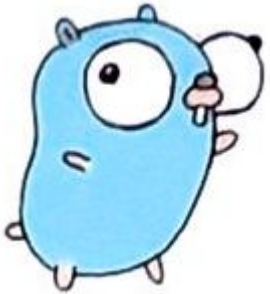
Go 1.12

timeline



28 Mar 2012	1.0
...	
16 Feb 2017	1.8
24 Aug 2017	1.9
16 Feb 2018	1.10
24 Aug 2018	1.11
?? Feb 2019	**1.12**

try & test!

$ go get golang.org/dl/go1.12rc1

$ go1.12rc1 download

$ go1.12rc1 build

what is in 1.12?

go tour removed
from binary distribution

“godoc” vs “go doc”

$ godoc &

$ open localhost:6060/pkg/strings

$ go doc strings.ReplaceAll

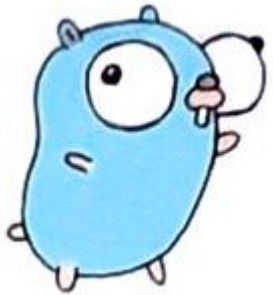
func ReplaceAll(s, old, new string) string

...

end of binary-only packages

“go vet” rewrite:
more analysis tools

darwin: syscalls through libSystem



modules

modules: use outside module directory

$ cd /tmp

$ export GO111MODULE=on

$ go1.11.5 get golang.org/x/exp/cmd/apidiff

go: cannot find main module; see 'go help modules'

$ go1.12rc1 get golang.org/x/exp/cmd/apidiff

go: finding golang.org/x/exp/cmd/apidiff latest

…

success!

more modules

- go.mod now gets language version
- use “replace” before trying network
- concurrent go commands that download & extract modules

```
$ cat go.mod

module testmod

go 1.12

require github.com/lib/pq v1.0.0

replace github.com/lib/pq => ../pq
```

more modules

- “runtime/debug”: new BuildInfo type exposes the build information

compiler: calling conventions

- ABI0
- ABIInternal

library changes

“os”: os.UserHomeDir

“strings”: ReplaceAll

s := "oink oink oink"

old: strings.Replace(s, "oink", "moo", -1)

new: strings.ReplaceAll(s, "oink", "moo")

“fmt”: prints maps sorted by key

```
package main

import "fmt"

func main() {
	m := map[string]string{
		"b": "gophers",
		"a": "hello",
	}
	fmt.Println(m)
}
```

```
$ go1.11.5 run mapfmt.go
map[b:gophers a:hello]
```

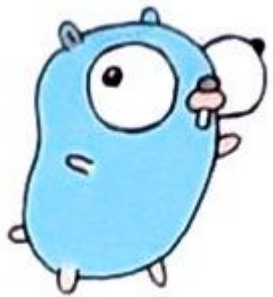
```
$ go1.12rc1 run mapfmt.go
map[a:hello b:gophers]
```

“net”

- RFC 6555 Fast Fallback ("Happy Eyeballs") is now enabled by default
- TCP keep-alives are now enabled by default

“crypto/tls”: TLS 1.3

- GODEBUG=tls13=1
- no 0-RTT



more:

https://tip.golang.org/doc/go1.12

golang.org/cl/XXX

future: 1.13

https://blog.golang.org/modules2019