```
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:
 7:
 8: ##### YOU SHOULD NOT CHANGE BELOW THIS LINE #####
9:
10: VERSION:=1.4.1
11: SHELL:=/bin/bash
12: SRCS:=api.c
13: MANS:=man3/libxbee.3 \
14:
          man3/xbee con.3 \
15:
          man3/xbee_end.3 \
16:
          man3/xbee_endcon.3
17:
          man3/xbee_flushcon.3 \
18:
          man3/xbee_purgecon.3 \
19:
          man3/xbee_getanalog.3 \
20:
          man3/xbee_getdigital.3 \
21:
          man3/xbee_getpacket.3 \
22:
          man3/xbee_hasanalog.3 \
23:
          man3/xbee_hasdigital.3 \
24:
          man3/xbee_logit.3 \
25:
          man3/xbee_logitf.3 \
26:
          man3/xbee_newcon.3 \
27:
          man3/xbee_nsenddata.3 \
28:
          man3/xbee_pkt.3 \
29:
          man3/xbee_senddata.3 \
30:
          man3/xbee_setup.3 \
31:
          man3/xbee_setupAPI.3
32:
          man3/xbee_setuplog.3 \
33:
          man3/xbee_setuplogAPI.3 \
34:
          man3/xbee_vsenddata.3
35: MANPATHS:=$(foreach dir,$(shell ls man -ln | grep ^d | tr -s ' ' | cut -d ' ' -f 9),${MANPATH}/$(dir))
36:
37: PDFS:=${SRCS} ${SRCS:.c=.h} makefile main.c xbee.h
38:
39: CC:=gcc
40: CFLAGS:=-Wall -Wstrict-prototypes -Wno-variadic-macros -pedantic -c -fPIC ${DEBUG}
41: CLINKS:=-lpthread -lrt ${DEBUG}
42: DEFINES:=
43:
44: ifeq ($(strip $(wildcard ${MANPATH}/man3/libxbee.3.bz2)),)
45: FIRSTTIME:=TRUE
46: else
47: FIRSTITME:=FALSE
48: endif
49:
50: ENSCRIPT:=-MA4 --color -f Courier8 -C --margins=15:15:0:20
51: ifneq ($(strip $(wildcard /usr/share/enscript/mine-web.hdr)),)
     ENSCRIPT+= --fancy-header=mine-web
52:
53: else
54:
    ENSCRIPT+= --fancy-header=a2ps
55: endif
56:
57: SRCS:=${sort ${SRCS}}}
58: PDFS:=${sort ${PDFS}}}
59:
60: .PHONY: FORCE
61: .PHONY: all run new clean cleanpdfs main pdfs html
62: .PHONY: install_su install_man
63: .PHONY: uninstall uninstall_su uninstall_man/
64:
65:
66: # all - do everything (default) #
67: all: ./lib/libxbee.so.$(VERSION)
68:
            @echo "*** Done! ***"
69:
70:
71: # run - remake main and then run #
72: run: all main
73:
            ./bin/main
74:
75:
76: # new - clean and do everything again #
77: new: clean all
78:
79:
80: # clean - remove any compiled files and PDFs #
81: clean:
            rm -f ./*~
82:
83:
            rm -f ./sample/*~
            rm -f ./obj/*.o
rm -f ./lib/libxbee.so*
84:
```

```
rm -f ./bin/main
87:
88: cleanpdfs:
         rm -f ./pdf/*.pdf
89:
90:
91:
92: # install - installs library #
93: install: ./lib/libxbee.so.$(VERSION)
94:
         @echo
95:
         @echo
96: ifneq ($(shell echo $$USER),root)
97:
         @echo "### To Install this library I need the root password please!"
98:
         99:
100: endif
101:
         su -c "make install su --no-print-directory"
102:
         @echo
103: ifeq (${FIRSTTIME},TRUE)
         104:
105:
         @echo
106:
         @pr -h "" -o 3 -w 86 -tT ./README
107:
         @echo
108:
         109: endif
110:
111: install_su: /usr/lib/libxbee.so.$(VERSION) /usr/include/xbee.h install_man
112:
113: /usr/lib/libxbee.so.$(VERSION): ./lib/libxbee.so.$(VERSION)
114:
         cp ./lib/libxbee.so.$(VERSION) /usr/lib/libxbee.so.$(VERSION) -f
115:
         @chmod 755 /usr/lib/libxbee.so.$(VERSION)
116:
         @chown root:root /usr/lib/libxbee.so.$(VERSION)
117:
         ln ./libxbee.so.$(VERSION) /usr/lib/libxbee.so.1 -sf
118:
         @chown root:root /usr/lib/libxbee.so.1
119:
         ln ./libxbee.so.$(VERSION) /usr/lib/libxbee.so -sf
         @chown root:root /usr/lib/libxbee.so
120:
121:
122: /usr/include/xbee.h: ./xbee.h
123:
         cp ./xbee.h /usr/include/xbee.h -f
124:
         @chmod 644 /usr/include/xbee.h
125:
         @chown root:root /usr/include/xbee.h
126:
127: install_man: ${MANPATH} ${mANPATHS} ${addsuffix .bz2,${addprefix ${mANPATH}/,${mANS}}}}
128:
129: ${MANPATH} ${MANPATHS}:
         130:
131:
         @echo "### $@ does not exist... cannot install man files here!"
