

Highlights from The State of Go

Go 1.8 release party, 2017 February 16, GolangDFW Meetup.

Jason E. Aten, Ph.D.

Computer Scientist/Gopher

slides courtesy of

The Google Go Team.

The video full presentation by

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source:

<https://github.com/golang/talks>

and

<https://talks.golang.org/2017/state-of-go.slide>

can be viewed

<https://www.youtube.com/watch?v=tY4UKkgb5IY&feature=youtu.be>

Highlight #1: garbage collection pause times

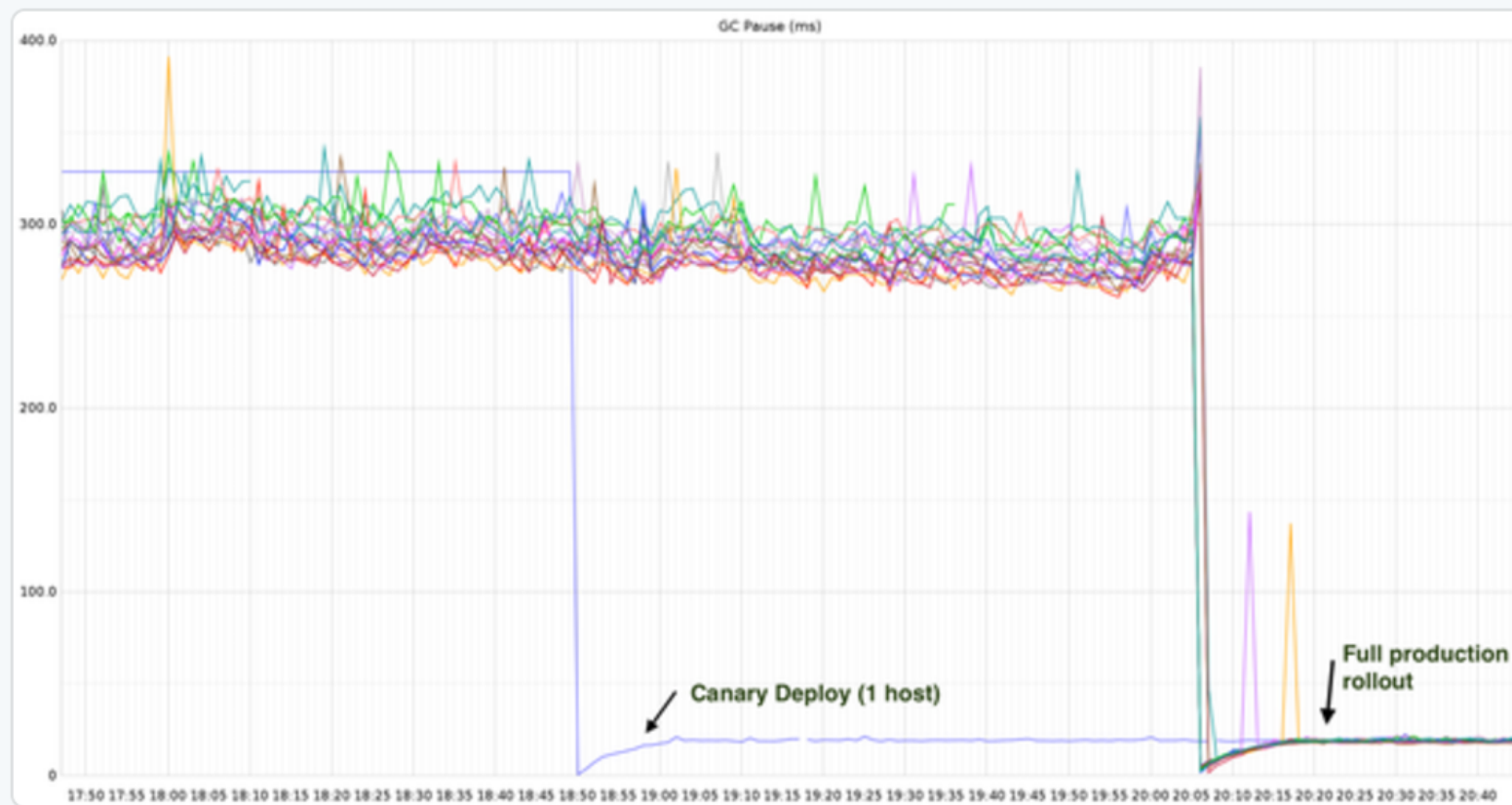
GC history in tweets

go 1.5



Brian Hatfield @brianhatfield · 19 Aug 2015

Amazing GC pause time improvements in Go 1.5.



