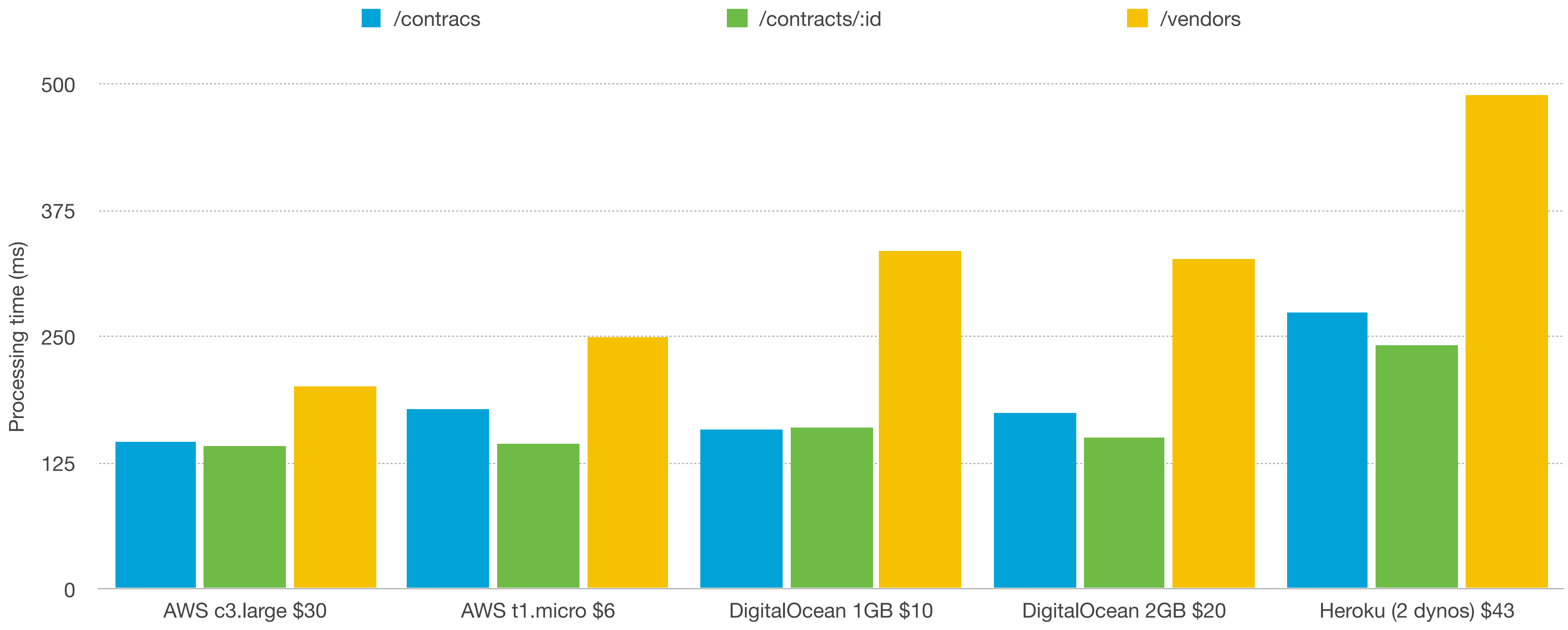
Processing time / request - concurrency=1

	/contracs	/contracts/:id	/vendors
AWS c3.large $30	147	142	201
AWS t1.micro $6	179	145	249
DigitalOcean 1GB $10	159	160	335
DigitalOcean 2GB $20	174	151	326
Heroku (2 dynos) $43	274	242	490

