



From Testing to Observing: Synthetic Monitoring Unpacked

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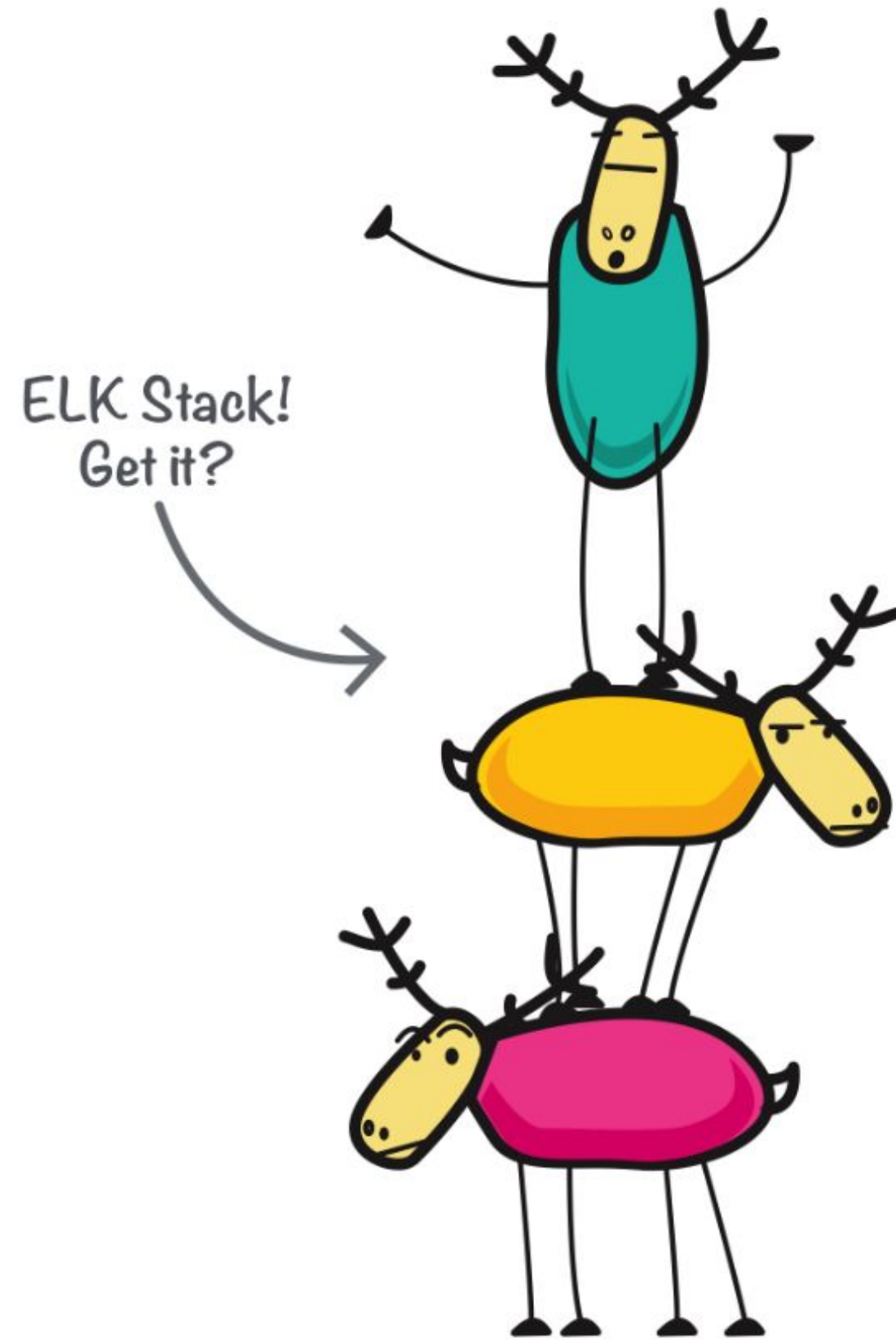
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E Elasticsearch

L Logstash

K Kibana

What is Synthetic Monitoring?


Synthetic monitoring allows you to track user pathways using global testing infrastructure to gauge the influence of web and front-end performance on user experience.

How does synthetic monitoring relate to testing?

Both testing and synthetic monitoring emulate the user path. This tooling can be used to build tests that can also provide production monitoring in web applications.


<https://demo-store-ivory.vercel.app/>

Demo Store[Home](#)




Coffee Mug
\$15
A coffee mug!

Buy



Set of Pens
\$10
Pens in assorted colors.

Buy



Plush Elk
\$16
Elastic Elk!

