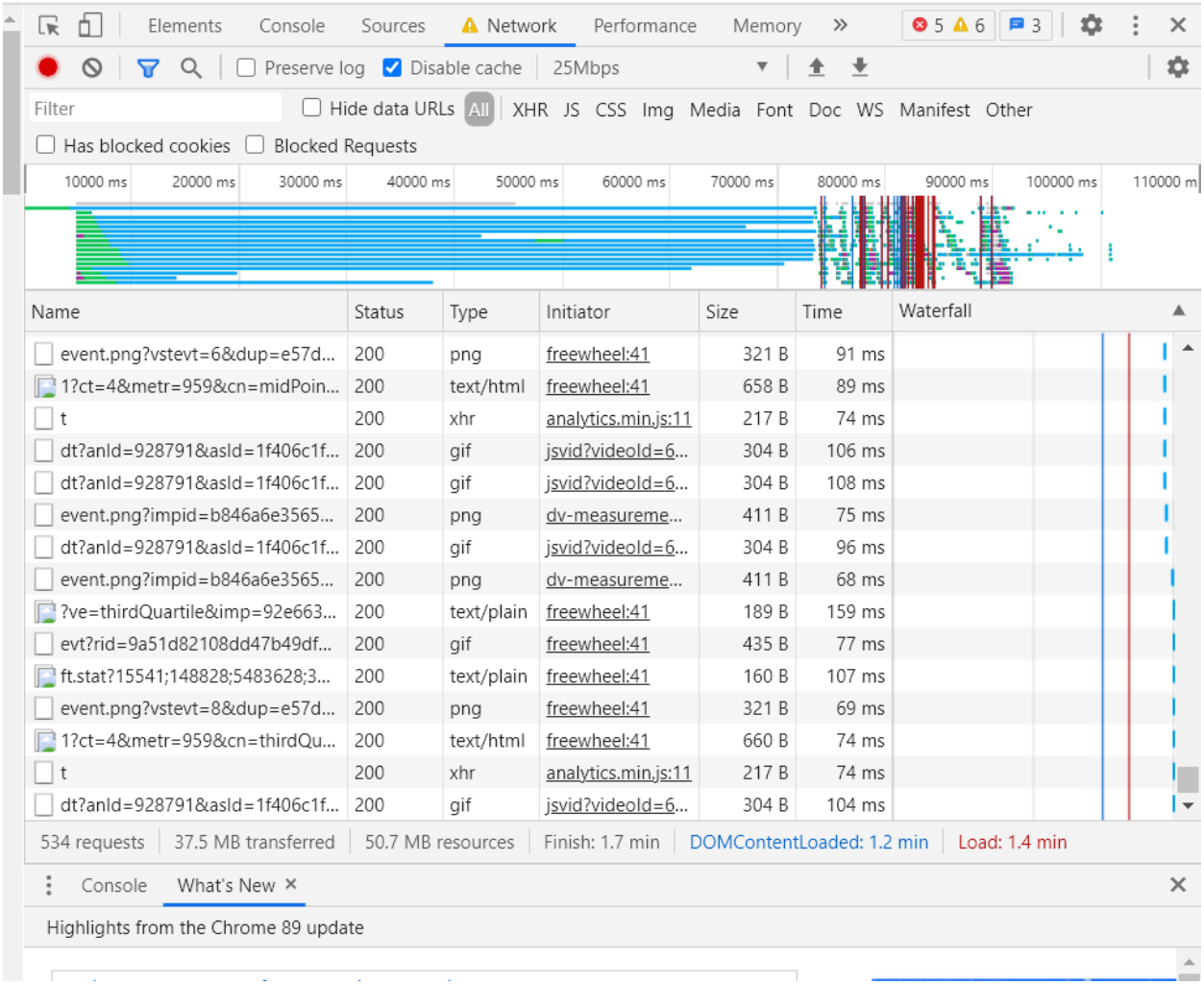