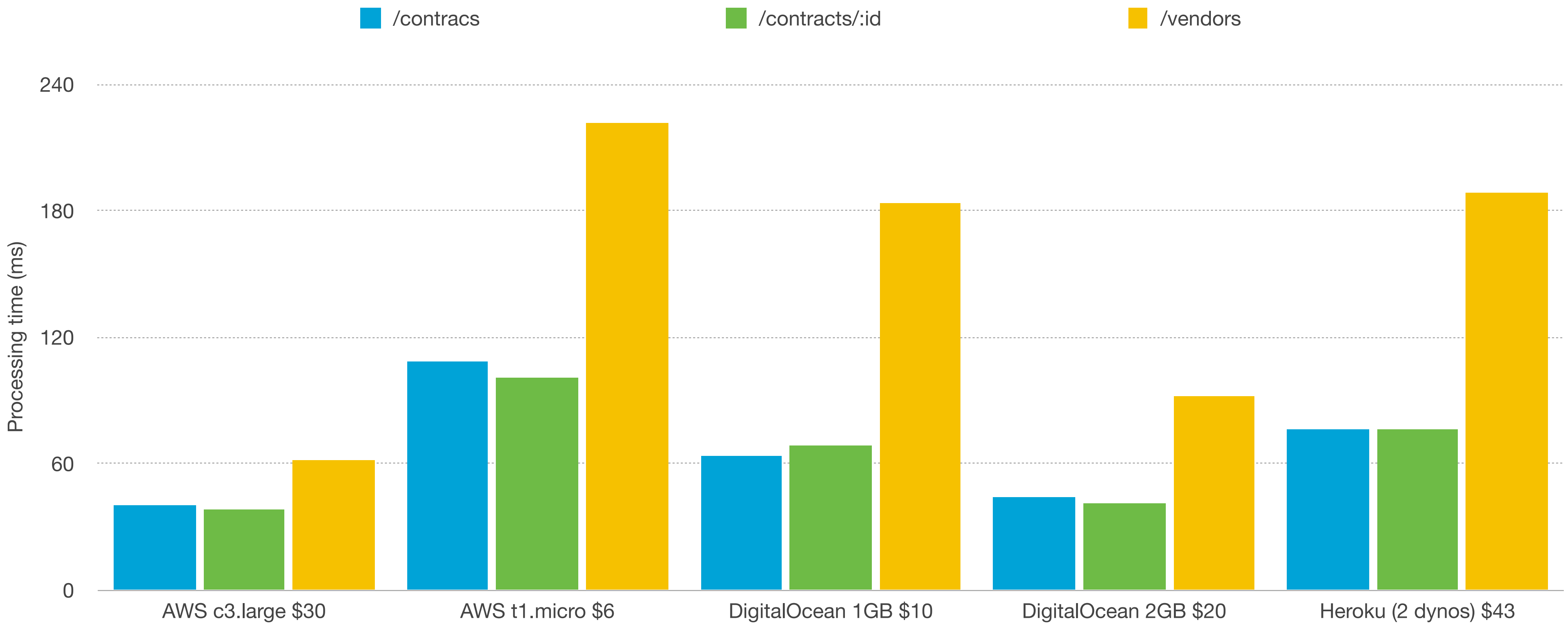
Notes:

- Times shown are the ab “waiting” time / # concurrent requests. That is the time after connection is setup until first response byte arrives
- Requests were mostly CPU bound. DB was highly cached.
- AWS prices are for 3 year reserved instances
- Heroku price is for 2 dynos + hobby database
- For Heroku I used the median instead of average. Heroku had *huge* variability in the processing time. It was common for requests to take several seconds to process. Maybe partially due to using the hobby database?
- The AWS t1.micro throughput is not sustainable because the CPU is allocated in bursts. For sites with low traffic it’s a good option.
- AWS m1.small times are hidden. They were ~4x slower than c3.large
- DigitalOcean 2G started out 2x slower than shown and got faster over time. I observed this for several different instances. Is this cyclical or a one-time thing at startup?



