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Hey, but what about OPTIONS?

* inconsistent: WITH_OPT or WITHOUT_OPT

* the value isn't checked at all

* inconsistent usage

* too simplistic: only a simple list of option

* no incompatiblity checking

* unfriendly way to set the options globaly

Can we have better?

Yes "optionsng":

 * simple options: on/off

 * multi options: at least 1 over N

 * single options: 1 and only 1 over N (exclusive)

 * every options have an options description

 * centralized description overwritable

 * maintainer options

 * system wide options

New variables

* OPTIONS_DEFINE: port (maintainer)

* OPTIONS_DEFAULT: port (maintainer)

* OPTIONS_EXCLUDE: port (maintainer)

* OPTIONS_OVERWRITE: overwrite all the other variables

* OPTIONS_SET: user, make.conf, global

* OPTIONS_UNSET: make.conf (user)

* ${UNIQUENAME}_SET: make.conf (user)

* ${UNIQUENAME}_UNSET: make.conf (user)

* ${OPTIONNAME}_DESC: port or bsd.options.desc

* PORT_OPTIONS: list of options chosen by the user in the port

Consistency

1- set the default options

2- remove any global options via OPTIONS_EXCLUDE

3- overwrite the previous with OPTIONS_DEFAULT

4- apply the system wide OPTIONS_(UN)SET

5- apply the ${UNIQUNAME:U}_(UN)SET

6- for compatibility, apply /var/db/ports/${UNIQUENAME}/options

7- new /var/db/ports/${UNIQUENAME}/options (from dialog ui)

8- automatic consistency check

Example

OPTIONS_DEFINE= OPT1 OPT2 OPT3

OPTIONS_MULTI= GRP1 GRP2

OPTIONS_MULTI_GRP1= OPT4 OPT5

OPTIONS_MULTI_GRP2= OPT6 OPT7

OPTIONS_SINGLE= SG1

OPTIONS_SINGLE_SG1= OPT8 OPT9 OPT10

OPTIONS_DEFAULT= OPT2 OPT3 OPT9 OPT7 OPT8 OPT4

OPTIONS_EXCLUDE= DOCS NLS

OPT1_DESC= "Description of my option"

Example

```
$ make show-config

===> The following configuration options are available:
OPT1=off: Description of my option
OPT2=on
OPT3=on
====> Options available for the multi GRP1: you must choose at least one
OPT4=on
OPT5=off
====> Options available for the multi GRP2: you must choose at least one
OPT6=off
OPT7=on
====> Options available for the single SG1: you must select only one of them
OPT8=on
OPT9=off
OPT10=off
```

Example

The user defined values:

```
$make pretty-print-config:
-OPT1 +OPT2 +OPT3 GTP1[ +OPT4 -OPT5 ] GRP2[ -OPT6 +OPT7 ]
SG1( +OPT8 +OPT9 -OPT10)
```

The user can check the configuration:

```
$make check-config:
====> You should select only one option from the SG1 single
*** Error code 1
```

check-config is transparently executed before building ports

```
.if !empty(PORTS_OPTIONS:MOPT1)
  @${ECHO_CMD} " the option OPT1 is set (aka: on)"
.else
  @${ECHO_CMD} " the option OPT1 is not set (aka: off)"
.endif
```

Questions ?