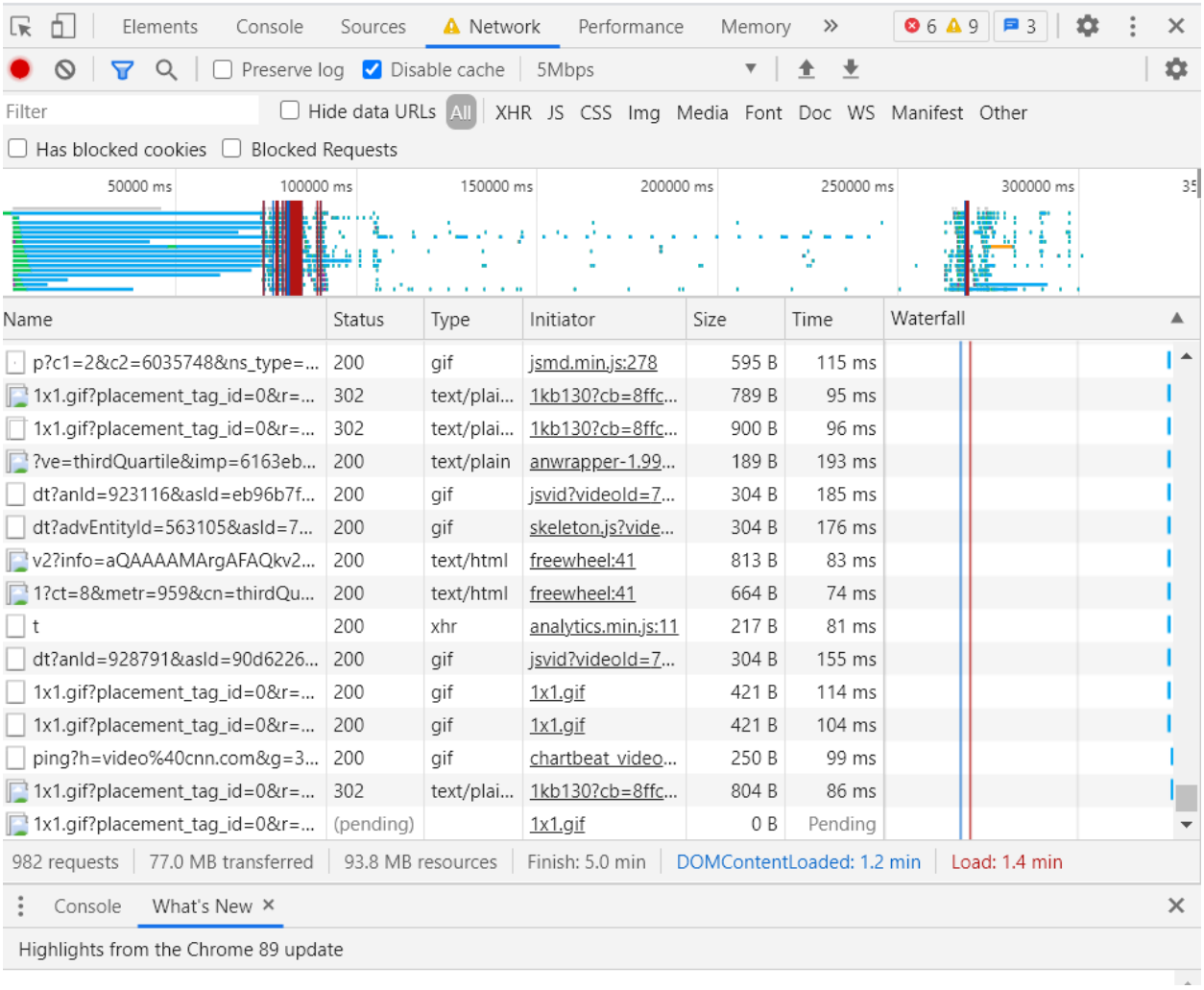
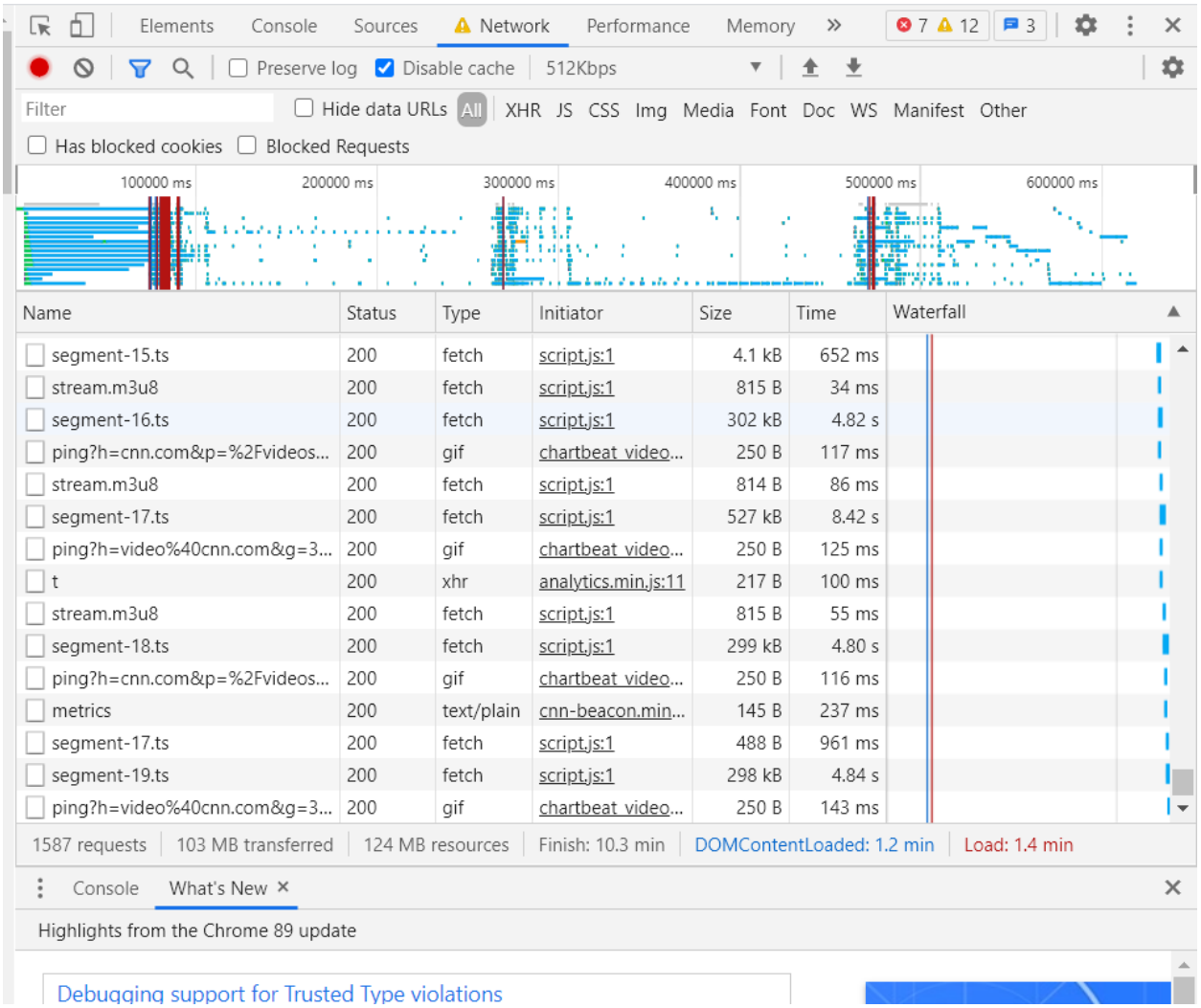