Processing time / request - concurrency=5

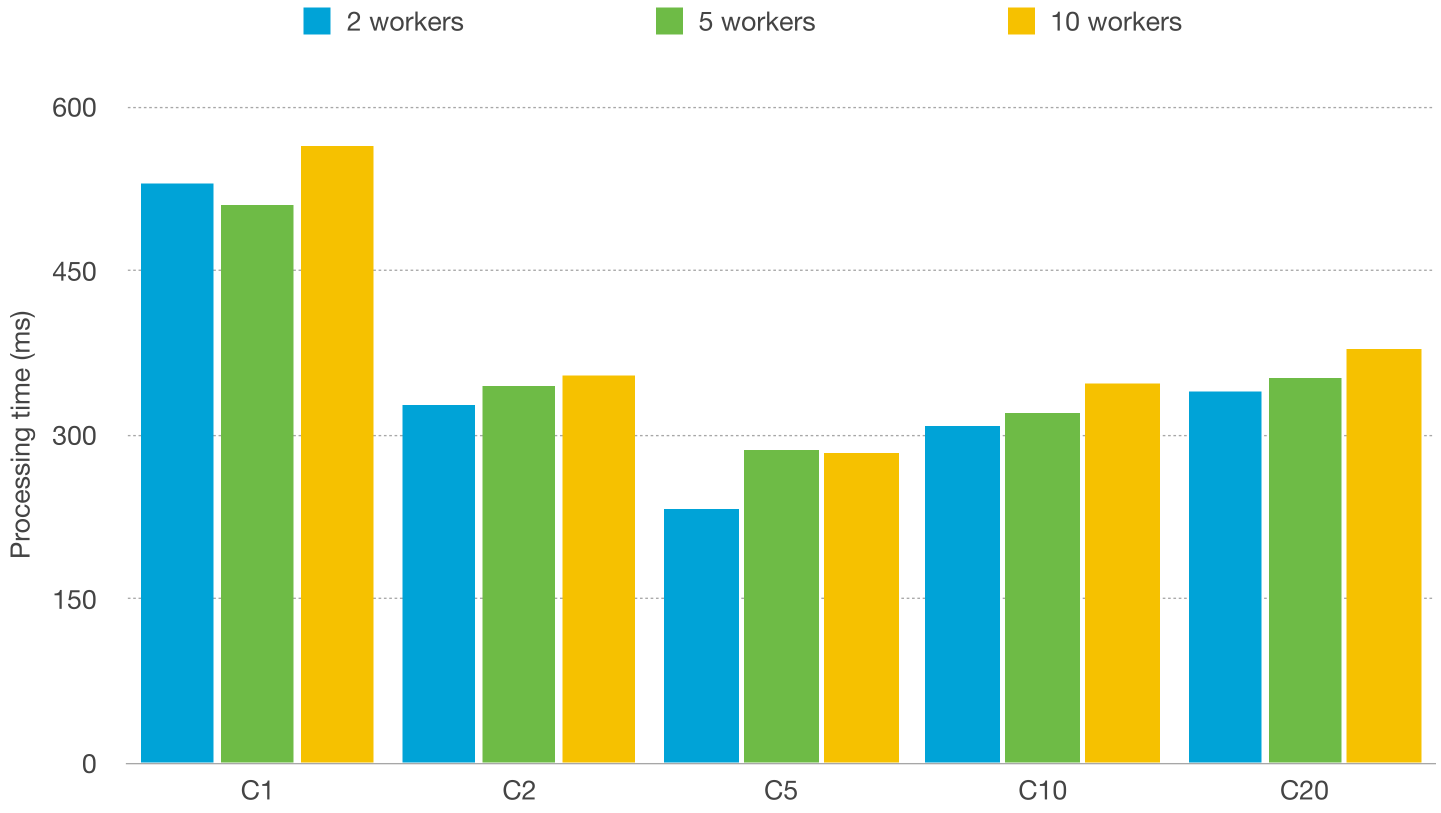
	/contracs	/contracts/:id	/vendors
AWS c3.large $30	40	38	61
AWS t1.micro $6	108	101	221
DigitalOcean 1GB $10	64	68	184
DigitalOcean 2GB $20	44	41	91
Heroku (2 dynos) $43	77	76	189



