



Making a new Port





What is FreeBSD ?

- UNIX-like operating system descended from Research Unix via the Berkeley Software Distribution (BSD)
- Based on 4.4BSD-Lite
- Complete operating system
- Complete documentation
- More than 34399 ports package
- Open source project with big community





Tools for make a port

Minimum for make a port

- `ports-mgmt/porttools`
- `ports-mgmt/portlint`
- `ports-mgmt/poudriere`



Skeleton of makefile

- **port create** name_your_port

```
# $FreeBSD$
```

```
PORTNAME=      port
```

```
PORTVERSION=
```

```
CATEGORIES=    games
```

```
MASTER_SITES=
```

```
MAINTAINER=    maintainer@email.com
```

```
COMMENT=
```

```
LICENSE=
```

```
LICENSE_FILE=
```

```
.include <bsd.port.mk>
```



Structure of real makefile

```
# $FreeBSD$

PORTNAME=      mylib
DISTVERSION=   1.0.0
DISTVERSIONSUFFIX= -dev
CATEGORIES=    devel

MAINTAINER=    maintainer@email.com
COMMENT=       Library for programming
LICENSE=       ZLIB
LICENSE_FILE=  ${WRKSRC}/LICENSE.md

LIB_DEPENDS=   libglfw.so:graphics/glfw

USES=          cmake
USE_GITHUB=    yes
GH_ACCOUNT=    myAccount
USE_LDCONFIG=  yes
USE_GL=        gl glu
USE_XORG=      ice sm x11 xcursor xext xrandr xi xinerama xxf86vm

CMAKE_ON=      SHARED USE_EXTERNAL_GLFW
CMAKE_OFF=     STATIC BUILD_EXAMPLES BUILD_GAMES

PLIST_FILES=   include/lib.h \
               lib/lib.so \
               lib/lib.so.1 \
               lib/.so.${DISTVERSION} \
               libdata/pkgconfig/lib.pc

.include <bsd.port.mk>
```



How to build a port

- **make makesum** → distinfo file contains this :
TIMESTAMP = 1523396238
SHA256 (lol-myprogram-1.9.7_GH0.tar.gz) =
2be745bf1a132e3de2dd14c9b2f8a596499fb2569ceb00c82c2e9dd95d76f062
SIZE (lol-myprogram-1.9.7_GH0.tar.gz) = 95336821
- Complete files for port
 - **makefile**
 - **pkg-descr**
 - **pkg-plist**
 - **distinfo**
- Validation files port
 - **portlint -A**
- Make a patch
 - **make makepatch** and files with patch are in folder files/
- Testing port
 - **make test**



Poudriere

- Advance BSD-licensed utility for creating and testing FreeBSD packages.
- How use poudriere
 - Set configuration file **`/usr/local/etc/poudriere.conf`**
- Create port tree for poudriere :
 - **`poudriere ports -c`**
- Create jail with version FreeBSD
 - **`poudriere jail -c -j 11amd64 -v 11.1-RELEASE -a amd64`**
- Choose port for test
 - **`poudriere testport -j 11_2amd64 -c devel/zapcc`**



Submit the new port

- For new port
 - **shar** `find my_port` > my_port.shar
- For patch
 - **diff -u** Makefile Makefile.orig > Makefile_patch
- And submit to bugzilla form ...



Questions ?