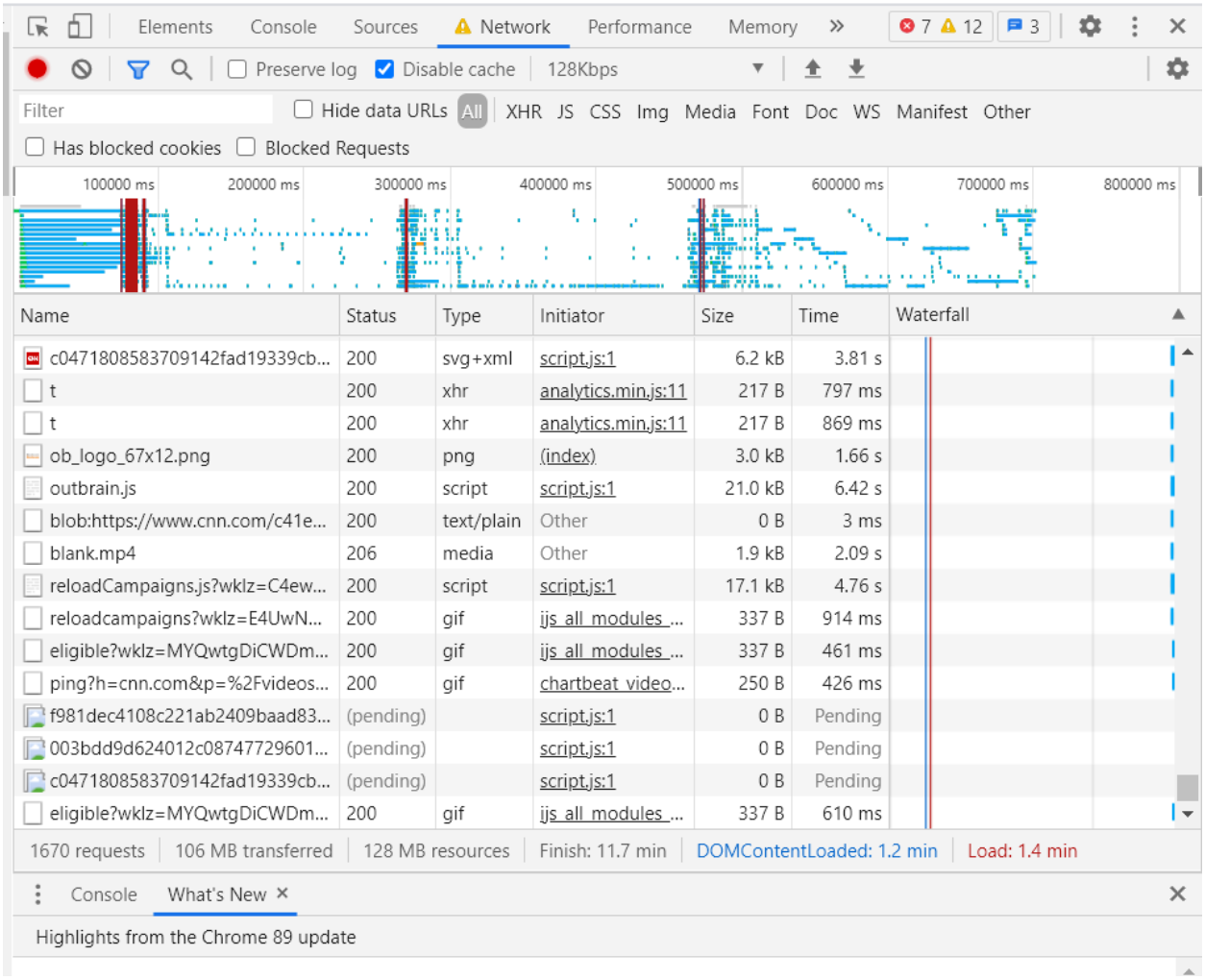
Sample Lab Report:

