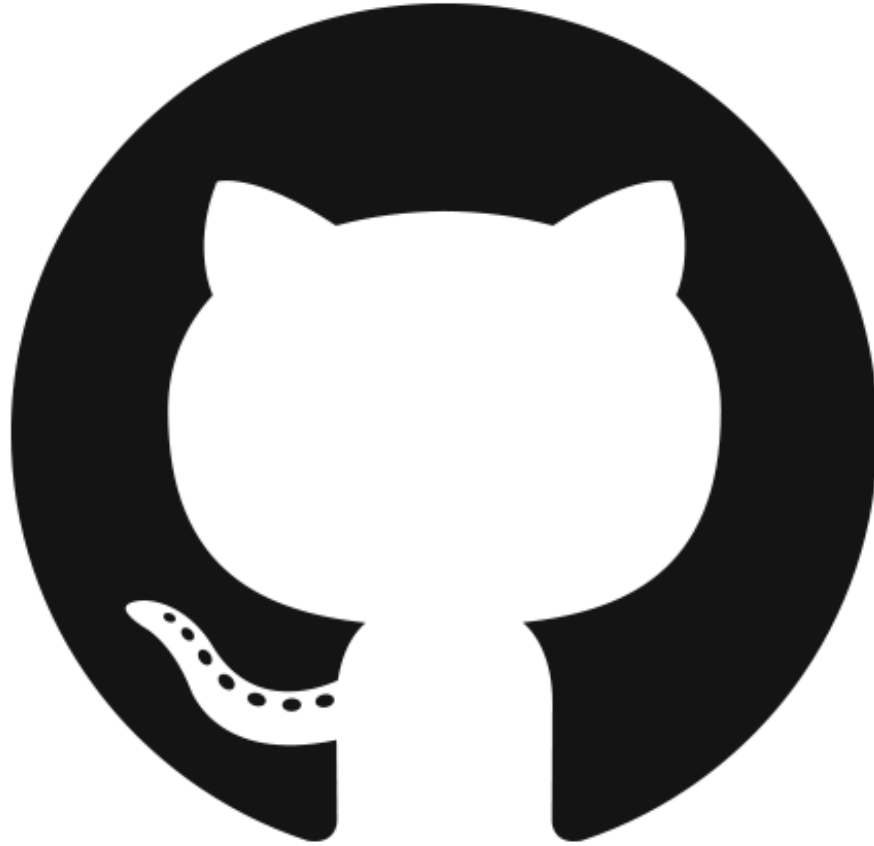


Our Suggested Go Development Environment

Building Forensics Tools in Go

DFRWS 2016

August 7, 2016



Grab an Updated Copy of These Slides

<https://github.com/jtsylve/slides>

Go

- Install Go
- Google has some pretty good documentation
 - <https://golang.org/doc/install>
- Make sure you test your installation
 - <https://golang.org/doc/install#testing>

Go

- To install packages
 - Make sure the go binary is in your \$PATH
 - Open Command Prompt / Terminal
 - go get <package name>
- Go get uses VCS to download open source packages
 - Install git, svn, & mercurial to make your life easier

Go

- Install goimports
 - `go get golang.org/x/tools/cmd/goimports`
- Install golint
 - `go install github.com/golang/lint/golint`

Sublime Text 3

- Our IDE of Choice
- Free*
 - Pay \$70 to get rid of nag screens
 - It's great, so if you like it, please support the developers
- Extendable
 - Tons of additional features can be added
 - Python plugins and package manager

Sublime Text 3

- Install Sublime Text 3
 - <https://www.sublimetext.com/3>
 - It's fairly straight forward, but if you need help
 - http://docs.sublimetext.info/en/latest/getting_started/install.html

Sublime Text 3

- Install Package Control
 - <https://packagecontrol.io/installation>
 - Usage Instructions
 - <https://packagecontrol.io/docs/usage>
- Restart Sublime Text

Sublime Text 3

- To Install Packages
 - Ctrl+shift+p (Windows & Linux)
 - Cmd+shift+p (OSX)
 - Type “install” (no quotes)
 - Select “Package Control: Install”
 - Type the name of the package you want to install
 - Select the package you want

Sublime Text 3

- Install the Following Packages
 - GoSublime
 - SublimeLinter
 - SublimeLinter-contrib-golint
 - SublimeLinter-contrib-govet

Sublime Text 3

- Configure Linter
 - Tools > SublimeLinter > LintMode
 - Background
 - Tools > SublimeLinter > Toggle Linter...
 - Ensure that golint and govet are enabled
 - Click on them if not
 - Tools > SublimeLinter > Mark Style > Squiggly underline
 - Your tastes may vary, but this is a pretty obvious yet non-obtrusive style

Sublime Text 3

- Configure GoSublime
 - Sublime Text > Preferences > Package Settings > GoSublime > Settings – User
 - Set “fmt_cmd” to include goimports

```
// by default fmt'ing is done by margo using `fmt_tab_intent` and `fmt_tab_width` (above)
// you may use a command of your choosing by setting `fmt_cmd`
// e.g. ["goimports"]
// the command will be passed, to its stdin, the contents of the file
// it must output the new file contents
"fmt_cmd": ["goimports"],
```

Sublime Text 3

- Set “env” to include \$GOPATH and \$PATH
 - Make sure you include both the standard go bin path as well as your \$GOPATH bin path
 - Mine Looks Like This:

```
// you may set specific environment variables here
// e.g "env": { "PATH": "$HOME/go/bin:$PATH" }
// in values, $PATH and ${PATH} are replaced with
// the corresponding environment(PATH) variable, if it exists.
"env": {"PATH": "$HOME/go/bin:/usr/local/bin/go:$PATH", "GOPATH" : "$HOME/go"},
```

Sublime Text 3

- Your settings should look something like this:

```
{  
  "env": {"GOPATH": "$HOME/go" ,"PATH": "$HOME/go/bin"},  
  "fmt_cmd": ["goimports"],  
}
```

Sublime Text 3

- Configure SublimeLinter
 - Sublime Text > Preferences > Package Settings > SublimeLinter > Settings – User
 - Enable shadowed variable detection in govet args
 - Enable all other default detections in same

```
},
"govet": {
  "@disable": false,
  "args": [
    "--shadow=true",
    "--all"
  ],
  "excludes": []
}
```

Sublime Text 3

- Verify that the plugins load correctly
 - Quit and reopen Sublime
 - View->Show Console
 - Look for these two lines (or similar):
 - SublimeLinter: govet activated: /usr/local/go/bin/go
 - SublimeLinter: golint activated:
/Users/gouser/projects/go/bin/golint

Go Play!

- You should now be all set up
- If you're not familiar with Go yet take the tour
 - <https://tour.golang.org>

Questions / Comments / Problems

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