

D0 ups/upd Basics

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What are UPS and UPD?

UPS

- A local product management tool which ...
 - Manipulates your environment and path
 - Allows for multiple versions
 - Tracks dependencies
 - Uses **dbconfig** to determine file placement

UPD

- A product distribution tool which ...
 - Obtains products from a server
 - Uses **updconfig** to determine directory placement
 - Uses ups under the covers

Some basic commands

```
d0mino> ./usr/local/etc/setups.sh
d0mino% source /usr/local/etc/setups.csh
```

```
d0mino> echo $PRODUCTS
/usr/products/upsdb:
/d0usr/products/upsdb:
```

```
/d0dist/dist/upsdb
```

```
d0mino> ups flavor  
IRIX+6.5
```

```
d0mino> ups list -a ups -c -2 -K+  
"ups" "v4_4" "IRIX+6" "" "current"
```

More basic commands

```
d0mino> upd list ups  
upd: Command not found.  
d0mino> setup upd
```

```
d0mino> upd list ups
```

```
DATABASE=/ftp/upsdb
```

```
Product=ups Version=v4_5_1 Flavor=IRIX+6  
Qualifiers="" Chain=current
```

The dbconfig file

ftp://ftp.fnal.gov/products/bootstrap/v2_0/downloads/dbconfig.D0alt

```
FILE = DBCONFIG
```

```
PROD_DIR_PREFIX = /d0/fermi/products  
MAN_TARGET_DIR = /d0/fermi/products/man
```

```
SETUPS_DIR = /d0/fermi/local/etc
```

```
UPD_USERCODE_DIR = /d0/fermi/products  
/upsdb/.updfiles
```

The updconfig file, part 1

ftp://ftp.fnal.gov/products/bootstrap/v2_0/downloads/updconfig.D0alt

File = updconfig

GROUP:

```
product      = D0RunII
product      = D0RunII-bin
dist_database = /d0dist/dist/upsdb
END:
```

COMMON:

```
UPS_THIS_DB   = "/d0/d0dist/dist/upsdb"
UPS_PROD_DIR  = "releases/${UPS_PROD_VERSION}"
UPS_UPS_DIR   = "ups"
```

The updconfig file, part 2

ftp://ftp.fnal.gov/products/bootstrap/v2_0/downloads/updconfig.D0alt

File = updconfig

GROUP:

```
product      = ANY
dist_database = /d0dist/dist/upsdb
END:
```

COMMON:

```
UPS_THIS_DB   = "/d0/d0dist/dist/upsdb"
UPS_PROD_DIR  = "packages/${UPS_PROD_VERSION}"
```

The updconfig file, part 3

ftp://ftp.fnal.gov/products/bootstrap/v2_0/downloads/updconfig.D0alt

File = updconfig

GROUP:

product = ANY

END:

COMMON:

UPS_THIS_DB = "/d0/fermi/products/upsdb"

UPS_PROD_DIR = "\${UPS_PROD_NAME}/

 \${UPS_PROD_VERSION}

 \${UPS_PROD_QUALIFIERS}"

UPS_UPS_DIR = "ups"

The table file

```
d0mino> ups list -K @table_file python
"/prd/python/v1_5_2a/ups/python.table"
```

```
d0mino> cat /prd/python/v1_5_2a/ups/python.table
FILE=TABLE
PRODUCT=python
```

Common:

 setupenv()

 proddir()

 setupRequired("tk v8_0_2")

 envSet(PYTHONHOME, \${UPS_PROD_DIR})

 envPrepend(PATH, \${UPS_PROD_DIR}/bin)

END:

Unix ups/upd Bootstrap

ftp://ftp.fnal.gov/products/bootstrap/v2_0/index.html

The bootstrap procedure consists of downloading the **stage1.sh** script plus a config file:

- **D0** sets up the standard three D0 RunII development ups areas, creates a products account, installs other products to facilitate D0 development (cvs, d0cvs, python), and installs fullFUE.
- **D0alt** sets up the alternative three D0 RunII development ups areas (/d0/fermi/products /d0/d0usr/products /d0/d0dist/dist). It is suitable for off-site installs. You'll need to have a /d0 directory created first.

Then you run the command:

```
> sh stage1.sh D0(alt)
```

NT ups/upd Bootstrap

ftp://ftp.fnal.gov/products/bootstrap/v2_0/index.html

The NT bootstrap procedure consists of downloading the **stage1.bat** script, plus a config file:

- **D0cygC** puts the three D0 Run II products area in C:\D0RunII
- **D0cygD** puts the three D0 Run II products area in D:\D0RunII
- **D0cygE** puts the three D0 Run II products area in E:\D0RunII

Then you run the command:

```
C:\> stage1.bat D0cyg(C,D,E)
```

Installing/Declaring Products

```
> upd install netscape
```

```
> ups declare netscape v4_61 -c
```

```
> upd install D0RunII -G -c
```

Setups scripts

In your .login (and .cshrc), add the following:

```
if ( -f "/d0/fermi/products/etc/setups.csh" ) then
  source "/d0/fermi/products/etc/setups.csh"
endif
```

In your .profile (and .shrc), add the following:

```
if [ -f "/d0/fermi/products/etc/setups.sh" ]
then
  . "/d0/fermi/products/etc/setups.sh"
fi
```

Resources

- <http://www.fnal.gov/docs/products/ups/D0/> (with Opera)
- <http://www.fnal.gov/docs/products/ups/>
- <http://www.fnal.gov/docs/products/ups/BrownBagSeminars/>
- UPS/UPS Reference Card