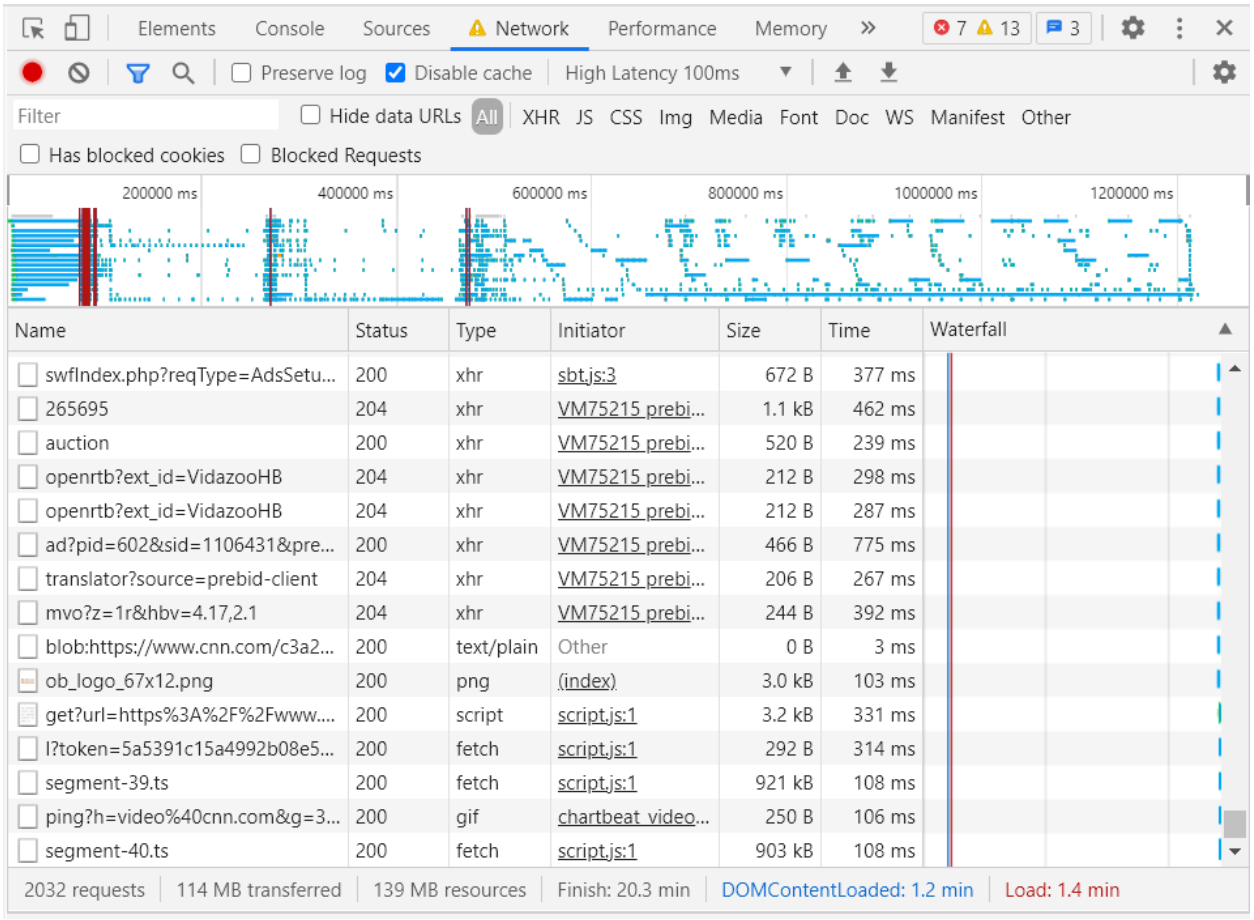
1. Include a table or spreadsheet of all the results of the page load times. This should be 9 rows by 2 columns for a total of 18-pages load times. Might be 16 total results if 64Kbps wouldn't load in time. Be sure each row shows the throttle name along with the results.

