What can Test Clutch teach us about curl tests?

Daniel Fandrich
curl://up 2025

What is Test Clutch?

- Tracks and analyzes automated regression test results
- Retrieves logs from CI services
- Comments on PR test results
- All Open Source

curl://up

Reports

- Test Clutch periodically generates static reports
- curl reports are public at https://testclutch.curl.se/
- Updated 4 times a day (currently)

curl://up

Test report for https://github.com/curl/curl

Report generated Wed, 30 Apr 2025 00:55:47 +0000 covering runs over the past 90 days

Hover over cells for more information.
successful test run successful older test run
*failed test run *failed older test run
aborted test run
unknown test run
disabled job
new day

Job Name	Flake	Older runs →	b1e6bff46	d33b44927	3fcddc835	fd4e34fd8	9dcca3561	ea8071ddf	47b180919	a3830a53e	1fc5326ce	8893441ed	9f37c2ee9	2fa3d5728a	c1167f9fdf	89f7d45e3	12ce9c46b	49e8c3f11	da33c1e34	7a1211d47	4e7869823	ba4c8d19e5	9fe7e92e7e	771c12fe6	13f8f9089d	e908f7114	4ba6b60161	7b7e29d6dd	469ea8618b	e2a23af540	49a1fa4ad8	85c7309f84	2b6b2781ba	de8622b865	991c38d4e4	e3d63c48e4
			Apr29	Apr29	Apr29	Apr29	Apr29	Apr29	Apr29	Apr29	Apr29	Apr29	Apr29	Apr29	Apr29	Apr29	Apr29	Apr28	Apr28	Apr28	Apr28	Apr28	Apr28	Apr28	Apr28	Apr28	Apr28	Apr28	Apr28	Apr27	Apr27	Apr26	Apr26	Apr26	Apr26	Apr26	Apr26
[circle] CircleCI / arm-openssl (curl)			1551	1551	1551	-	-	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551
[circle] CircleCI / arm-openssl-c-ares (curl)	flaky		1615	1615	1615	-	-	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615	1615
[circle] CircleCI / openssl-c-ares (curl)			1550	1550	1550	-	-	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
[circle] CircleCI / openssl-libssh (curl)			1602	1602	1602	-	-	1602	1602	1602	1602	1602	1602	1602	1602	1602	1602	1602	1602	1602	1602	1602	1601	1602	1601	1602	1602	1602	1602	1602	1602	1602	1602	1602	1602	1602
[circle] CircleCI / openssl-no-proxy (curl)			1355	1355	1355	-	-	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355
[circle] CircleCI / x86-openssl (curl)			1551	1551	1551	-	-	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551	1551
[curlauto] Kirill Sokolovsky / Linux 4.1.15 x86_64 gcc 13.2.1 Gentoo (curl)			-	-	1606	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1606	-	-	-	-	-	-	-	1606	-	-	-	-	-	-	1606
[curlauto] Dan Fandrich / Linux Debian RISC-V 64-bit (curl)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
[curlauto] Marcel Raad / MSYS2 MinGW32 WinThreads SSPI HTTP-only WinSSL (curl)	flaky		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	851	-	-	-	-	-	-	-	-	-	851	-	851	-	-	-	-	-
[curlauto] Marcel Raad / MSYS2 MinGW64 WinThreads SSPI HTTP-only OpenSSL --disable-proxy --disable-crypto-auth (curl)	flaky		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	726	-	-	-	-	-	-	-	-	-	726	-	726	-	-	-	-	-
[curlauto] Michael Kaufmann / NetBSD 10.1 ARM big-endian gcc 10.5.0 (curl)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1666	-	-	-	-	-	-	-	-	-	1666	-	1666	-	-	-	-	-
[curlauto] Michael Kaufmann / NetBSD 9.3 ARM gcc 7.5.0 (curl)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
[curlauto] Dagobert / Solaris 10 I386 GCC 4.9.2 + OpenCSW (ares resolver) (curl)			-	-	-	-	-	1672	1672	-	-	-	-	-	1672	-	-	1672	1672	-	-	1672	-	-	-	1672	1672	-	1672	1672	1672	-	-	-	1672	1672
[curlauto] Dagobert / Solaris 10 I386 GCC 4.9.2 + OpenCSW (threaded resolver) (curl)	permafail		-	-	*1	-	-	*1	-	-	-	-	-	*1	-	*1	-	*1	-	-	-	*1	*1	-	-	*1	*1	-	*1	*1	*1	-	-	-	*1	*1
[curlauto] Dagobert / Solaris 10 I386 GCC 4.9.2 + OpenCSW (curl)			-	-	1672	-	-	-	-	-	-	-	-	-	-	1672	-	1672	1672	-	-	1672	-	-	1672	1672	-	-	1672	1672	1672	-	-	-	1672	1672
[curlauto] Dagobert / Solaris 10 SPARC GCC 4.9.2 + OpenCSW (ares resolver) (curl)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1672	-	1672	-	-	-	-	1672	-	-	1672	1672	1672	-	-	-	-	1672	
[curlauto] Dagobert / Solaris 10 SPARC GCC 4.9.2 + OpenCSW			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1669	1669	-	-	-	*1	-	-	1669	-	-	1669	-	1669	-	-	-	-	1669	

Tue, 29 Apr 2025 20:47:44 +0000 3fcddc835
Success: 1668, Failed: 1, Attempted: 1669
Result: failure

https://curl.se/dev/log.cgi?id=20250429220211-1673893

Test failure counts for test runs on https://github.com/curl/curl

Report generated Tue, 29 Apr 2025 12:52:07 +0000 covering runs over the past 30 days.

Test	Result	Count	Examples
580	UNKNOWN	500	Log Log Log Log Log
1632	FAILIGNORE	472	Log Log Log Log Log
565	UNKNOWN	396	Log Log Log Log Log
576	UNKNOWN	394	Log Log Log Log Log
639	UNKNOWN	389	Log Log Log Log Log
581	UNKNOWN	384	Log Log Log Log Log
641	UNKNOWN	376	Log Log Log Log Log
640	UNKNOWN	361	Log Log Log Log Log
574	UNKNOWN	353	Log Log Log Log Log
642	UNKNOWN	353	Log Log Log Log Log
578	UNKNOWN	343	Log Log Log Log Log
2004	FAILIGNORE	340	Log Log Log Log Log
643	UNKNOWN	330	Log Log Log Log Log
1631	FAILIGNORE	317	Log Log Log Log Log
567	UNKNOWN	315	Log Log Log Log Log
638	UNKNOWN	290	Log Log Log Log Log
632	UNKNOWN	273	Log Log Log Log Log
611	FAILIGNORE	251	Log Log Log Log Log
626	FAILIGNORE	250	Log Log Log Log Log
604	FAILIGNORE	249	Log Log Log Log Log
606	FAILIGNORE	248	Log Log Log Log Log
610	FAILIGNORE	248	Log Log Log Log Log
634	FAILIGNORE	248	Log Log Log Log Log
582	FAILIGNORE	247	Log Log Log Log Log
613	FAILIGNORE	247	Log Log Log Log Log
627	FAILIGNORE	247	Log Log Log Log Log
637	FAILIGNORE	247	Log Log Log Log Log

Configured Test Job Features on https://github.com/curl/curl

Report generated Tue, 29 Apr 2025 12:39:47 +0000 covering jobs over the past 6 days.

✓ job has this feature
  job does not have this feature
– job does not have this mutually exclusive feature
? unable to determine if job has this feature
? unable to determine if job has this binary feature (but likely no)

The job links to the results of the latest run.