10

227

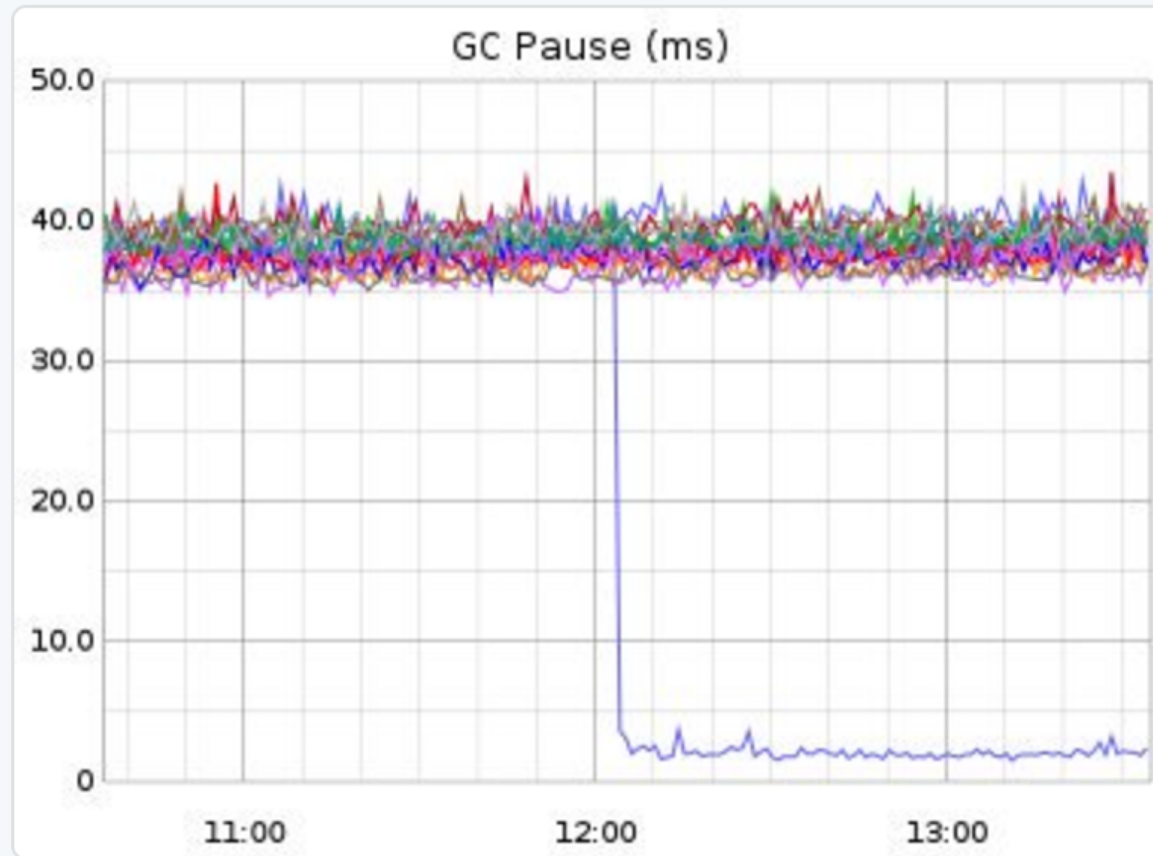
230

go 1.6



Brian Hatfield @brianhatfield · 28 Jan 2016

They did it again in Go 1.6 RC 1!