Buy

How to get started



```
npm install -g @elastic/synthetics  
npx @elastic/synthetics init projects-test
```

Heartbeat

```
heartbeat.monitors:  
- type: http  
  name: Lightweight demo store  
  id: demo-store-lightweight  
  enabled: true  
  urls: "https://demo-store-ivory.vercel.app"  
  schedule: '@every 3m'  
  timeout: 16s  
  alert.status.enabled: true
```


Key commands to keep in mind

Run synthetic tests:



```
npm run test
```

Push monitors to Kibana:



```
SYNTHETICS_API_KEY=<value> npm run push
```

Elastic Synthetics 🤝 Playwright

Let's run our tests! 

Simplified Test for Demo Store ▼

[Overview](#) [History](#) [Errors](#)

Location
North America - US East

Status
Succeeded

Last run
10 seconds ago

Run test manually

Edit monitor

Refresh

Monitor details

Enabled (all locations)

☒

URL
<https://demo-store-ivory.vercel.app/>

Last run
Aug 23, 2024 @ 2:03:08 PM

Last modified
Aug 22, 2024 @ 5:18:32 PM

Project ID
projects-test

Monitor ID
demo-store-check-projects-test-default

Monitor type
Journey

Frequency
Every 10 minutes

Locations
North America - US East

Tags
--

Summary To date

100.0%

Availability

1.0 s

Median duration

0

Errors

Duration trends To date

Status Last 24 hours [View History](#)

Complete

Failed

Skipped

Simplified Test for Demo Store-Test results

▼ **North America - US East** COMPLETED Took 948 ms [View test result details](#)

4 steps completed

Steps

#	Screenshot	Step name	Result	Duration
> 1		Launch application	Complete	642 ms
> 2		Check for loading state	Complete	72 ms
> 3		Validate page content	Complete	185 ms
> 4		Monitor page performance	Complete	46 ms

Another option 😎

3

Add a script

Use Elastic Synthetics Recorder to generate a script and then upload it. Alternatively, you can write your own [Playwright](#) script and paste it in the script editor.

[Launch Synthetics Recorder](#)[Download Synthetics Recorder](#)**Upload script****Script editor**

Select or drag and drop a .js file

Parameters

1



Use JSON to define parameters that can be referenced in your script with `params.value`

> Advanced options

Cancel

▶ Run test

Create monitor



Enter a starting URL

 Start

● Not recording

 Test

 Export

No steps recorded yet

Click on **Start recording** to get started with your script.



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Buy

```
getByText('Coffee Mug$15A coffee mug!BuySet of Pens$10Pens in assorted colors.BuyPlush Elk$')
```



|| [Pause](#)

☐ [Stop](#)

● Recording

[Test](#)

[Export](#)

▼ **Step 1**

- **navigate** https://demo-store-ivory.vercel.app/products
- ⊕
- **click** div >> internal:has-text=/^Coffee Mug\ \$15A coffee mug!Buy\$/ >> [data-test="buy-button"]
- ⊕
- **click** div >> internal:has-text=/^Plush Elk\ \$16Elastic Elk!Buy\$/ >> [data-test="buy-button"]
- ⊕
- **click** div >> internal:has-text=/^Set of Pens\ \$10Pens in assorted colors\.Buy\$/ >> [data-test="buy-button"]
- ⊕
- **click** internal:role=link[name="Home"]i

Resources

Get started

<https://www.elastic.co/guide/en/observability/current/synthetics-get-started-project.html>

Two sides of the same coin: Uniting testing and monitoring with Synthetic Monitoring

<https://www.elastic.co/observability-labs/blog/testing-monitoring-synthetic-monitoring>

My coworker Carly's talk from DevOps.js

<https://portal.gitnation.org/contents/synthetic-monitoring-and-e2e-testing-2-sides-of-the-same-coin-1979>

<https://github.com/JessicaGarson/Synthetic-Monitoring-Unpacked>



Speak at an Elastic User Group meetup

<https://ela.st/present-at-a-meetup>



How to get involved in the Elastic Community



- ✓ Interested in presenting? We would love to hear from your Elastic story. We welcome lightning talks, deep dives and everything in between.
- ✓ Help us grow the user group! Bring a friend or colleague to our next meetup.
- ✓ Is your company interested in hosting? We love working with local community members and their companies on joint events. Hosting a meetup is also a great recruiting opportunity. And as always, Elastic would cover the pizza, beer and swag! 🍺
- ✓ Do you know of an affinity meetup chapter (a group for developers interested in various technology) that we could partner with for a joint event? Let us know. We love collaborating with local tech groups.
- ✓ Something else? Feel free to reach out to us to chat more: meetups@elastic.co