Job	arch: aarch64	arch: evbarm	arch: i386	arch: sparc	arch: x86_64	targetarch: aarch64	targetarch: armv7eb	targetarch: i386	targetarch: i686	targetarch: sparc	targetarch: x86_64	os: cygwin	os: darwin	os: freebsd	os: linux	os: msys	os: netbsd	os: openbsd	os: solaris	buildsystem: automake	buildsystem: cmake/make	buildsystem: cmake/msbuild	buildsystem: cmake/ninja	compiler: AppleClang	compiler: clang	compiler: gcc	compiler: IntelC
[circle] CircleCI / arm-openssl (curl)	✓	–	–	–	–	✓	–	–	–	–	–	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–
[circle] CircleCI / arm-openssl-c-ares (curl)	✓	–	–	–	–	✓	–	–	–	–	–	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–
[circle] CircleCI / openssl-c-ares (curl)	–	–	–	–	✓	–	–	–	–	–	✓	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–
[circle] CircleCI / openssl-libssh (curl)	–	–	–	–	✓	–	–	–	–	–	✓	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–
[circle] CircleCI / openssl-no-proxy (curl)	–	–	–	–	✓	–	–	–	–	–	✓	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–
[circle] CircleCI / x86-openssl (curl)	–	–	–	–	✓	–	–	–	–	–	✓	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–
[curlauto] Kirill Sokolovsky / Linux 4.1.15 x86_64 gcc 13.2.1 Gentoo (curl)	–	–	–	–	✓	–	–	–	–	–	✓	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–
[curlauto] Marcel Raad / MSYS2 MinGW32 WinThreads SSPI HTTP-only WinSSL (curl)	–	–	–	–	✓	–	–	–	✓	–	–	–	–	–	–	✓	–	–	–	✓	–	–	–	–	–	✓	–
[curlauto] Marcel Raad / MSYS2 MinGW64 WinThreads SSPI HTTP-only OpenSSL --disable-proxy --disable-crypto-auth (curl)	–	–	–	–	✓	–	–	–	–	–	✓	–	–	–	–	✓	–	–	–	✓	–	–	–	–	–	✓	–
[curlauto] Michael Kaufmann / NetBSD 10.1 ARM big-endian gcc 10.5.0 (curl)	–	✓	–	–	–	–	✓	–	–	–	–	–	–	–	–	–	✓	–	–	✓	–	–	–	–	–	✓	–
[curlauto] Dagobert / Solaris 10 I386 GCC 4.9.2 + OpenCSW (ares resolver) (curl)	–	–	✓	–	–	–	–	✓	–	–	–	–	–	–	–	–	–	–	✓	✓	–	–	–	–	–	✓	–
[curlauto] Dagobert / Solaris 10 I386 GCC 4.9.2 + OpenCSW (threaded resolver) (curl)	–	–	✓	–	–	–	–	✓	–	–	–	–	–	–	–	–	–	–	✓	✓	–	–	–	–	–	✓	–
[curlauto] Dagobert / Solaris 10 I386 GCC 4.9.2 + OpenCSW (curl)	–	–	✓	–	–	–	–	✓	–	–	–	–	–	–	–	–	–	–	✓	✓	–	–	–	–	–	✓	–
[curlauto] Dagobert / Solaris 10 SPARC GCC 4.9.2 + OpenCSW (ares resolver) (curl)	–	–	–	✓	–	–	–	–	–	✓	–	–	–	–	–	–	–	–	✓	✓	–	–	–	–	–	✓	–
[curlauto] Dagobert / Solaris 10 SPARC GCC 4.9.2 + OpenCSW (threaded resolver) (curl)	–	–	–	✓	–	–	–	–	–	✓	–	–	–	–	–	–	–	–	✓	✓	–	–	–	–	–	✓	–
[curlauto] Dagobert / Solaris 10 SPARC GCC 4.9.2 + OpenCSW (curl)	–	–	–	✓	–	–	–	–	–	✓	–	–	–	–	–	–	–	–	✓	✓	–	–	–	–	–	✓	–
[curlauto] Dagobert / Solaris 11 SPARC GCC 4.9.2 + OpenCSW (ares resolver) (curl)	–	–	–	✓	–	–	–	–	–	✓	–	–	–	–	–	–	–	–	✓	✓	–	–	–	–	–	✓	–
[curlauto] Dagobert / Solaris 11 SPARC GCC 4.9.2 + OpenCSW (threaded resolver) (curl)	–	–	–	✓	–	–	–	–	–	✓	–	–	–	–	–	–	–	–	✓	✓	–	–	–	–	–	✓	–
[curlauto] Dagobert / Solaris 11 SPARC GCC 4.9.2 + OpenCSW (curl)	–	–	–	✓	–	–	–	–	–	✓	–	–	–	–	–	–	–	–	✓	✓	–	–	–	–	–	✓	–
[gha] dist / maketgz-and-verify-in-tree (curl)	–	–	–	–	✓	–	–	–	–	–	✓	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–
[gha] dist / verify-out-of-tree-autotools-debug (curl)	–	–	–	–	✓	–	–	–	–	–	✓	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–
[gha] dist / verify-out-of-tree-docs (curl)	–	–	–	–	✓	–	–	–	–	–	✓	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–
[gha] Linux HTTP/3 / AM gnutls (curl)	–	–	–	–	✓	–	–	–	–	–	✓	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–
[gha] Linux HTTP/3 / AM gnutls (pytest)	–	–	–	–	✓	–	–	–	–	–	✓	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–
[gha] Linux HTTP/3 / AM openssl-quic (curl)	–	–	–	–	✓	–	–	–	–	–	✓	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–
[gha] Linux HTTP/3 / AM openssl-quic (pytest)	–	–	–	–	✓	–	–	–	–	–	✓	–	–	–	✓	–	–	–	–	✓	–	–	–	–	–	✓	–

Metadata for test runs on https://github.com/curl/curl

Report generated Tue, 29 Apr 2025 18:48:59 +0000 covering runs over the past 90 days.

Expand each name to see all its values among recent test runs. Note that not all test runs expose all metadata.

▼ arch

- aarch64
- amd64
- arm64
- evbarm
- i386
- riscv64
- sparc
- x86_64

▶ branch
▶ buildcode
▶ buildsystem
▶ buildsystemver
▶ checkrepo
▶ ciarch
▶ cicores
▶ cidef
▶ cijob
▶ ciname
▶ cinodetype
▶ cios
▶ ciresult
▶ cistep
▶ cistepid
▶ cistepresult
▶ commit
▼ compiler

- APPLECLANG
- AppleClang
- CLANG
- Clang

Reports: Statistics

Test run statistics for test runs on https://github.com/curl/curl

Report generated Tue, 29 Apr 2025 01:33:53 +0000 covering runs over the past 368 days.

Days of stats: 369

Most recent run: Fri, 25 Apr 2025 23:48:01 +0000

Oldest run used: Thu, 25 Apr 2024 07:46:46 +0000

Number of git commits tested: 2404

Number of unique configured test jobs: 401

Test runs: 260702

Runs per day: 707.0

Runs by test result: 260702 (100%)

- success: 252564 (97%)
- failure: 7084 (2.7%)
- truncated: 1054 (0.40%)

Tests run: 354846350

Tests executed per day: 962295.2

Tests considered: 372440284 (100%)

- PASS: 354485469 (95%)
- FAIL: 9029 (0.0024%)
- SKIP: 17593934 (4.7%)
- FAILIGNORE: 273845 (0.074%)
- UNKNOWN: 78007 (0.021%)

Total clock time spent running tests: 266754193 sec. (3087 days)

Time spent running tests per day: 723401 sec./day (8.4 days/day)

Average time spent running each test: 0.752 sec./test

Longest test runs:

- curl: 13118 sec.
- pytest: 243 sec.

Shortest test runs:

- curl: 16 sec.
- pytest: 72 sec.

Average test runs:

- curl: 420 sec.
- pytest: 125 sec.