m1.small (1 vCPU - 1 ECU) $12

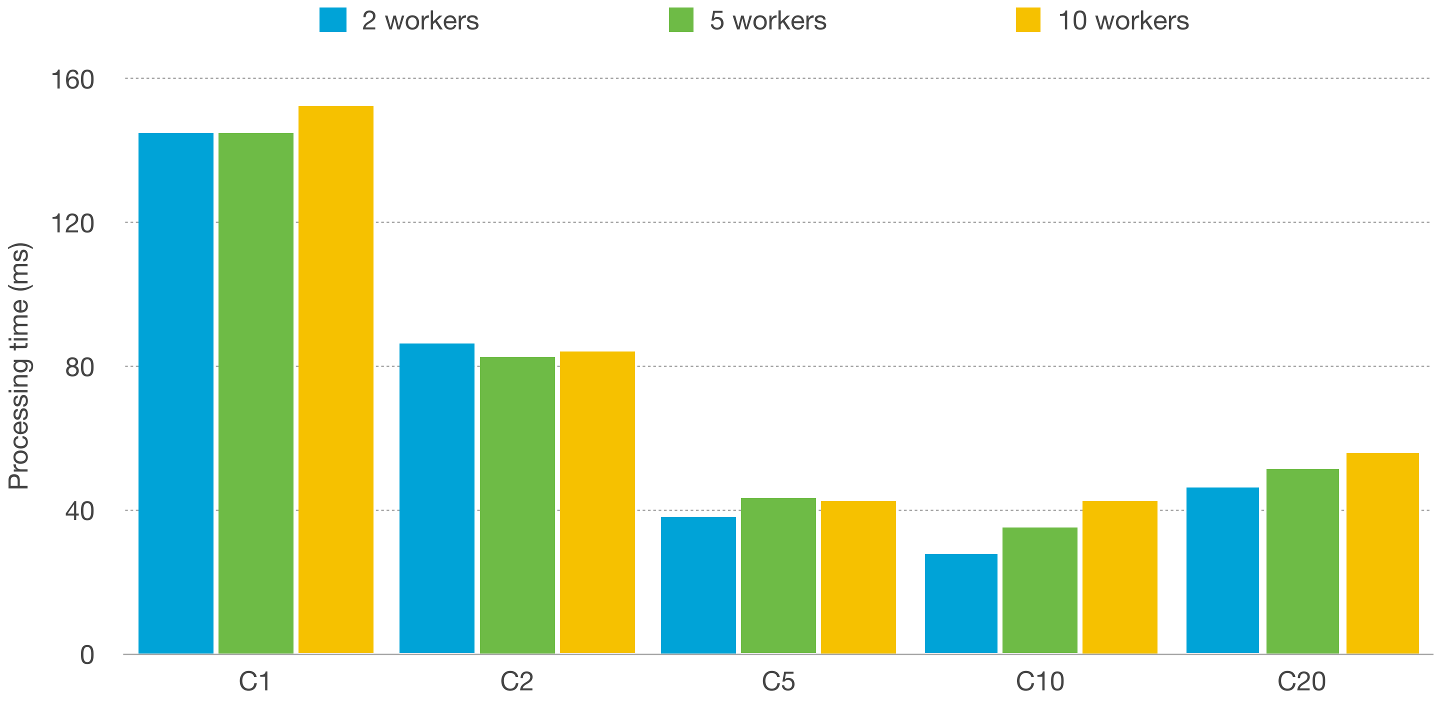
	2 workers	5 workers	10 workers
C1	529	511	563
C2	327	344	355
C5	232	286	285
C10	308	321	347
C20	338	352	378

- Time charted is the ab “waiting” time / # concurrent requests. That is the time after connection is setup until first response byte arrives
- C1, C2, C5 are the # concurrent requests (ab -c option)



