

```

1: 1: #-- set this to the man directory you would like to use
2: MANPATH:=/usr/share/man
3:
4: 4: #-- uncomment this to enable debugging
5: DEBUG:=-g -DDEBUG
6:
7:
8: 8: ##### YOU SHOULD NOT CHANGE BELOW THIS LINE #####
9:
10:
11: SRCS:=api.c
12: MANS:=man3/libxbee.3 \
13:     man3/xbee_setup.3 \
14:     man3/xbee_newcon.3 \
15:     man3/xbee_getpacket.3 \
16:     man3/xbee_senddata.3 \
17:     man3/xbee_vsnddata.3 \
18:     man3/xbee_getdigital.3 \
19:     man3/xbee_hasdigital.3 \
20:     man3/xbee_getanalog.3 \
21:     man3/xbee_hasanalog.3 \
22:     man3/xbee_pkt.3
23: MANPATHS:=$(foreach dir,$(shell ls man -ln | grep ^d | tr -s ' ' | cut -d ' ' -f 9),${MANPATH}/${dir})
24:
25: PDFS:=${SRCS} ${SRCS:.c=.h} makefile main.c xbee.h globals.h
26:
27: CC:=gcc
28: CFLAGS:=-Wall -Wstrict-prototypes -pedantic -c -fPIC ${DEBUG}
29: CLINKS:=-lm ./lib/libxbee.so.1.0.1 -lpthread ${DEBUG}
30: DEFINES:=
31:
32: ifeq ($(strip $(wildcard ${MANPATH}/man3/libxbee.3.bz2)),)
33: FIRSTTIME:=TRUE
34: else
35: FIRSTTIME:=FALSE
36: endif
37:
38: ENSCRIPT:=-MA4 --color -f Courier8 -C --margins=15:15:0:20
39: ifneq ($(strip $(wildcard /usr/share/enscript/mine-web.hdr)),)
40: ENSCRIPT+= --fancy-header=mine-web
41: else
42: ENSCRIPT+= --fancy-header=a2ps
43: endif
44:
45: SRCS:=$(sort ${SRCS})
46: PDFS:=$(sort ${PDFS})
47:
48: .PHONY: all run new clean cleanpdfs main pdfs
49: .PHONY: install install_su install_man
50: .PHONY: uninstall uninstall_su uninstall_man/
51:
52:
53: 53: # all - do everything (default) #
54: all: main
55:     @echo "**** Done! ****"
56:
57:
58: 58: # run - remake main and then run #
59: run: main
60:     LD_LIBRARY_PATH=./lib:$LD_LIBRARY_PATH ./bin/main
61:
62:
63: 63: # new - clean and do everything again #
64: new: clean all
65:
66:
67: 67: # clean - remove any compiled files and PDFs #
68: clean:
69:     rm -f ./.*~
70:     rm -f ./sample/*~
71:     rm -f ./obj/*.o
72:     rm -f ./lib/libxbee.so*
73:     rm -f ./bin/main
74:
75: cleanpdfs:
76:     rm -f ./pdf/*.pdf
77:
78:
79: 79: # install - installs library #
80: install: ./lib/libxbee.so.1.0.1
81:     @echo
82:     @echo
83: ifneq ($(shell echo $$USER),root)
84:     @echo "#####"
85:     @echo "### To Install this library I need the root password please!"

```

```
86:         @echo "#####"
87:     endif
88:     su -c "make install_su --no-print-directory"
89:     @echo
90: ifeq (${FIRSTTIME},TRUE)
91:     @echo "#####"
92:     @echo
93:     @pr -h "" -o 3 -w 86 -tT ./README
94:     @echo
95:     @echo "#####"
96: endif
97:
98: install_su: /usr/lib/libxbee.so.1.0.1 /usr/include/xbee.h install_man
99:
100: /usr/lib/libxbee.so.1.0.1: ./lib/libxbee.so.1.0.1
101:     cp ./lib/libxbee.so.1.0.1 /usr/lib/libxbee.so.1.0.1 -f
102:     @chmod 755 /usr/lib/libxbee.so.1.0.1
103:     @chown root:root /usr/lib/libxbee.so.1.0.1
104:     cp /usr/lib/libxbee.so.1.0.1 /usr/lib/libxbee.so.1 -sf
105:     @chown root:root /usr/lib/libxbee.so.1
106:     cp /usr/lib/libxbee.so.1.0.1 /usr/lib/libxbee.so -sf
107:     @chown root:root /usr/lib/libxbee.so
108:
109: /usr/include/xbee.h: ./xbee.h
110:     cp ./xbee.h /usr/include/xbee.h -f
111:     @chmod 644 /usr/include/xbee.h
112:     @chown root:root /usr/include/xbee.h
113:
114: install_man: ${MANPATH} ${MANPATHS} ${addsuffix .bz2,$(addprefix ${MANPATH}/,${MANS})}
115:
116: ${MANPATH} ${MANPATHS}:
117:     @echo "#####"
118:     @echo "### $@ does not exist... cannot install man files here!"