Most number of unique tests attempted in one run by test format:

- curl: 1749
- pytest: 673

Average number of tests attempted in one run by test format:

- curl: 1480.4
- pytest: 451.4

Runs by CI system: 260702 (100%)

- appveyor: 1327 (0.51%)
- azure: 12127 (4.7%)
- circle: 19714 (7.6%)
- cirrus: 444 (0.17%)
- curlauto: 10650 (4.1%)
- gha: 216440 (83%)

Runs by build system: 240593 (100%)

- automake: 171781 (71%)
- cmake/make: 9741 (4.0%)
- cmake/msbuild: 10370 (4.3%)
- cmake/ninja: 48701 (20%)

Runs by test format: 260702 (100%)

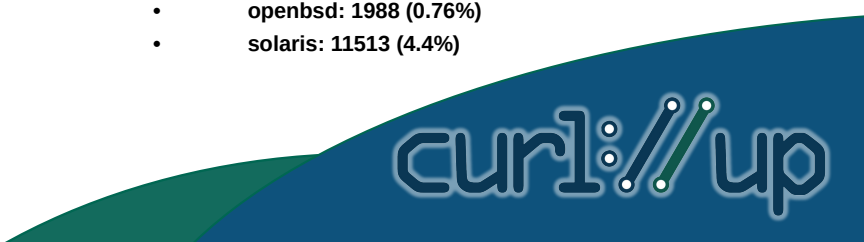
- curl: 230469 (88%)
- pytest: 30233 (12%)

Runs by test mode: 230469 (100%)

- normal: 220198 (96%)
- torture: 10271 (4.5%)

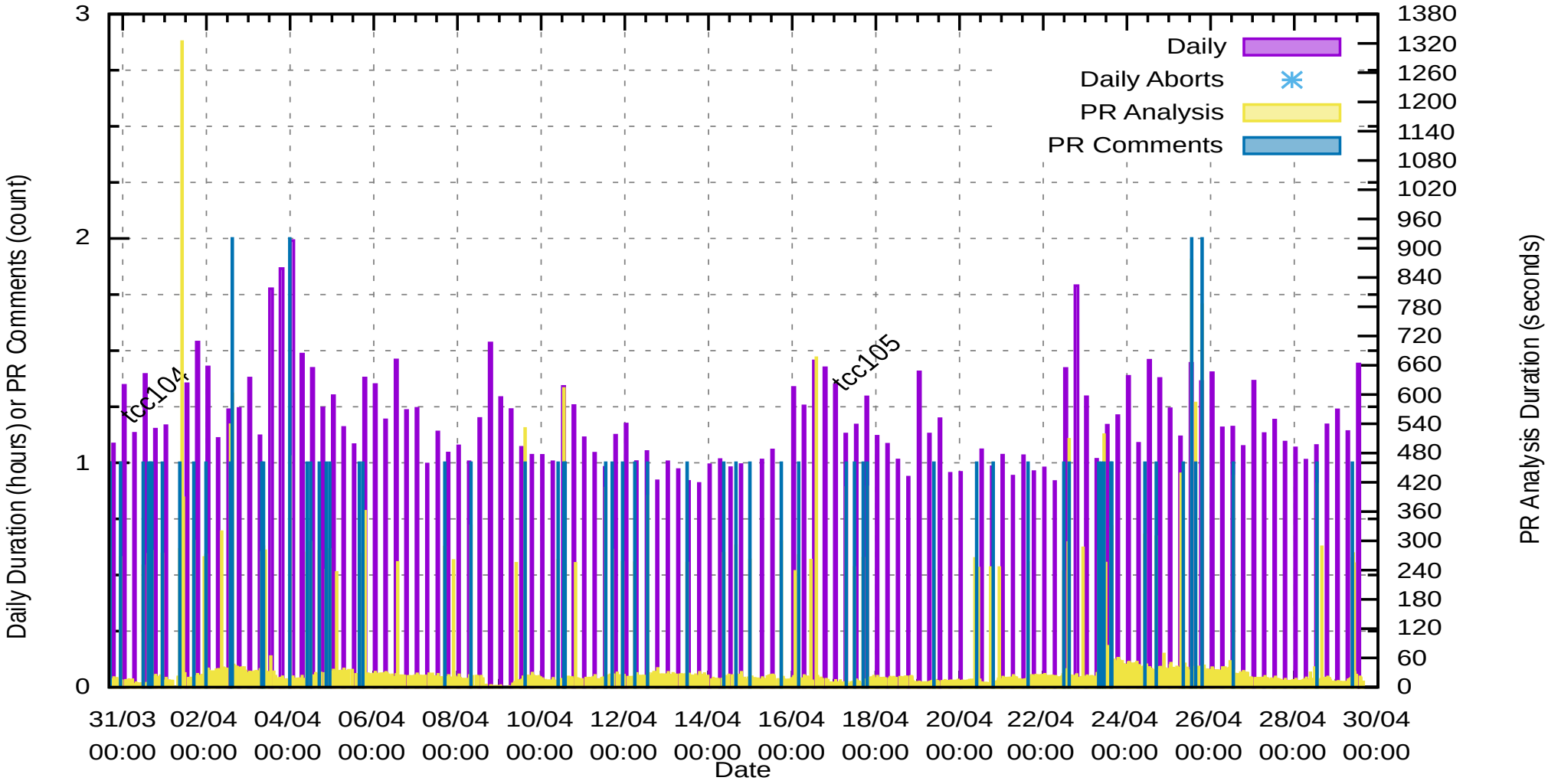
Runs by operating systems: 260702 (100%)

- aix: 10 (0.0038%)
- cygwin: 7010 (2.7%)
- darwin: 69613 (27%)
- freebsd: 2120 (0.81%)
- linux: 138805 (53%)
- msys: 27284 (10%)
- netbsd: 2359 (0.90%)
- openbsd: 1988 (0.76%)
- solaris: 11513 (4.4%)



Logs

- Batch jobs log erroneous output
- Logs are manually downloaded
- Job graph produced on demand
- Helps me make sure things are still working


Test Clutch for curl job durations
Daily
Daily Aborts
PR Analysis
PR Comments
tcc104
tcc105
Daily Duration (hours) or PR Comments (count)
PR Analysis Duration (seconds)
Date
0
1
2
3
0
60
120
180
240
300
360
420
480
540
600
660
720
780
840
900
960
1020
1080
1140
1200
1260
1320
1380
31/03 00:00
02/04 00:00
04/04 00:00
06/04 00:00
08/04 00:00
10/04 00:00
12/04 00:00
14/04 00:00
16/04 00:00
18/04 00:00
20/04 00:00
22/04 00:00
24/04 00:00
26/04 00:00
28/04 00:00
30/04 00:00

Database

- Central store of test results
- Source of data for all reports
- Source of flakiness status for PR comments
- Can be exported in OpenMetrics format

curl://up

Open Metrics

- Born in the Prometheus monitoring project
- Attempt to become IETF standard was abandoned
- Still used by much software as “Prometheus format”
- Simple text-based format for exporting metrics
- Simple example:

```
# TYPE testclutch_tests_duration_seconds gauge
# UNIT testclutch_tests_duration_seconds seconds
# HELP testclutch_tests_duration_seconds How long the tests took to run
(wall clock time).
testclutch_tests_duration_seconds 2650.0 1742118441
```