c3.large (2 vCPU - 7 ECU) $30

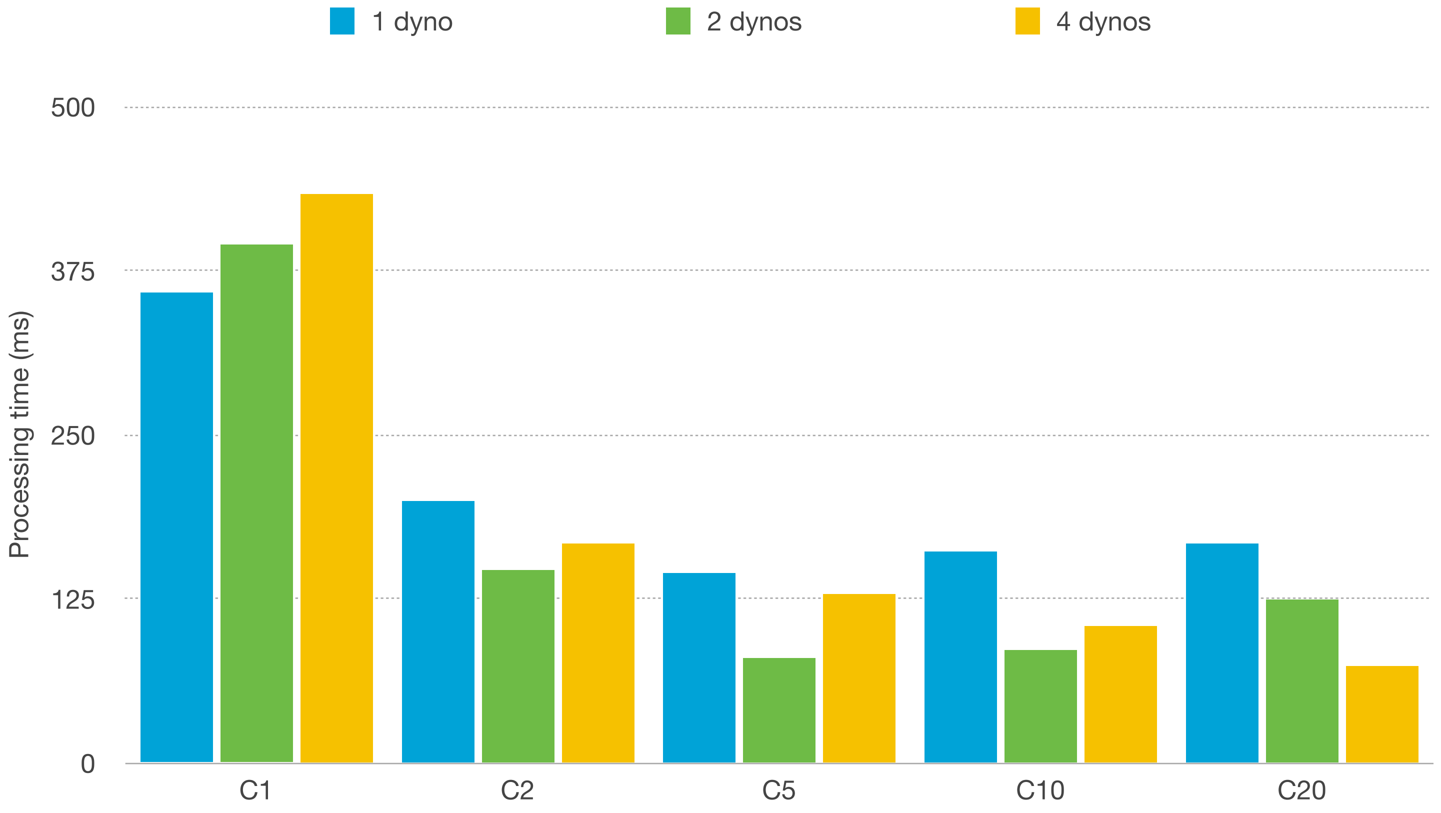
	2 workers	5 workers	10 workers
C1	145	145	152
C2	87	83	84
C5	38	44	43
C10	28	35	42
C20	46	51	56



Heroku $43 - average

	1 dyno	2 dynos	4 dynos
C1	358	395	434
C2	199	146	167
C5	145	79	128
C10	162	87	104
C20	167	124	74