4



144



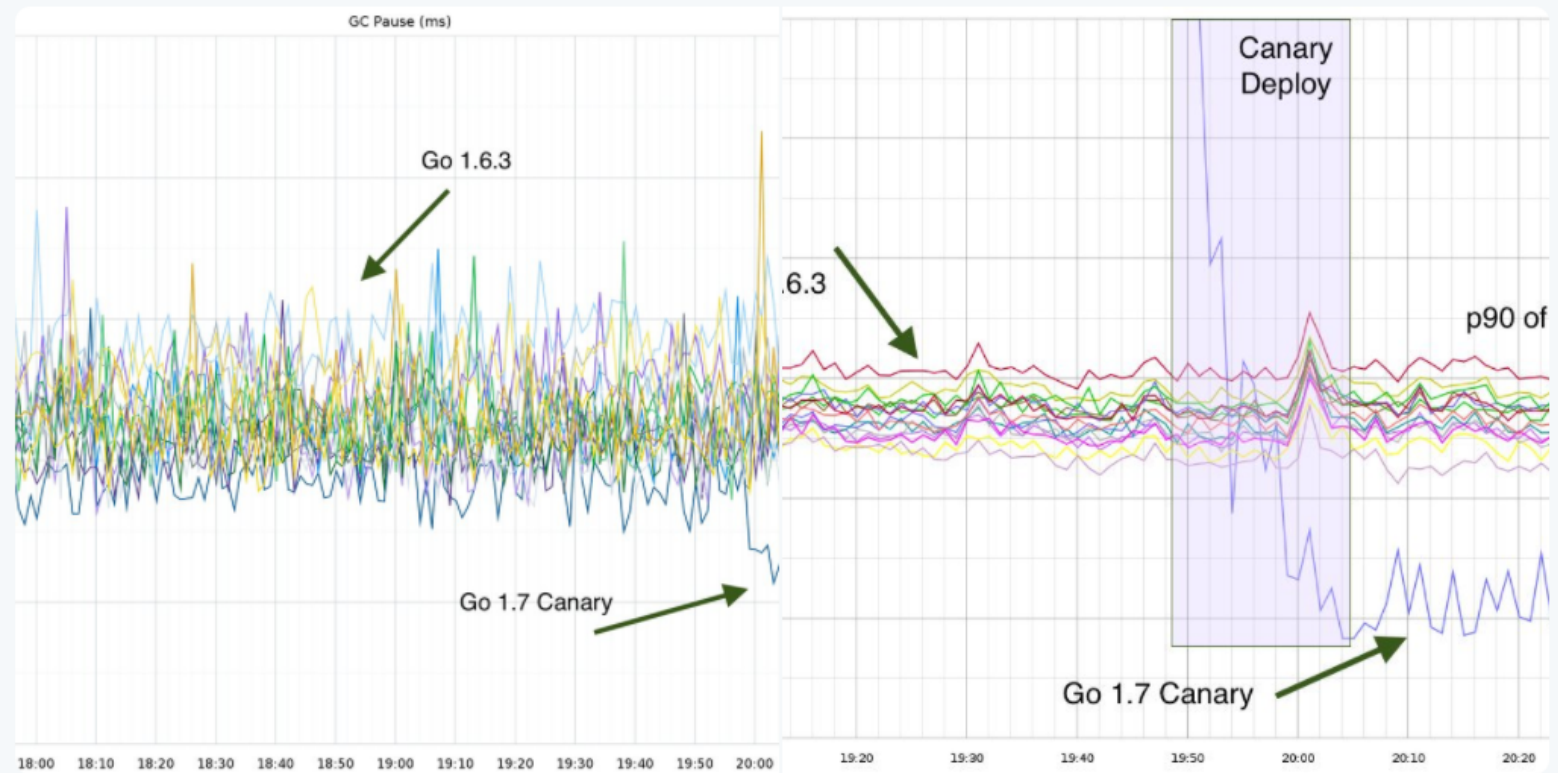
165

go 1.7



Brian Hatfield @brianhatfield · 22 Aug 2016

Excited to canary Go 1.7! Continued improvement in GC pause, and improvements in various request latencies/perf!



