title: Synthetics Metrics description: List of metrics collected as part of HTTP and Browser monitor

Synthetics monitors collect the following metrics as part of every run. You can create custom charts using Chart Builder for Synthetics metrics. The custom charts can be used to compare Synthetics metrics across multiple monitors.

HTTP Monitor Metrics

Name	Label	Description	Unit
synthetics.time.response	Response time	Total time taken for the complete request & response	ms
synthetics.http.time.dns	DNS lookup time	DNS resolution time	ms
synthetics.http.time.socket	Socket connect time	Socket connection time	ms
synthetics.http.time.tls	TLS handshake time	TLS handshake time	ms
synthetics.http.time.firstbyte	Time to first byte (TTFB)	Time taken to receive the first response byte from the server. Also called server or wait time	ms
synthetics.http.time.download	Download Time	Time taken to download the response body	ms
synthetics.http.response.size	Response Body Size	Size of the response body	bytes

Browser Monitor Metrics

Run Metrics

For every browser run, the monitor collects the below run-level metrics:

Name	Label	Description	Unit
synthetics.time.response	Response time	Total time taken for the script to finish	ms

Name	Label	Description	Unit
synthetics.browser.requestCount	Request count	Total number of HTTP requests sent during the execution of the script	
synthetics.browser.transferSize	Transfer size	Total number of network bytes downloaded during the execution of the script	bytes

Page Load Metrics

The browser monitor collects the below page load (navigation) metrics for every run. If there are multiple page loads during the execution of the script, the last page-load metrics are collected.

Name	Label	Description	Unit
synthetics.browser.time.frontendtime	Frontend time	Time taken for the browser to parse and create the page	ms
synthetics.browser.time.backendtime	Backend time	Time taken for the network and the server to generate and start sending the HTML	
synthetics.browser.time.pageloadtime	Page load time	Time taken for the page to load, from initiation of the page load (e.g., click on a page link) to load completion in the browser	ms
synthetics.browser.time.dnstime	DNS time	DNS resolution time for the URL of the page	ms
synthetics.browser.time.socketconnect	Socket connect time	Time taken to connect to server	ms

Name	Label	Description	Unit
synthetics.browser.time...	Time to first byte	Time taken for the server to send the response	ms
synthetics.browser.time...	Download time	Time taken to download the page contents	ms
synthetics.browser.time...	DOM interactive time	Time taken by the browser to parse the document, including the network time from the user's location to your server	ms
synthetics.browser.time...	DOM content load load time	Time taken by the browser to parse the document and execute deferred and parser-inserted scripts including the network time from the user's location to your server	ms
synthetics.browser.time...	First Paint (FP)	The time from navigation to the time when the first paint happens on the screen	ms
synthetics.browser.time...	First Contentful Paint (FCP)	The time from navigation to the time when the browser renders the first bit of content from the DOM	ms

Name	Label	Description	Unit
synthetics.browser.time.paint.largestcontentful	Largest Contentful Paint (LCP)	The time for largest content element to be visible in the viewport.	ms
synthetics.browser.cumulativelayoutshift	Cumulative Layout Shift (CLS)	The sum total of all individual layout shift scores for every unexpected layout shift that occurs during the entire lifespan of the page	

Resource Metrics

Browser monitor collects the below metrics for every resource loaded during the execution of the script:

Name	Label	Description	Unit
synthetics.browser.resource.transfer.size	Transfer.size	Network size of the resource content	bytes
synthetics.browser.resource.time	Resource time	Total time taken to fetch the resource	ms

Custom Metrics

You can script the Browser monitor to collect custom metrics that are specific to your website or use case. For example, you might need to measure the time take to display auto-suggestions on your website or collect & monitor the value from an element in your webpage. To collect a custom metric use `context.setMetric(name, value)` method in the Browser monitor script. For more info on how to use this API, look into the examples while creating the Browser monitor. The metric name should be unique for this Synthetics App and will be automatically pre-pended with `synthetics.` prefix. You could use Chart Builder to create a custom chart to monitor this metric. You could also create a threshold or anomaly alert on this metric.