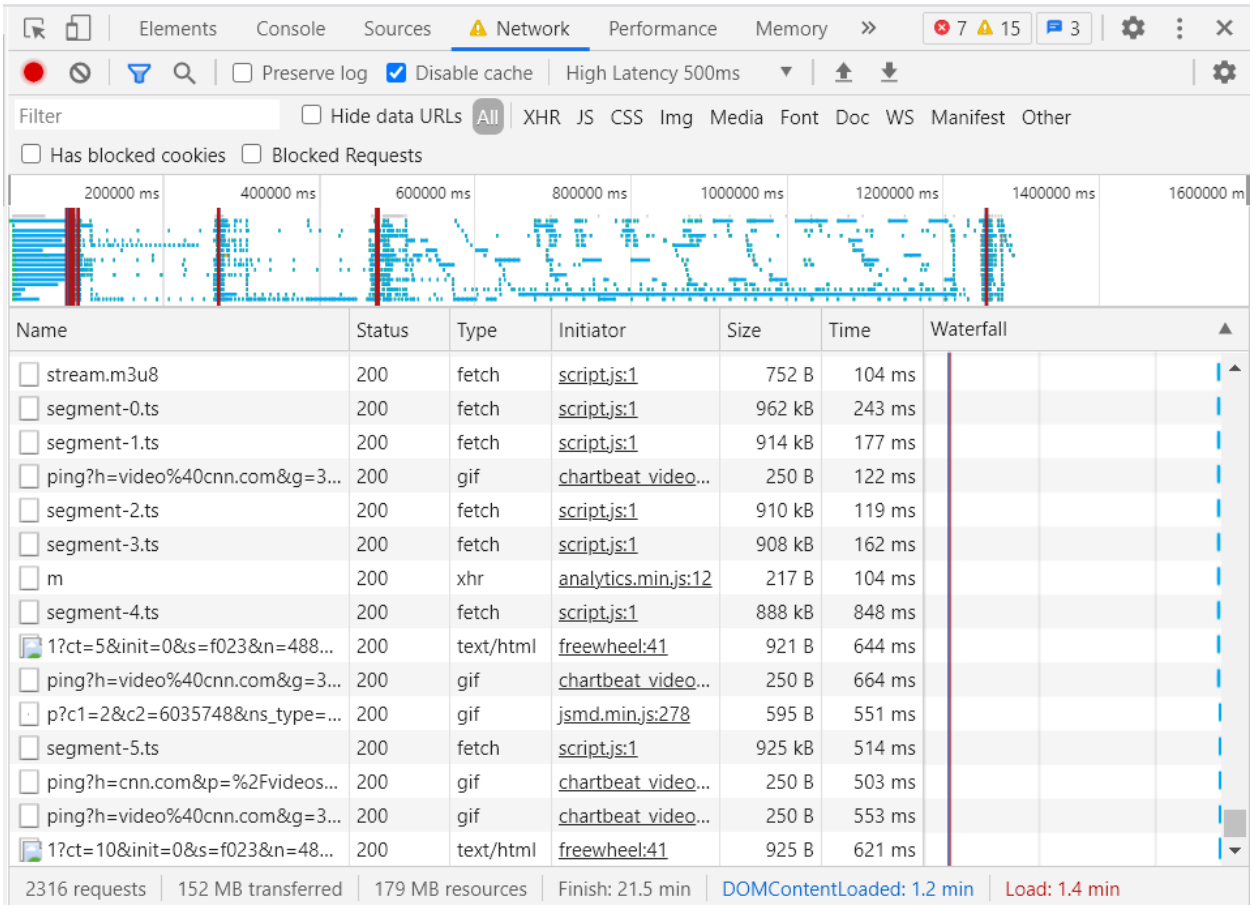


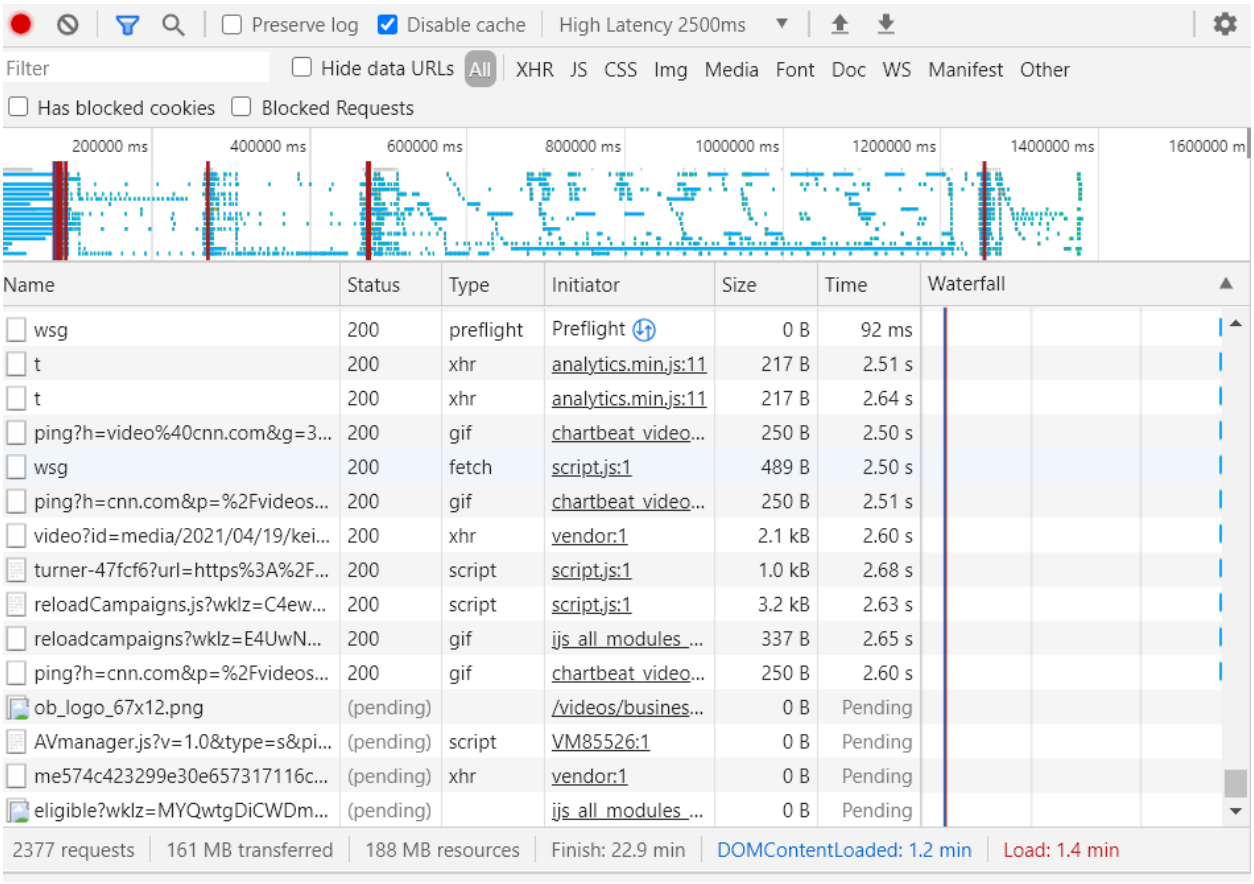

Elements
Console
Sources
Network
Performance
Memory
6 9
3
Preserve log
Disable cache
5Mbps
Filter
Hide data URLs
All
XHR JS CSS Img Media Font Doc WS Manifest Other
Has blocked cookies
Blocked Requests
50000 ms
100000 ms
150000 ms
200000 ms
250000 ms
300000 ms
Name
Status
Type
Initiator
Size
Time
Waterfall
p?c1=2&c2=6035748&ns_type=... 200 gif jsmd.min.js:278 595 B 115 ms
1x1.gif?placement_tag_id=0&r=... 302 text/plai... 1kb130?cb=8ffc... 789 B 95 ms
1x1.gif?placement_tag_id=0&r=... 302 text/plai... 1kb130?cb=8ffc... 900 B 96 ms
?ve=thirdQuartile&imp=6163eb... 200 text/plain anwrapper-1.99... 189 B 193 ms
dt?anId=923116&asId=eb96b7f... 200 gif jsvid?videoId=7... 304 B 185 ms
dt?advEntityId=563105&asId=7... 200 gif skeleton.js?vide... 304 B 176 ms
v2?info=aQAAAAMArgAFAQkv2... 200 text/html freewheel:41 813 B 83 ms
1?ct=8&metr=959&cn=thirdQu... 200 text/html freewheel:41 664 B 74 ms
t 200 xhr analytics.min.js:11 217 B 81 ms
dt?anId=928791&asId=90d6226... 200 gif jsvid?videoId=7... 304 B 155 ms
1x1.gif?placement_tag_id=0&r=... 200 gif 1x1.gif 421 B 114 ms
1x1.gif?placement_tag_id=0&r=... 200 gif 1x1.gif 421 B 104 ms
ping?h=video%40cnn.com&g=3... 200 gif chartbeat_video... 250 B 99 ms
1x1.gif?placement_tag_id=0&r=... 302 text/plai... 1kb130?cb=8ffc... 804 B 86 ms
1x1.gif?placement_tag_id=0&r=... (pending) 1x1.gif 0 B Pending
982 requests
77.0 MB transferred
93.8 MB resources
Finish: 5.0 min
DOMContentLoaded: 1.2 min
Load: 1.4 min
Console
What's New
Highlights from the Chrome 89 update


