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```
1: #-- set this to the man directory you would like to use
 2: MANPATH:=/usr/share/man
 3:
 4: #-- uncomment this to enable debugging
 5: #DEBUG:=-g -DDEBUG
 6:
 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_setuplog.3 \
15:
          man3/xbee_newcon.3 \
16:
          man3/xbee_flushcon.3 \
17:
          man3/xbee endcon.3 \
18:
          man3/xbee_getpacket.3 \
19:
          man3/xbee senddata.3 \
20:
          man3/xbee_nsenddata.3 \
21:
          man3/xbee_vsenddata.3 \
22:
          man3/xbee_getdigital.3 \
23:
          man3/xbee_hasdigital.3 \
24:
          man3/xbee_getanalog.3 \
25:
          man3/xbee_hasanalog.3 \
26:
          man3/xbee_pkt.3
27: MANPATHS:=$(foreach dir,$(shell ls man -ln | grep ^d | tr -s ' ' | cut -d ' ' -f 9),${MANPATH}/$(dir))
28:
29: PDFS:=${SRCS} ${SRCS:.c=.h} makefile main.c xbee.h globals.h
30:
31: CC:=gcc
32: CFLAGS:=-Wall -Wstrict-prototypes -pedantic -c -fPIC ${DEBUG}
33: CLINKS:=-lm ./lib/libxbee.so.1.0.1 -lpthread ${DEBUG}
34: DEFINES:=
35:
36: ifeq ($(strip $(wildcard ${MANPATH}/man3/libxbee.3.bz2)),)
37: FIRSTTIME:=TRUE
38: else
39: FIRSTTIME:=FALSE
40: endif
41:
42: ENSCRIPT:=-MA4 --color -f Courier8 -C --margins=15:15:0:20
43: ifneq ($(strip $(wildcard /usr/share/enscript/mine-web.hdr)),)
44:
     ENSCRIPT+= --fancy-header=mine-web
    ENSCRIPT+= --fancy-header=a2ps
46:
47: endif
48:
49: SRCS:=${sort ${SRCS}}
50: PDFS:=${sort ${PDFS}}}
51:
52: .PHONY: all run new clean cleanpdfs main pdfs
53: .PHONY: install_su install_man
54: .PHONY: uninstall uninstall_su uninstall_man/
56:
57: # all - do everything (default) #
58: all: main
59:
            @echo "*** Done! ***"
60:
61:
62: # run - remake main and then run #
63: run: main
            LD_LIBRARY_PATH=./lib:$LD_LIBRARY_PATH ./bin/main
64:
65:
66:
67: # new - clean and do everything again #
68: new: clean all
69:
70:
71: # clean - remove any compiled files and PDFs #
72: clean:
            rm -f ./*~
73:
           rm -f ./sample/*^
rm -f ./obj/*.o
74:
75:
            rm -f ./lib/libxbee.so*
rm -f ./bin/main
76:
77:
78:
79: cleanpdfs:
80:
            rm -f ./pdf/*.pdf
81:
82:
83: # install - installs library #
84: install: ./lib/libxbee.so.1.0.1
            @echo
```

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

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```
171: ifeq ($(strip $(wildcard ./lib/libxbee.so)),)
172:
             ln ./libxbee.so.1.0.1 ./lib/libxbee.so -sf
173: endif
174:
175: ./lib/:
176:
             mkdir ./lib/
177:
178: ./obj/:
             mkdir ./obj/
179:
180:
181: ./obj/%.o: %.c %.h xbee.h globals.h
             ${CC} ${CFLAGS} ${DEFINES} ${DEBUG} $*.c -o $@
182:
183:
184: ./obj/%.o: %.c xbee.h globals.h
             ${CC} ${CFLAGS} ${DEFINES} ${DEBUG} $*.c -0 $@
185:
186:
187:
188: # pdfs - generate PDFs for each source file #
189: ifneq ($(strip $(wildcard /usr/bin/ps2pdf)),)
190: ifneq ($(strip $(wildcard /usr/bin/enscript)),)
191: pdfs: ./pdf/ ${addprefix ./pdf/,${addsuffix .pdf,${PDFS}}}}
192:
193: ./pdf/:
             mkdir ./pdf/
194:
195:
196: ./pdf/makefile.pdf: ./makefile
             enscript ${ENSCRIPT} -Emakefile $< -p - | ps2pdf - $@
197:
198:
199: ./pdf/%.pdf: %
200:
             enscript ${ENSCRIPT} -Ec $< -p - | ps2pdf - $@
201:
202: ./pdf/%.pdf:
             @echo "*** Cannot make $@ - '$*' does not exist ***"
203:
204: else
205: pdfs:
206:
             @echo "WARNING: enscript is not installed - cannot generate PDF files"
207: endif
208: else
209: pdfs:
210:
             @echo "WARNING: ps2pdf is not installed - cannot generate PDF files"
211: endif
```