curl://up

Open Metrics

testclutch_tests_duration_seconds{**arch**="*sparc*",**buildcode**="*2222030376*",**buildsystem**="*automake*",**checkrepo**="*https://github.com/curl/curl*",**cijob**="*Solaris 10 SPARC GCC 4.9.2 + OpenCSW (ares resolver)*",**ciname**="*Dagobert*",**commit**="*4911e7af119c1b7efd46a742d47bca44832c3041*",**compiler**="*GNU_C*",**compilerversion**="*5.5.0*",**compilerversioncode**="*505*",**configureargs**="'*--enable-ares' '--with-openssl' '--enable-debug' '--enable-curldebug' '--enable-symbol-hiding' '--with-gssapi=/opt/csw/lib' '--enable-ldap' '--enable-ldaps' 'CC=/opt/csw/bin/gcc' 'LDFLAGS=-L/opt/csw/lib*'",**curldeps**="*libcurl/8.13.0-DEV OpenSSL/1.1.1w zlib/1.3.1 brotli/1.0.2 zstd/1.4.5 c-ares/1.14.0 libidn2/2.0.4 libpsl/0.21.5 nghttp2/1.30.0 librtmp/2.3 libgsasl/1.8.0 OpenLDAP/2.4.40*",**curlprotocols**="*dict file ftp ftps gopher gophers http https imap imaps ipfs ipns ldap ldaps mqtt pop3 pop3s rtmp rtsp smb smbs smtp smtps telnet tftp ws wss*",**executor**="*testcurl*",**executorver**="*2024-11-28*",**features**="*alt-svc AsynchDNS brotli Debug gsasl GSS-API HSTS HTTP2 HTTPS-proxy IDN IPv6 Kerberos Largefile libz NTLM PSL SPNEGO SSL threadsafe TLS-SRP TrackMemory UnixSockets zstd*",**host**="*unstable10s*",**hostarch**="*sparc*",**hostos**="*solaris2.10*",**hosttriplet**="*sparc-sun-solaris2.10*",**hostvendor**="*sun*",**origin**="*curlauto*",**os**="*solaris*",**perlver**="*5.10.1*",**randomseed**="*223460*",**runid**="*build-20250316094727-315931.log*",**runtestsopts**="*-a -p -r*",**systemhost**="*unstable10s*",**systemos**="*SunOS*", **systemosver**="*5.10*", **targetarch**="*sparc*",**targetos**="*solaris2.10*",**targettriplet**="*sparc-sunsolaris2.10*", **targetvendor**="*sun*", **testformat**="*curl*", **testingver**="*8.13.0-DEV*", **testmode**="*normal*",**testresult**="*success*", **uniquejobname**="*Solaris 10 SPARC GCC 4.9.2 + OpenCSW (ares resolver) 2222030376!curl*",**url**="*https://curl.se/dev/log.cgi?id=20250316094727-315931*",**withduphandle**="no", **withevent**="*no*",**withvalgrind**="*no*",**job**="*testclutch*",**instance**="*test*"} 2650.0 1742118441

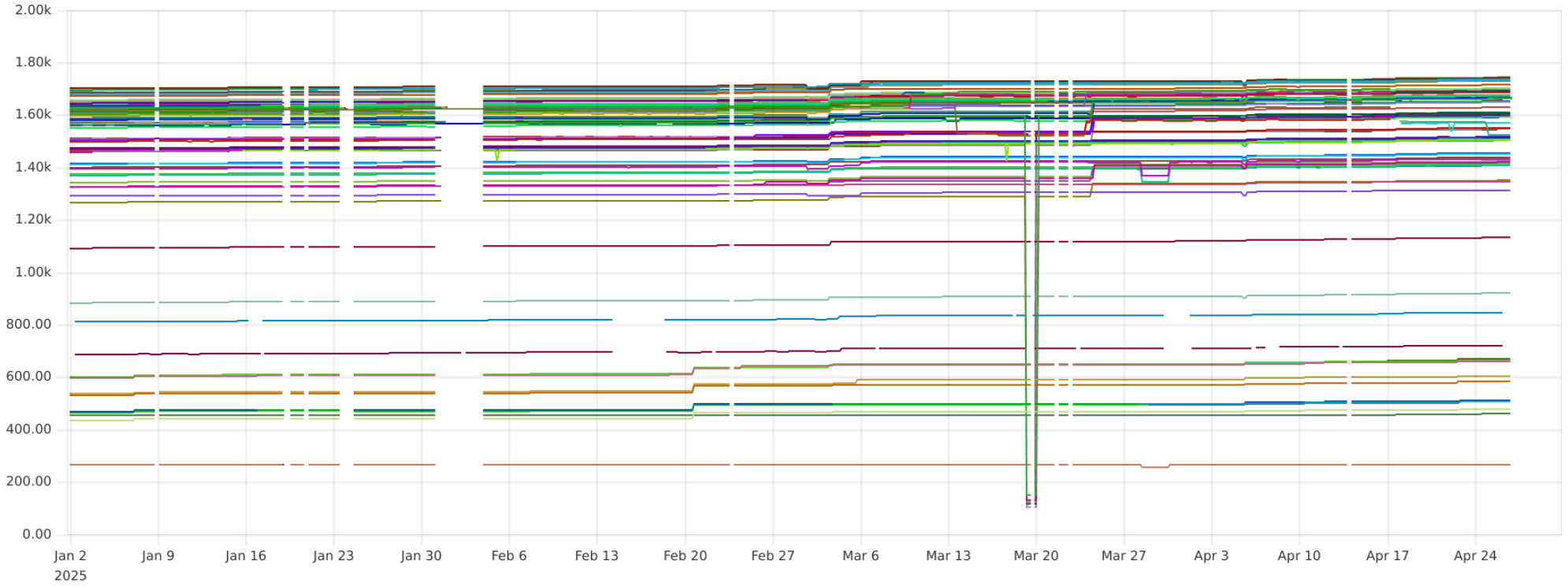
Prometheus Consoles Query Alerts Status

```
max(last_over_time(testclutch_tests_seconds_count[24h])) by (origin, account, uniquejobname, testformat)
```

Execute

Table Graph Explain

17w End time High res. Unstacked Stacked



{origin="circle", testformat="curl", uniquejobname="arm-openssl!curl"}

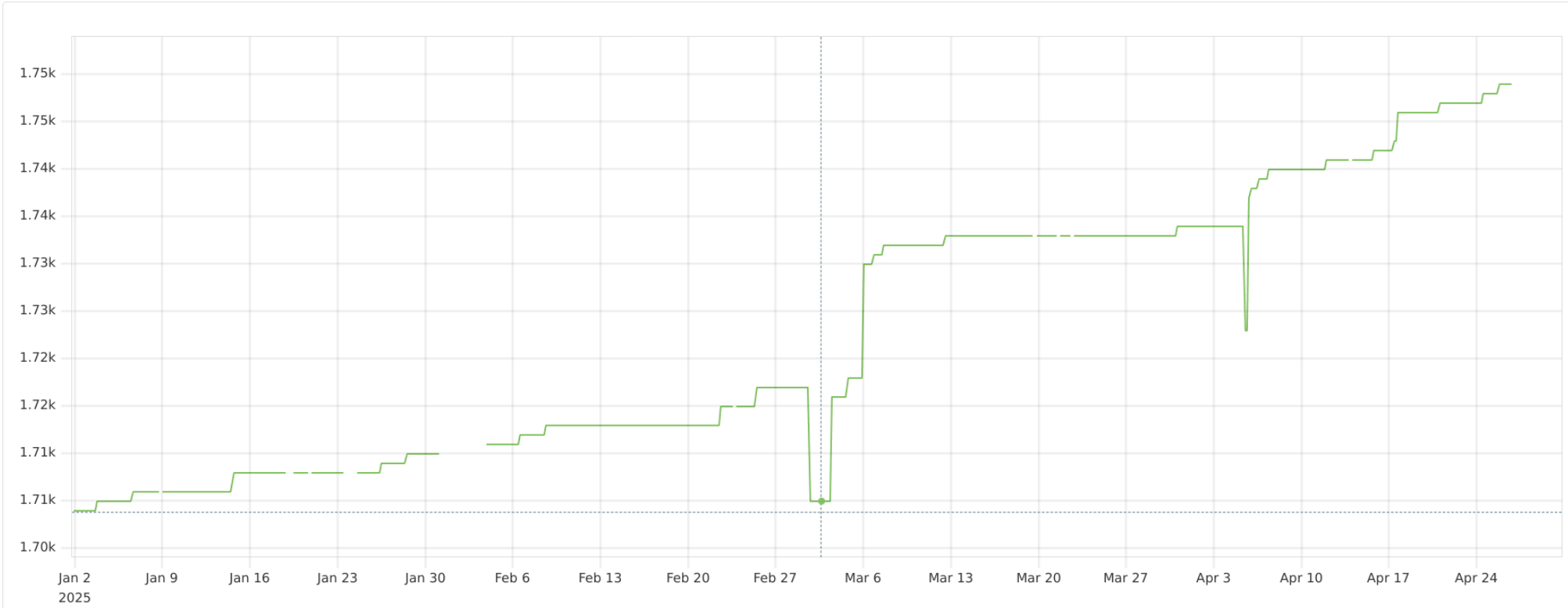
Prometheus Consoles Query Alerts Status

```
max(last_over_time(testclutch_tests_seconds_count[24h])) by (origin, account, uniquejob
```

