undo™

UDB 7.2 Quick Reference

Interactive Debugging

$ udb /path/to/program
Start UDB, ready to time-travel debug program

$ udb --args /path/to/program ARG1 ...
Start UDB, ready to time-travel debug program with arguments

$ udb -p PID
Start UDB and attach to existing process with identifier PID

start
(Re)start the program from the beginning and run until main()

run or shortcut **r**
(Re)start the program from the beginning and run until interrupted

Working with LiveRecorder recordings

$ udb /path/to/recording.undo
Start UDB and load a recording file for analysis

usave /path/to/recording.undo
Save recorded history to a recording file for later analysis

uload /path/to/recording.undo
Load a recording file for analysis

Breakpoints

break [LOC] [if COND] or shortcut **b**
Stop each time LOC is reached [if expression COND is true]

last [-f|-forward] [EXPR]
Jump to the last time when the value of EXPR was modified.

watch VAR [if COND]
Stop each time VAR changes [if expression COND is true]

delete N or shortcut **d**
Delete break/watchpoint

rbreak [REGEXP]
Stop each time a function matching REGEXP is reached

tbreak [LOC] [if COND] or shortcut **tb**
Stop just next time LOC is reached [if expression COND is true]

disable N or **enable N**
Disable or re-enable break/watchpoint

Inspecting State

print EXPR or shortcut **p**
Print the value of C expression EXPR

display EXPR
Print value of EXPR at each prompt

info locals [NAMEREGEXP]
Print all local variables, or those matching NAMEREGEXP

Interactive Debugging

continue or shortcut **c**
Continue the execution of the program

reverse-continue or shortcut **rc**
Execute program backward

next or shortcut **n**
Forward one source line, stepping over functions

reverse-next or shortcut **rn**
Backward one source line, stepping over functions

step or shortcut **s**
Forward one source line, stepping into functions

reverse-step or shortcut **rs**
Backward one source line, stepping into functions

stepi or shortcut **si**
Forward one machine instruction

reverse-stepi or shortcut **rsi**
Backward one machine instruction

finish or shortcut **fin**
Forward until current function has returned

reverse-finish or shortcut **rf**
Backward until just before function was called

Time Travel Navigation

info time
Get the current debuggee time

ugo time TIME
Jump to specified time

ugo start or **ugo end**
Jump to start or end of recorded history

ubookmark NAME
Create a bookmark at current debuggee time

ugo bookmark NAME
Jump to time corresponding to a named bookmark

info bookmarks
List available bookmarks and their times

ugo wallclock TIMESTAMP
Jump to time corresponding to a wall-clock time

Undo / Redo Navigation

ugo undo or shortcut **uu**
Undo the last navigation operation

ugo redo or shortcut **ur**
Reverse the effect of the ugo undo command