119:     @echo "### Please check the directory and the MANPATH variable in the makefile"
120:     @echo "#####"
121:     @false
122:
123: ${MANPATH}/%.bz2: ./man/%
124:     @echo "cat $< | bzip2 -z > $@"
125:     @cat $< | bzip2 -z > $@ || ( \
126:         echo "#####"; \
127:         echo "### Installing man page '$*' to '$@' failed..."; \
128:         echo "#####"; )
129:     @chmod 644 $@
130:     @chown root:root $@
131:
132: uninstall:
133:     @echo
134:     @echo
135: ifneq ($(shell echo $$USER),root)
136:     @echo "#####"
137:     @echo "### To Uninstall this library I need the root password please!"
138:     @echo "#####"
139: endif
140:     su -c "make uninstall_su --no-print-directory"
141:     @echo
142:     @echo
143:
144: uninstall_su: ${addprefix uninstall_man/,${MANS}}
145:     rm /usr/lib/libxbee.so.1.0.1 -f
146:     rm /usr/lib/libxbee.so.1 -f
147:     rm /usr/lib/libxbee.so -f
148:     rm /usr/include/xbee.h -f
149:
150: uninstall_man/%:
151:     rm ${MANPATH}/${*.bz2} -f
152:
153: # main - compile & link objects #
154: main: ./bin/main
155:
156: ./bin/main: ./lib/libxbee.so.1.0.1 ./bin/ ./main.c
157:     ${CC} ${CLINKS} ./main.c -o ./bin/main ${DEBUG}
158:
159: ./bin/:
160:     mkdir ./bin/
161:
162: ./lib/libxbee.so.1.0.1: ./lib/ ./obj/ ${addprefix ./obj/,${SRCS:.c=.o}} ./xbee.h
163:     gcc -shared -Wl,-soname,libxbee.so.1 -o ./lib/libxbee.so.1.0.1 ./obj/*.o -lrt
164: ifeq ($(strip $(wildcard ./lib/libxbee.so.1)),)
165:     ln ./libxbee.so.1.0.1 ./lib/libxbee.so.1 -sf
166: endif
167: ifeq ($(strip $(wildcard ./lib/libxbee.so)),)
168:     ln ./libxbee.so.1.0.1 ./lib/libxbee.so -sf
169: endif
170:
```

```
171: ./lib/:
172:     mkdir ./lib/
173:
174: ./obj/:
175:     mkdir ./obj/
176:
177: ./obj/%.o: %.c %.h xbee.h globals.h
178:     ${CC} ${CFLAGS} ${DEFINES} ${DEBUG} *.c -o $@
179:
180: ./obj/%.o: %.c xbee.h globals.h
181:     ${CC} ${CFLAGS} ${DEFINES} ${DEBUG} *.c -o $@
182:
183:
184: # pdfs - generate PDFs for each source file #
185: ifneq ($(strip $(wildcard /usr/bin/enscript)),)
186: ifneq ($(strip $(wildcard /usr/bin/ps2pdf)),)
187: pdfs: ./pdf/ ${addprefix ./pdf/,${addsuffix .pdf,${PDFS}}}
188:
189: ./pdf/:
190:     mkdir ./pdf/
191:
192: ./pdf/makefile.pdf: ./makefile
193:     enscript ${ENSCRIPT} -Emakefile $< -p - | ps2pdf - $@
194:
195: ./pdf/%.pdf: %
196:     enscript ${ENSCRIPT} -Ec $< -p - | ps2pdf - $@
197:
198: ./pdf/%.pdf:
199:     @echo "**** Cannot make $@ - '$*' does not exist ****"
200: else
201: pdfs:
202:     @echo "WARNING: ps2pdf is not installed - cannot generate PDF files"
203: endif
204: else
205: pdfs:
206:     @echo "WARNING: enscript is not installed - cannot generate PDF files"
207: endif
```