find . -name 'n2n*ipk'
```

2.6把搜到的n2n ipk包复制到目标系统进行安装

2.7安装n2n ipk时可能提示以下错误，是因为缺少依赖包

Unknown package 'n2n-edge'.

Collected errors:

```
* pkg_hash_check_unresolved: cannot find dependency kmod-tun for n2n-edge
* pkg_hash_check_unresolved: cannot find dependency resolveip for n2n-edge
* pkg_hash_check_unresolved: cannot find dependency libopenssl for n2n-edge
* pkg_hash_fetch_best_installation_candidate: Packages for n2n-edge found, but incompatible
with the architectures configured
* opkg_install_cmd: Cannot install package n2n-edge.
```

解决办法:

opkg update #如果这一步提示错误，反复尝试，或者切换国内镜像源后重试

opkg install kmod-tun

opkg install resolveip

opkg install libopenssl

2.8 openwrt平台安装好 n2n后，配置文件再/etc/n2n/edge.conf 。启动方式 /etc/init.d/edge start

编译问题FAQ:

1.Centos8上下载资源文件太慢，解决方法：通过socks5全局代理或者vpn

2.编译失败，删除sdk目录，重新解压再操作

3.斐讯K2G使用22.3.0版本容易出现重启后配置丢失，lan口地址获取不到ip等

4.高版本sdk编译的ipk包，可以在较近的低版本中使用，如22.3编译的19.7版本实际测试可用

n2n-2.8适合斐讯k2g固件（openwrt mips平台）点击下载