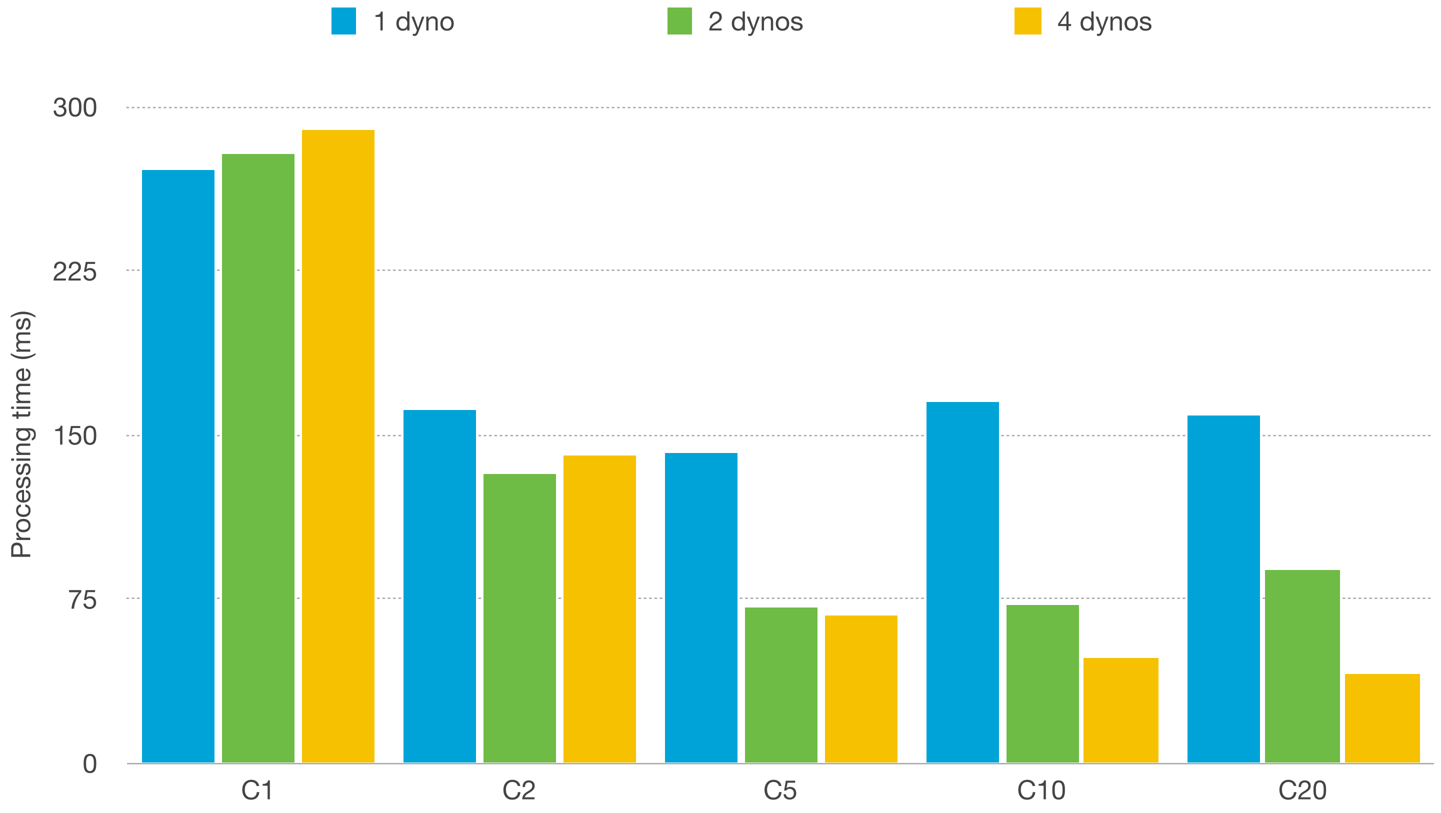
- I used the $9 “hobby” database for testing.
- There was *huge* variability in the request times with requests commonly taking several seconds or more. Was this due to the hobby DB?



Heroku $43 - median

	1 dyno	2 dynos	4 dynos
C1	271	278	289
C2	161	132	141
C5	142	71	67
C10	164	72	47
C20	159	88	40

- Because of the large variability in processing times raised the average, I also included a chart for median times


🟦 1 dyno
🟩 2 dynos
🟨 4 dynos
Processing time (ms)
C1
C2
C5
C10
C20