         @echo "### Please check the directory and the MANPATH variable in the makefile"
132:
133:
         134:
         @false
135:
136: ${manpath}/%.bz2: ./man/%
         @echo "cat $< | bzip2 -z > $@"
137:
138:
         @cat $< | bzip2 -z > $@ || ( \
139:
           echo "### Installing man page '$*' to '$@' failed..."; \
140:
141:
          echo "#################################;"; )
         @chmod 644 $@
142:
143:
         @chown root:root $@
144:
145: ./doc/:
146:
         mkdir ./doc/
147:
148: html: ./doc/ ./man/
         cd ./doc/; mkdir -p `find ../man/ -type d -not -path *.svn* | cut -b 2-';
149:
         find ./man/ -type f -not -path *.svn* | cut -d / -f 3- | sort > .html_todo
150:
151:
         for item in 'cat .html_todo'; do \
152:
          man2html -r ./man/$$item | tail -n +3 > ./doc/man/$$item.html; \
153:
          done 2> /dev/null
         rm .html_todo
154:
155:
156: uninstall:
157:
         @echo
158:
         @echo
159: ifneq ($(shell echo $$USER),root)
160:
         161:
         @echo "### To Uninstall this library I need the root password please!"
162:
         163: endif
164:
         su -c "make uninstall_su --no-print-directory"
165:
         @echo
166:
         @echo
167:
168: uninstall_su: ${addprefix uninstall_man/,${MANS}}
169:
         rm /usr/lib/libxbee.so.$(VERSION) -f
         rm /usr/lib/libxbee.so.1 -f
170:
```

```
rm /usr/lib/libxbee.so -f
172:
             rm /usr/include/xbee.h -f
173:
174: uninstall_man/%:
175:
             rm ${MANPATH}/$*.bz2 -f
176:
177: # main - compile & link objects #
178: main: ./bin/main
179:
180: ./bin/main: ./obj/api.o ./bin/ ./main.c
181:
             ${CC} ${CLINKS} ./main.c ./obj/api.o -o ./bin/main ${DEBUG}
182:
183: ./bin/:
             mkdir ./bin/
184:
185:
186: ./lib/libxbee.so.$(VERSION): ./lib/ ${addprefix ./obj/,${SRCS:.c=.o}} ./xbee.h
             gcc -shared -Wl,-soname, libxbee.so.1 $(CLINKS) -o ./lib/libxbee.so.$(VERSION) ./obj/*.o
187:
             ln ./libxbee.so.$(VERSION) ./lib/libxbee.so.1 -sf
ln ./libxbee.so.$(VERSION) ./lib/libxbee.so -sf
188:
189:
190:
191: ./lib/:
192:
             mkdir ./lib/
193:
194: ./obj/:
195:
             mkdir ./obj/
196:
197: ./obj/%.o: ./obj/ %.c %.h xbee.h
198:
             ${CC} ${CFLAGS} ${DEFINES} ${DEBUG} $*.c -0 $@
199:
200: ./obj/%.o: ./obj/ %.c xbee.h
             ${CC} ${CFLAGS} ${DEFINES} ${DEBUG} $*.c -0 $@
201:
202:
203:
204: # pdfs - generate PDFs for each source file #
205: ifneq ($(strip $(wildcard /usr/bin/ps2pdf)),)
206: ifneq ($(strip $(wildcard /usr/bin/enscript)),)
207: pdfs: ./pdf/ ${addprefix ./pdf/,${addsuffix .pdf,${PDFS}}}}
208:
209: ./pdf/:
210:
             mkdir ./pdf/
211:
212: ./pdf/makefile.pdf: ./makefile
213:
             enscript ${ENSCRIPT} -Emakefile $< -p - | ps2pdf - $@
214:
215: ./pdf/%.pdf: %
             enscript ${ENSCRIPT} -Ec $< -p - | ps2pdf - $@
216:
217:
218: ./pdf/%.pdf:
219:
             @echo "*** Cannot make $@ - '$*' does not exist ***"
220: else
221: pdfs:
             @echo "WARNING: enscript is not installed - cannot generate PDF files"
222:
223: endif
224: else
225: pdfs:
226:
             @echo "WARNING: ps2pdf is not installed - cannot generate PDF files"
227: endif
```