4



39



92

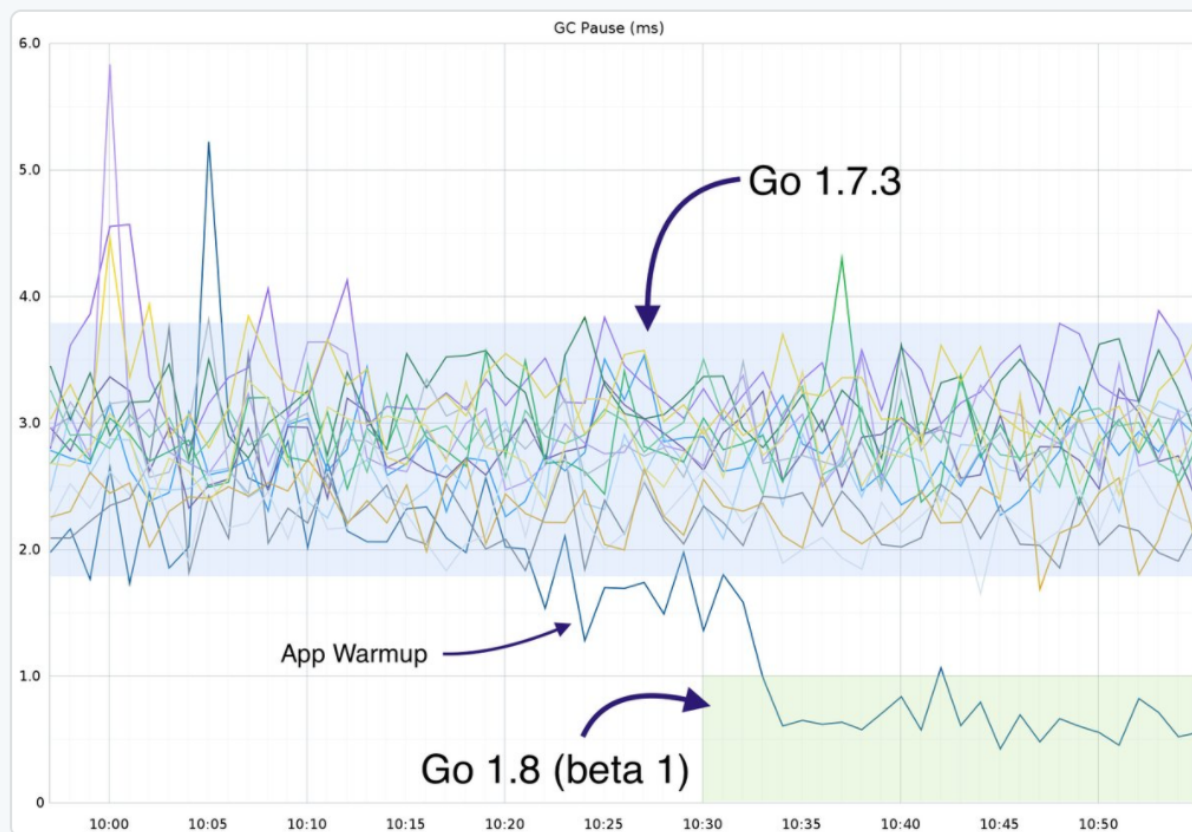
go 1.8 (beta 1)



Brian Hatfield @brianhatfield · 1 Dec 2016

SUB. MILLISECOND. PAUSE. TIME. ON. AN. 18. GIG. HEAP.

(Trying out Go 1.8 beta 1!)