Elements
Console
Sources
Network
Performance
Memory
7 12
3
Preserve log
Disable cache
512Kbps
Filter
Hide data URLs
All
XHR JS CSS Img Media Font Doc WS Manifest Other
Has blocked cookies
Blocked Requests
100000 ms
200000 ms
300000 ms
400000 ms
500000 ms
600000 ms
Name Status Type Initiator Size Time Waterfall
segment-15.ts 200 fetch script.js:1 4.1 kB 652 ms
stream.m3u8 200 fetch script.js:1 815 B 34 ms
segment-16.ts 200 fetch script.js:1 302 kB 4.82 s
ping?h=cnn.com&p=%2Fvideos... 200 gif chartbeat_video... 250 B 117 ms
stream.m3u8 200 fetch script.js:1 814 B 86 ms
segment-17.ts 200 fetch script.js:1 527 kB 8.42 s
ping?h=video%40cnn.com&g=3... 200 gif chartbeat_video... 250 B 125 ms
t 200 xhr analytics.min.js:11 217 B 100 ms
stream.m3u8 200 fetch script.js:1 815 B 55 ms
segment-18.ts 200 fetch script.js:1 299 kB 4.80 s
ping?h=cnn.com&p=%2Fvideos... 200 gif chartbeat_video... 250 B 116 ms
metrics 200 text/plain cnn-beacon.min... 145 B 237 ms
segment-17.ts 200 fetch script.js:1 488 B 961 ms
segment-19.ts 200 fetch script.js:1 298 kB 4.84 s
ping?h=video%40cnn.com&g=3... 200 gif chartbeat_video... 250 B 143 ms
1587 requests
103 MB transferred
124 MB resources
Finish: 10.3 min
DOMContentLoaded: 1.2 min
Load: 1.4 min
Console
What's New
Highlights from the Chrome 89 update
Debugging support for Trusted Type violations


Elements
Console
Sources
Network
Performance
Memory
7 12
3
Preserve log
Disable cache
128Kbps
Filter
Hide data URLs
All
XHR JS CSS Img Media Font Doc WS Manifest Other
Has blocked cookies
Blocked Requests
100000 ms
200000 ms
300000 ms
400000 ms
500000 ms
600000 ms
700000 ms
800000 ms
Name
Status
Type
Initiator
Size
Time
Waterfall
c0471808583709142fad19339cb... 200 svg+xml script.js:1 6.2 kB 3.81 s
t 200 xhr analytics.min.js:11 217 B 797 ms
t 200 xhr analytics.min.js:11 217 B 869 ms
ob_logo_67x12.png 200 png (index) 3.0 kB 1.66 s
outbrain.js 200 script script.js:1 21.0 kB 6.42 s
blob:https://www.cnn.com/c41e... 200 text/plain Other 0 B 3 ms
blank.mp4 206 media Other 1.9 kB 2.09 s
reloadCampaigns.js?wklz=C4ew... 200 script script.js:1 17.1 kB 4.76 s
reloadcampaigns?wklz=E4UwN... 200 gif ijs_all_modules_... 337 B 914 ms
eligible?wklz=MYQwtgDiCWDm... 200 gif ijs_all_modules_... 337 B 461 ms
ping?h=cnn.com&p=%2Fvideos... 200 gif chartbeat_video... 250 B 426 ms
f981dec4108c221ab2409baad83... (pending) script.js:1 0 B Pending
003bdd9d624012c08747729601... (pending) script.js:1 0 B Pending
c0471808583709142fad19339cb... (pending) script.js:1 0 B Pending
eligible?wklz=MYQwtgDiCWDm... 200 gif ijs_all_modules_... 337 B 610 ms
1670 requests
106 MB transferred
128 MB resources
Finish: 11.7 min
DOMContentLoaded: 1.2 min
Load: 1.4 min
Console
What's New
Highlights from the Chrome 89 update