Execute

Table Graph Explain

17w End time High res. Unstacked Stacked



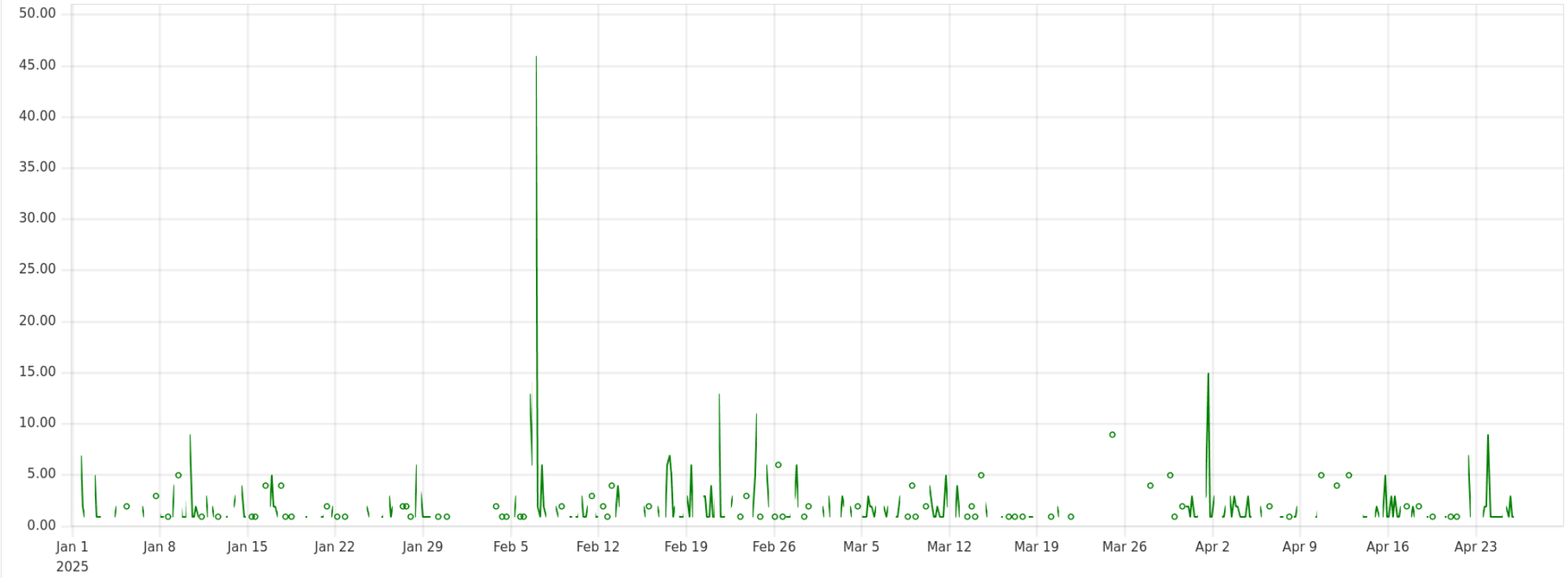
Prometheus Consoles Query Alerts Status

```
sum(last_over_time(testclutch_tests_seconds_count{result="FAIL"}[2h]))
```

Execute

Table Graph Explain

17w End time High res. Unstacked Stacked



{}

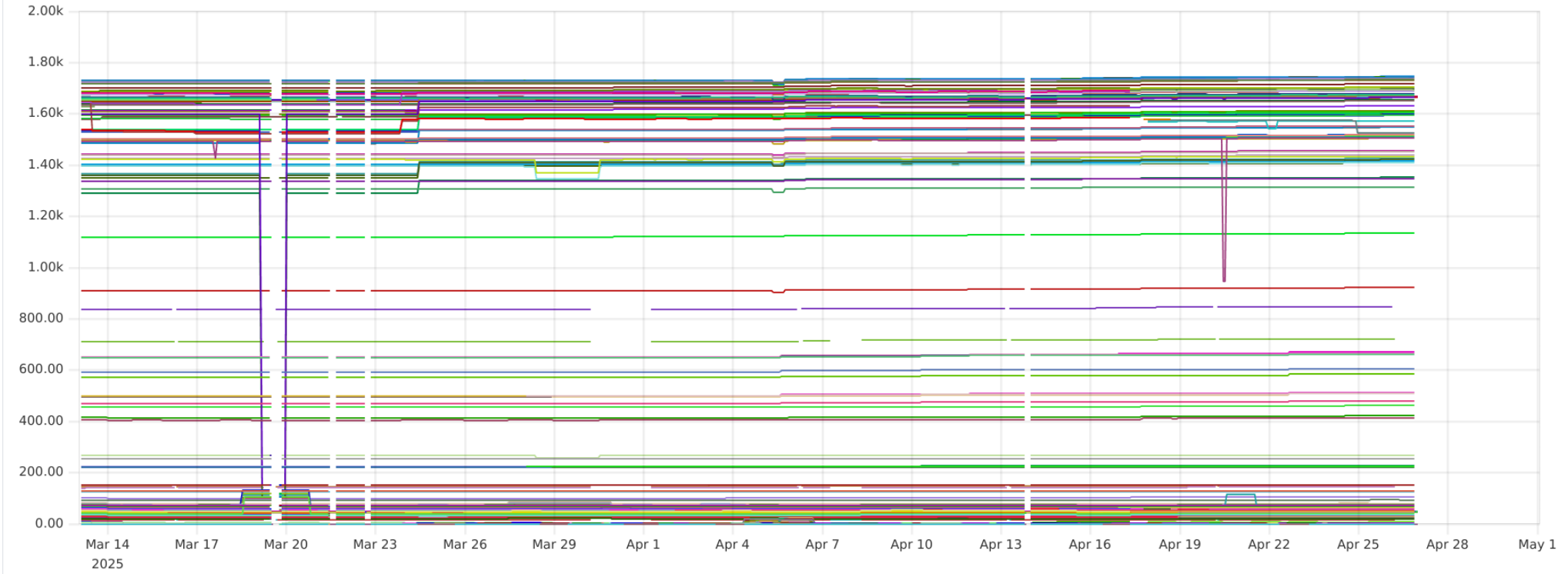
Prometheus Consoles Query Alerts Status

```
max(last_over_time(testclutch_tests_seconds_count[24h])) by (origin, account, uniquejobname, testformat, result)
```

Execute

Table Graph Explain

7w End time High res. Unstacked Stacked



{origin="circle", result="FAIL", testformat="curl", uniquejobname="arm-openssl-c-ares!curl"}