14



332



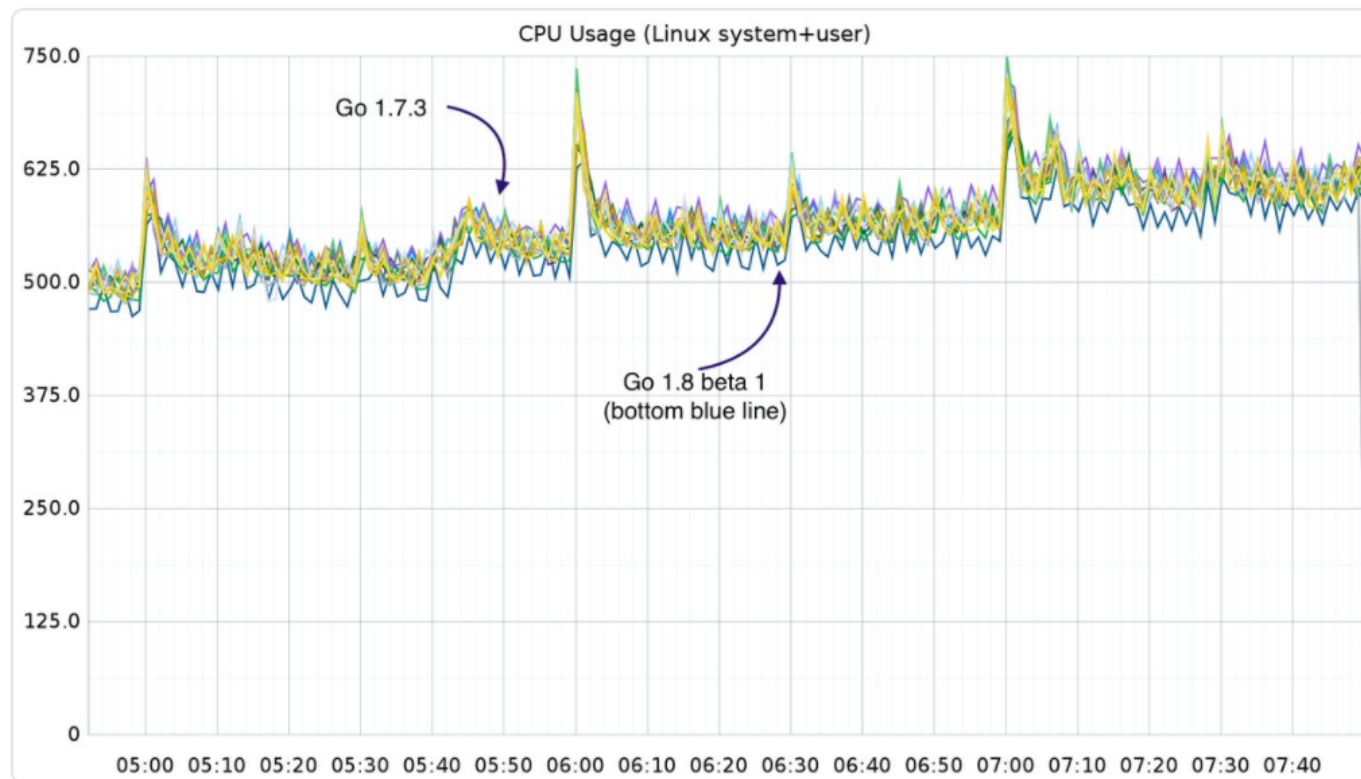
502

go 1.8 (beta 1) CPU



Brian Hatfield @brianhatfield · 2 Dec 2016

@tmornini On this particular service, properly scaled for what it does: Not very different. Here's an imprecise measurement on Linux/amd64:



1



1



1

Highlight number 2: Plugins

Define a plugin:

```
package main

// No C code needed.
import "C"

import "fmt"

var V int

func F() { fmt.Printf("Hello, number %d\n", V) }
```

Then build it:

```
go build -buildmode=plugin
```

Note: This currently works only on Linux.

Plugins

```
p, err := plugin.Open("plugin_name.so")
if err != nil {
    panic(err)
}

v, err := p.Lookup("V")
if err != nil {
    panic(err)
}

f, err := p.Lookup("F")
if err != nil {
    panic(err)
}

*v.(*int) = 7
f.(func())() // prints "Hello, number 7"
```

Plugins demo

Demo video: [twitter.com/francesc](https://twitter.com/francesc/status/827851085943566336) (<https://twitter.com/francesc/status/827851085943566336>)

Source code: github.com/campoy/golang-plugins (<https://github.com/campoy/golang-plugins>)

Highlight #3: Go meetups and conferences



Gophers all around the world! go-meetups.appspot.com (<http://go-meetups.appspot.com>)

Conferences:

- [FOSDEM](https://fosdem.org/2017/) (<https://fosdem.org/2017/>), earlier this month, these slides are from F. Campoy's talk there.
- [GopherCon India](http://www.gophercon.in/) (<http://www.gophercon.in/>), Feb 25-25th
- [Gophercon Denver](https://gophercon.com/) (<https://gophercon.com/>), Jul 12-15th
- [Golang UK](http://golanguk.com/) (<http://golanguk.com/>), August 16th-18th
- [dotGo](http://2017.dotgo.eu/) (<http://2017.dotgo.eu/>), Nov 6th

Thank you

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GolangDFW Meetup

