



New options framework

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Rationale

Current options problems has inconsistencies

- for a given option we only have two variables:
 WITH_F00 and WITHOUT_F00
- their value is not checked
- the usage is not consistent



Proposal: 3 options types

- simple options (on or off)
- multi options: at least 1 over N
- single options: 1 and only 1 over N (exclusive)
- every options can have an optional description
- maintainer options
- system wide options



Options values

- `OPTIONS_DEFINE: port, maintainer`
- `OPTIONS_DEFAULT: port, maintainer`
- `OPTIONS_EXCLUDE: port, maintainer`
- `OPTIONS_OVERRIDE: break everything`
- `OPTIONS_SET= OPT1: user, make.conf`
- `OPTIONS_UNSET= OPT1: user, make.conf`
- `${UNIQUE_NAME}_SET= OPT1 (zsh_SET) user, make.conf`
- `${UNIQUE_NAME}_UNSET= OPT1 (zsh_UNSET) user, make.conf`
- generic options descriptions as it is currently done in the `KNOBS` file.



Consistency

- 1/ set the default global options
- 2/ removes any global via `OPTIONS_EXCLUDE`
- 3/ `OPTIONS_DEFAULT`: override previous
- 4/ system-wide `OPTIONS_(UN)SET`
- 5/ `${UNIQUENAME:U}_(UN)SET`
- 6/ compatibility: `/var/db/ports/${UNIQUENAME}/options`
(note: usage of `OPTIONS+=` is deprecated)
- 6/ new `/var/db/ports/${UNIQUENAME}/options` from dialog ui
- 7/ 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= SEL1
```

```
OPTIONS_SINGLE_SEL1= OPT8 OPT9 OPT10
```

```
OPTIONS_DEFAULT= OPT2 OPT3 OPT9 OPT7 OPT8 OPT4
```

```
OPTIONS_EXCLUDE= NLS DOCS
```

```
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 of them
```

```
OPT4=on
```

```
OPT5=off
```

```
====> Options available for the multi GRP2: you must choose  
      at least one of them
```

```
OPT6=off
```

```
OPT7=on
```

```
====> Options available for the single SEL1: you must select  
      only one of them
```

```
OPT8=on
```

```
OPT9=off
```

```
OPT10=off
```



Example

```
$make pretty-print-config:
```

```
-OPT1 +OPT2 +OPT3 GRP1[ +OPT4 -OPT5 ] GRP2[ -OPT6 +OPT7 ] \  
SEL1( +OPT8 +OPT9 -OPT10 )
```

```
$make check-config
```

```
====> You should select one and only one options from the \  
SEL1 single  
" *** Error code 1
```




in port options checking

```
.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
```



Thanks

questions?