{origin="circle", result="FAIL", testformat="curl", uniquejobname="arm-openssl-c-ares!curl"}
{origin="circle", result="FAIL", testformat="curl", uniquejobname="openssl-c-ares!curl"}
{origin="circle", result="FAIL", testformat="curl", uniquejobname="openssl-no-proxy!curl"}
{origin="circle", result="PASS", testformat="curl", uniquejobname="arm-openssl!curl"}
{origin="circle", result="PASS", testformat="curl", uniquejobname="arm-openssl-c-ares!curl"}
{origin="circle", result="PASS", testformat="curl", uniquejobname="openssl-c-ares!curl"}
{origin="circle", result="PASS", testformat="curl", uniquejobname="openssl-libssh!curl"}
{origin="circle", result="PASS", testformat="curl", uniquejobname="openssl-no-proxy!curl"}
{origin="circle", result="PASS", testformat="curl", uniquejobname="x86-openssl!curl"}
{origin="circle", result="SKIP", testformat="curl", uniquejobname="arm-openssl!curl"}
{origin="circle", result="SKIP", testformat="curl", uniquejobname="arm-openssl-c-ares!curl"}
{origin="circle", result="SKIP", testformat="curl", uniquejobname="openssl-c-ares!curl"}
{origin="circle", result="SKIP", testformat="curl", uniquejobname="openssl-libssh!curl"}
{origin="circle", result="SKIP", testformat="curl", uniquejobname="openssl-no-proxy!curl"}
{origin="circle", result="SKIP", testformat="curl", uniquejobname="x86-openssl!curl"}
{origin="curlauto", result="FAIL", testformat="curl", uniquejobname="NetBSD 10.1 ARM big-endian gcc 10.5.0 127122733!curl"}
{origin="curlauto", result="FAIL", testformat="curl", uniquejobname="Solaris 10 I386 GCC 4.9.2 + OpenCSW (threaded resolver) 2057333316!curl"}
{origin="curlauto", result="FAIL", testformat="curl", uniquejobname="Solaris 10 SPARC GCC 4.9.2 + OpenCSW (ares resolver) 2222030376!curl"}
{origin="curlauto", result="FAIL", testformat="curl", uniquejobname="Solaris 10 SPARC GCC 4.9.2 + OpenCSW (threaded resolver) 2057333316!curl"}
{origin="curlauto", result="FAIL", testformat="curl", uniquejobname="Solaris 11 SPARC GCC 4.9.2 + OpenCSW (ares resolver) 2222030376!curl"}
{origin="curlauto", result="FAIL", testformat="curl", uniquejobname="Solaris 11 SPARC GCC 4.9.2 + OpenCSW (threaded resolver) 2057333316!curl"}
{origin="curlauto", result="FAIL", testformat="curl", uniquejobname="Solaris 11 SPARC GCC 4.9.2 + OpenCSW 2714428864!curl"}
{origin="curlauto", result="PASS", testformat="curl", uniquejobname="Linux 4.1.15 x86_64 gcc 13.2.1 Gentoo 606020064!curl"}
{origin="curlauto", result="PASS", testformat="curl", uniquejobname="MSYS2 MinGW32 WinThreads SSPI HTTP-only WinSSL 1952821939!curl"}
{origin="curlauto", result="PASS", testformat="curl", uniquejobname="MSYS2 MinGW64 WinThreads SSPI HTTP-only OpenSSL --disable-proxy --disable-crypto-auth 2503529752!curl"}
{origin="curlauto", result="PASS", testformat="curl", uniquejobname="NetBSD 10.1 ARM big-endian gcc 10.5.0 127122733!curl"}
{origin="curlauto", result="PASS", testformat="curl", uniquejobname="NetBSD 9.3 ARM gcc 7.5.0 127122733!curl"}
{origin="curlauto", result="PASS", testformat="curl", uniquejobname="Solaris 10 I386 GCC 4.9.2 + OpenCSW (ares resolver) 2222030376!curl"}
{origin="curlauto", result="PASS", testformat="curl", uniquejobname="Solaris 10 I386 GCC 4.9.2 + OpenCSW (threaded resolver) 2057333316!curl"}

Prometheus Consoles Query Alerts Status

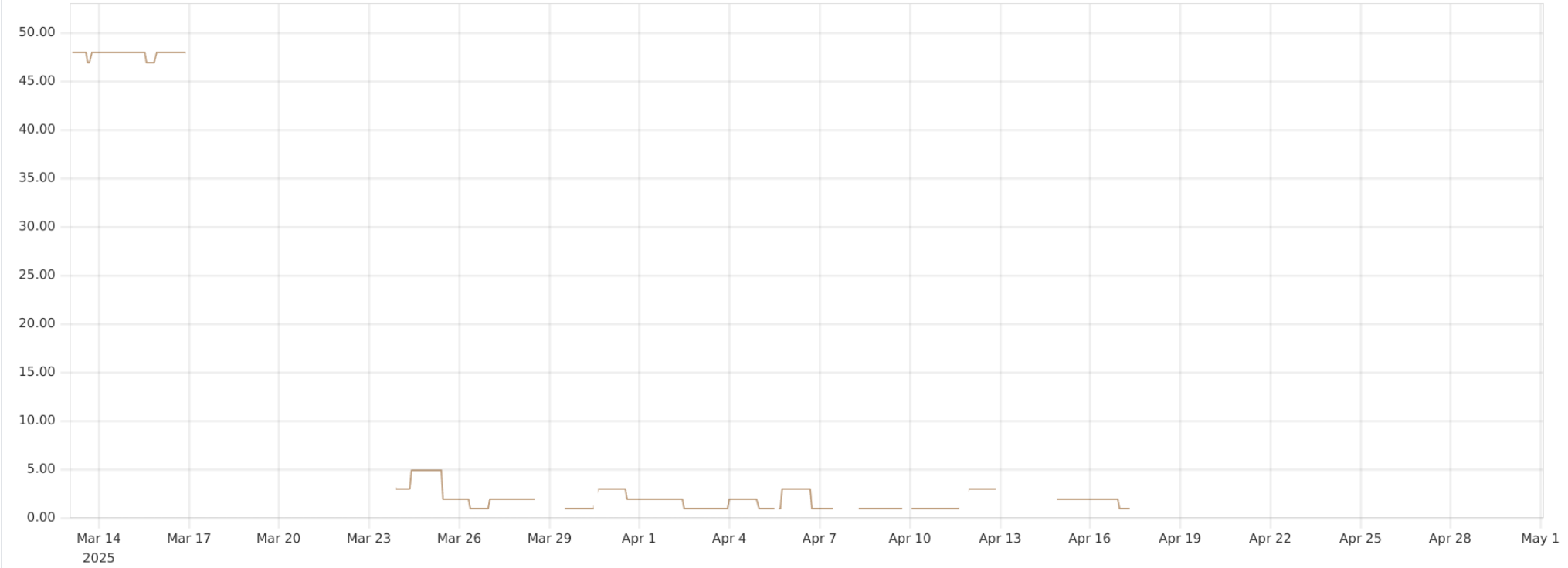
multissl 2/5

```
max(last_over_time(testclutch_tests_seconds_count[24h])) by (origin, account, uniquejobname, testformat, result)
```

Execute

Table Graph Explain

7w End time High res. Unstacked Stacked



{origin="circle", result="FAIL", testformat="curl", uniquejobname="arm-openssl-c-ares!curl"}