Elements
Console
Sources
Network
Performance
Memory
7 13
3
Preserve log
Disable cache
High Latency 100ms
Filter
Hide data URLs
All
XHR JS CSS Img Media Font Doc WS Manifest Other
Has blocked cookies
Blocked Requests
200000 ms
400000 ms
600000 ms
800000 ms
1000000 ms
1200000 ms
Name
Status
Type
Initiator
Size
Time
Waterfall
swfIndex.php?reqType=AdsSetu... 200 xhr sbt.js:3 672 B 377 ms
265695 204 xhr VM75215 prebi... 1.1 kB 462 ms
auction 200 xhr VM75215 prebi... 520 B 239 ms
openrtb?ext_id=VidazooHB 204 xhr VM75215 prebi... 212 B 298 ms
openrtb?ext_id=VidazooHB 204 xhr VM75215 prebi... 212 B 287 ms
ad?pid=602&sid=1106431&pre... 200 xhr VM75215 prebi... 466 B 775 ms
translator?source=prebid-client 204 xhr VM75215 prebi... 206 B 267 ms
mvo?z=1r&hbv=4.17,2.1 204 xhr VM75215 prebi... 244 B 392 ms
blob:https://www.cnn.com/c3a2... 200 text/plain Other 0 B 3 ms
ob_logo_67x12.png 200 png (index) 3.0 kB 103 ms
get?url=https%3A%2F%2Fwww.... 200 script script.js:1 3.2 kB 331 ms
l?token=5a5391c15a4992b08e5... 200 fetch script.js:1 292 B 314 ms
segment-39.ts 200 fetch script.js:1 921 kB 108 ms
ping?h=video%40cnn.com&g=3... 200 gif chartbeat_video... 250 B 106 ms
segment-40.ts 200 fetch script.js:1 903 kB 108 ms
2032 requests
114 MB transferred
139 MB resources
Finish: 20.3 min
DOMContentLoaded: 1.2 min
Load: 1.4 min


Elements
Console
Sources
Network
Performance
Memory
7 15
3
Preserve log
Disable cache
High Latency 500ms
Filter
Hide data URLs
All
XHR JS CSS Img Media Font Doc WS Manifest Other
Has blocked cookies
Blocked Requests
200000 ms
400000 ms
600000 ms
800000 ms
1000000 ms
1200000 ms
1400000 ms
1600000 m
Name
Status
Type
Initiator
Size
Time
Waterfall
stream.m3u8 200 fetch script.js:1 752 B 104 ms
segment-0.ts 200 fetch script.js:1 962 kB 243 ms
segment-1.ts 200 fetch script.js:1 914 kB 177 ms
ping?h=video%40cnn.com&g=3... 200 gif chartbeat_video... 250 B 122 ms
segment-2.ts 200 fetch script.js:1 910 kB 119 ms
segment-3.ts 200 fetch script.js:1 908 kB 162 ms
m 200 xhr analytics.min.js:12 217 B 104 ms
segment-4.ts 200 fetch script.js:1 888 kB 848 ms
1?ct=5&init=0&s=f023&n=488... 200 text/html freewheel:41 921 B 644 ms
ping?h=video%40cnn.com&g=3... 200 gif chartbeat_video... 250 B 664 ms
p?c1=2&c2=6035748&ns_type=... 200 gif jsmd.min.js:278 595 B 551 ms
segment-5.ts 200 fetch script.js:1 925 kB 514 ms
ping?h=cnn.com&p=%2Fvideos... 200 gif chartbeat_video... 250 B 503 ms
ping?h=video%40cnn.com&g=3... 200 gif chartbeat_video... 250 B 553 ms
1?ct=10&init=0&s=f023&n=48... 200 text/html freewheel:41 925 B 621 ms
2316 requests
152 MB transferred
179 MB resources
Finish: 21.5 min
DOMContentLoaded: 1.2 min
Load: 1.4 min



2. What were some of the trends you noticed in regard to page load time related to the data rate or latency selected?

The time is increasing significantly when I got 25Mbps to High Latency 2500ms.

3. Out of the data rates and latencies tested, what feels like the minimum data rate to have a good experience using this site? What feels like the maximum latency to have a good experience using this site? At what point would a user be frustrated by long page load times?

The minimum latency 1.7 min at the rate 37.5 to 50.7 Mbps

The maximum latency 22.9 min at the data rate of 161 to 188 Mbps.

Using the ccn.com is very good experience to see how video downloading affect the speed of the internet. The page was long and a lot of buffering to watch live the new.

4. What are some changes you could make as a developer to have better page load times for users with slower internet connections?

To improve the internet connection, I will redefine my spanning tree. It is important to reduce the number of the requests my website by selecting the important files. Make sure that files sounds are combined with different language and programs. Reduce the size of image and files. The time of the requesting packet to DNS server can reduce the time on the website.

5. What kinds of web applications would be usable with a slow internet connection, for example, the 64Kbps or 128Kbps connection?

High Latency 2500ms is usable for the web application and increase the latency.