mitmproxy Intercepting HTTP(S) proxy

CONCEPTS

Only intercept traffic from devices and apps you own or are explicitly authorised to inspect.

Three front ends share one engine: mitmproxy (TUI), mitmweb (browser UI) and mitmdump (no UI, scripts and files).

Client proxy set to :8080
↓ HTTP(S)
mitmproxy decrypts with its CA
↓ re-encrypted
Server real destination
Where mitmproxy sits

HTTPS only works once the client trusts the mitmproxy CA; browse to mitm.it through the proxy to install it.

Front ends

Tool	Use
`mitmproxy`	Interactive terminal UI
`mitmweb`	Web UI on :8081
`mitmdump`	Headless, like tcpdump for HTTP

FLOW LIST

`j` / `k` Move down / up

`g` / `G` Go to first / last flow

`Enter` Open the focused flow

`q` Back / leave current view

`f` Set the view filter

`m` Mark / unmark flow

`d` Delete flow from view

`D` Duplicate flow

`z` Clear the whole flow list

`F` Toggle focus follow (tail)

FLOW VIEW

`Tab`
Switch request / response / detail

`e`
Edit URL, header, body or method

FLOW VIEW (cont.)

`m`
Choose content view (JSON, hex...)

`p` / `Space` Previous / next flow

`V` Revert edits to flow

INTERCEPT AND REPLAY

`i`
Set intercept filter, e.g. ~u api & ~q

`I` Toggle intercept on / off

`a` Resume the intercepted flow

`A` Resume all intercepted flows

`r` Replay request to the server

`x`
Export flow (curl, httpie, raw...)

`b` Save response body to file

SAVE, LOAD, GLOBAL

`w` Save listed flows to file

`L` Load flows from file

`E` Open event log

`O` Open options

`:` Command prompt

`B` Launch an attached browser

`?` Context-sensitive help

`Q` Quit immediately

FILTER EXPRESSIONS

`~u <regex>`
Match URL

`~d <regex>`
Match domain

`~m <regex>`
Match method

`~c <code>`
Match response status code

FILTER EXPRESSIONS (cont.)

`~h <regex>`
Match any header

`~b <regex>`
Match any body

`~t <regex>`
Match Content-Type

`! / & / | / ( )`
Not, and, or, grouping

COMMAND LINE

`mitmproxy -p <port>`
Listen on another port

`mitmweb`
Web interface

`mitmdump -w <file>`
Record flows to file

`mitmproxy -r <file>`
Open a saved flow file

`mitmdump "<filter>"`
Show only matching flows

`--mode local[:<app>]`
Capture local apps by name or PID

`--mode reverse:<url>`
Front a single server

`-s <script.py>`
Load an addon script

`--set <option>=<value>`
Set any option

`--ignore-hosts <regex>`
Do not decrypt matching hosts

CERTIFICATES

`http://mitm.it`
Download CA via the proxy

`~/.mitmproxy/mitmproxy-ca-cert.pem`
CA certificate (non-Windows)

`curl --cacert <ca.pem> -x <proxy> <url>`
Trust CA for one curl call

The CA is generated per installation on first start. Remove it from devices when you finish testing.