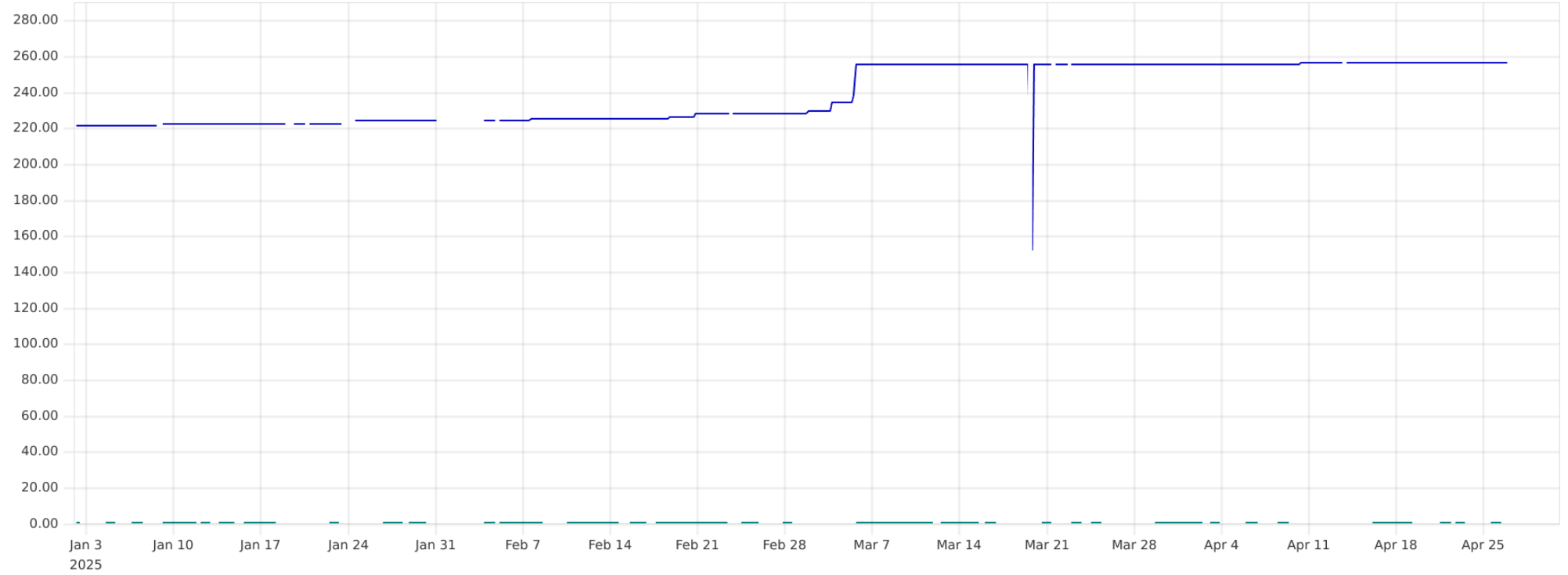
Prometheus Consoles Query Alerts Status

```
max(last_over_time(testclutch_tests_seconds_count[24h])) by (testformat, result)
```

Execute

Table Graph Explain

17w End time High res. Unstacked Stacked



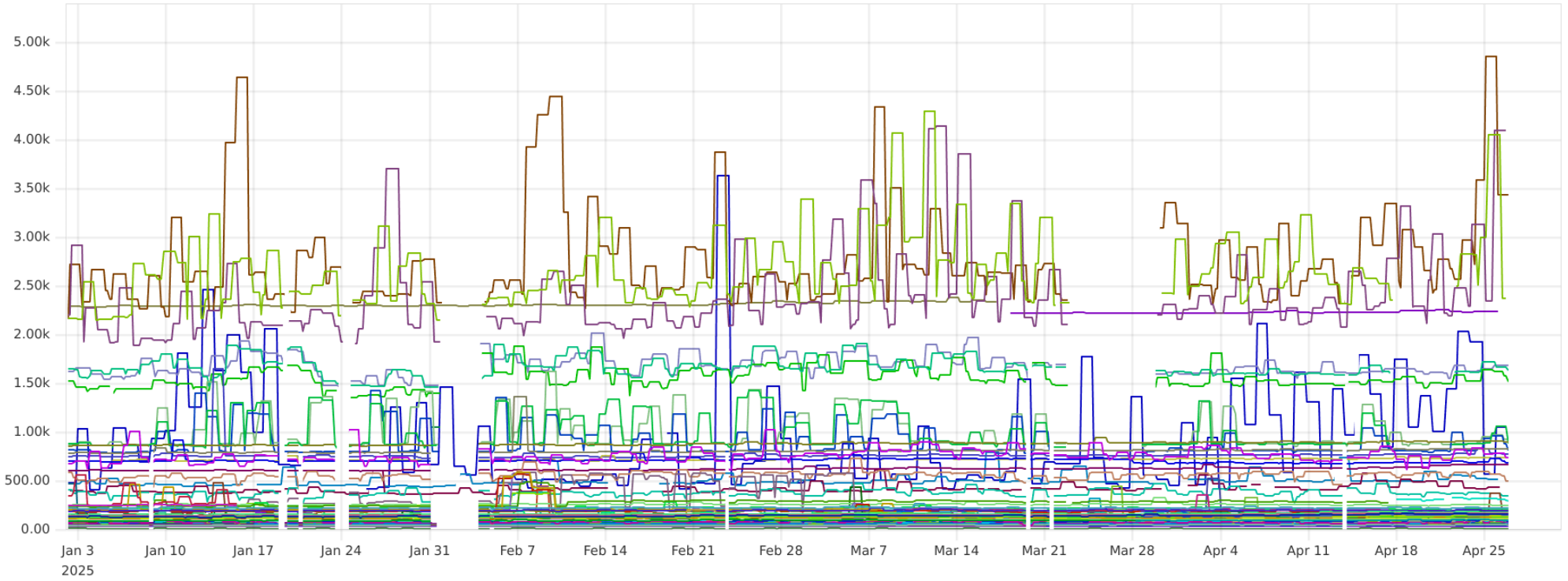
Prometheus Consoles Query Alerts Status

```
max(last_over_time(testclutch_tests_duration_seconds[24h])) by (origin, account, uniquejobname, testformat)
```

Execute

Table Graph Explain

17w End time High res. Unstacked Stacked



{origin="circle", testformat="curl", uniquejobname="arm-openssl!curl"}

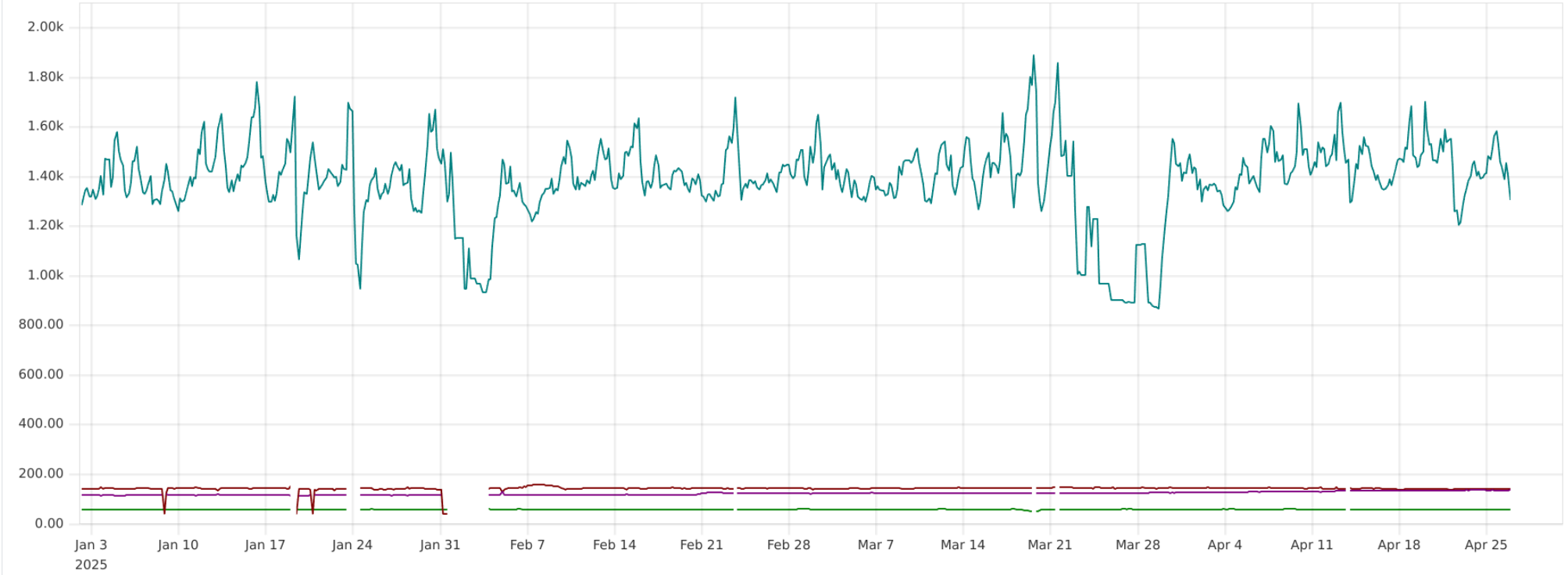
Prometheus Consoles Query Alerts Status

```
avg(last_over_time(testclutch_tests_duration_seconds[24h])) by (origin, account, testformat)
```

Execute

Table Graph Explain

17w End time High res. Unstacked Stacked



{origin="circle", testformat="curl"}

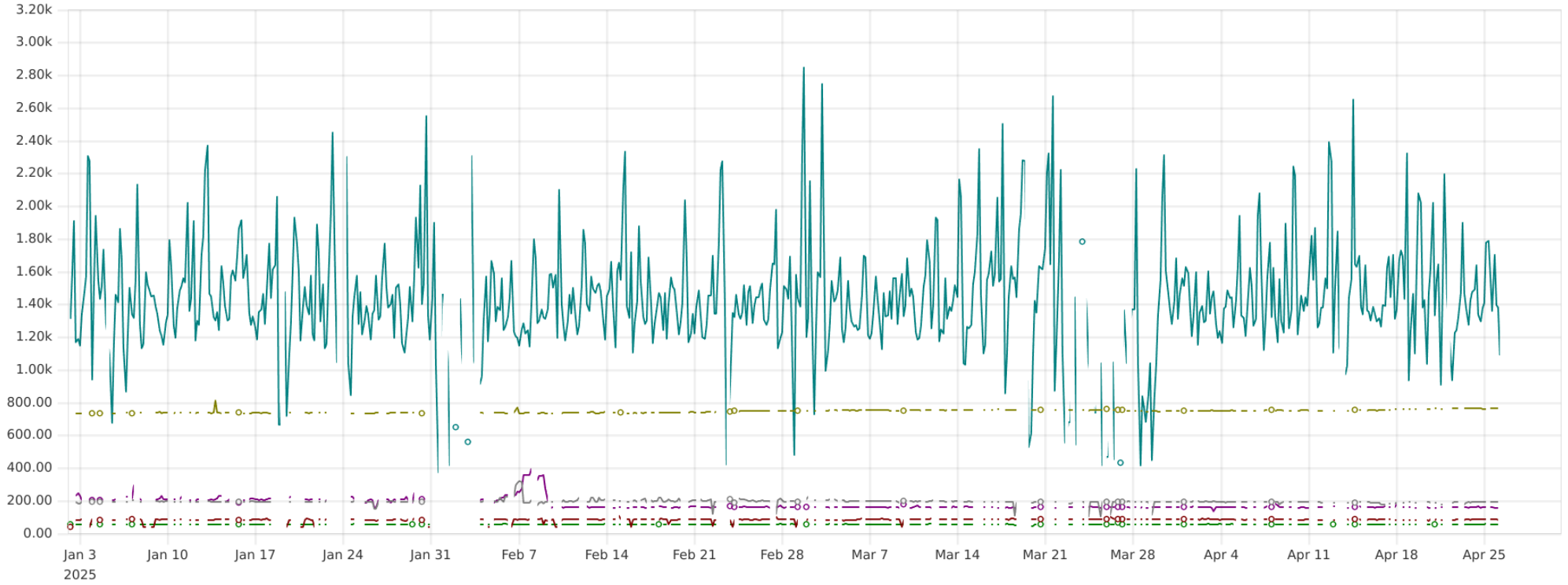
Prometheus Consoles Query Alerts Status

```
avg(last_over_time(testclutch_tests_duration_seconds{testformat="curl"}[6h])) by (origin, account, testformat, paralleljobs)
```

Execute

Table Graph Explain

17w End time High res. Unstacked Stacked



{origin="circle", paralleljobs="14", testformat="curl"}

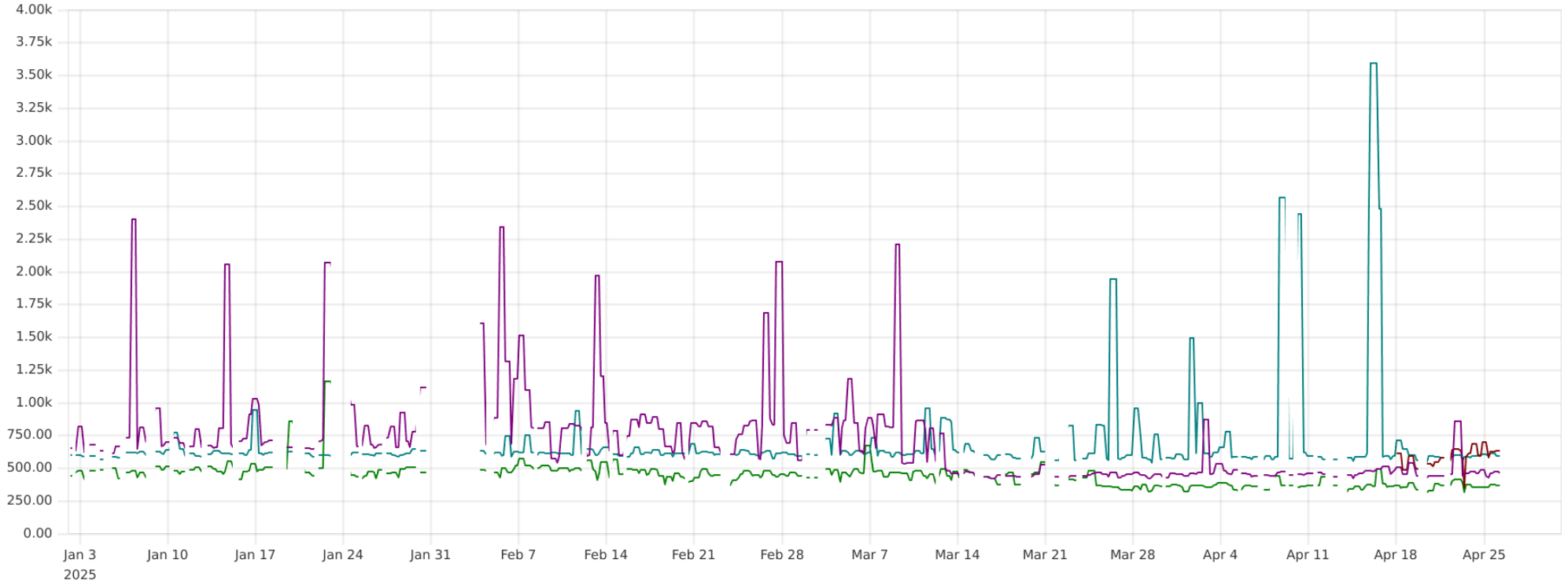
Prometheus Consoles Query Alerts Status

```
max(last_over_time(testclutch_job_duration_seconds{systemos=~"(MSYS|CYGWIN|MINGW).*"}[12h])) by (origin, account, systemos)
```

Execute

Table Graph Explain

17w End time High res. Unstacked Stacked



{origin="gha", systemos="CYGWIN_NT-10.0-20348"}

PromQL Issues

- Best with continuously-pulled metrics
- Delay of >5m between samples causes discontinuities
- Expand window to avoid gaps, but can become misleading
- Average() or Max() over larger window can combine several commits & job runs
- Most queries here used 6h or 24h windows
- Missing labels can cause missing data if care isn’t taken

Questions?

curl://

curl://up

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