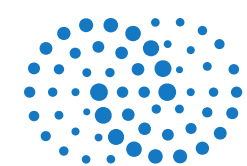


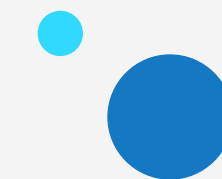
Digital Experience Observability

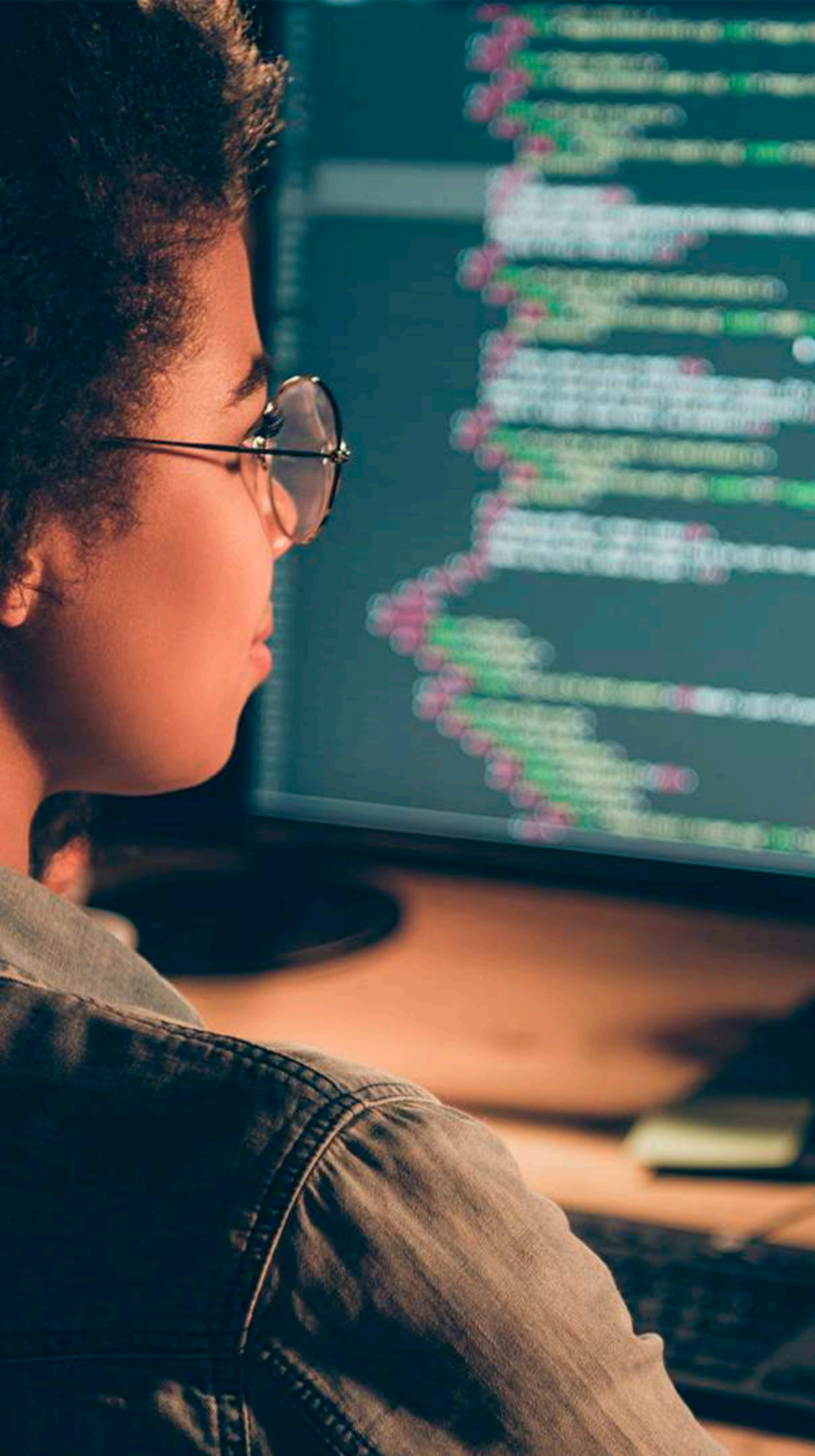
5 Ways to Prepare Your Website for High Traffic

Learn how to gear up your website for when traffic hits



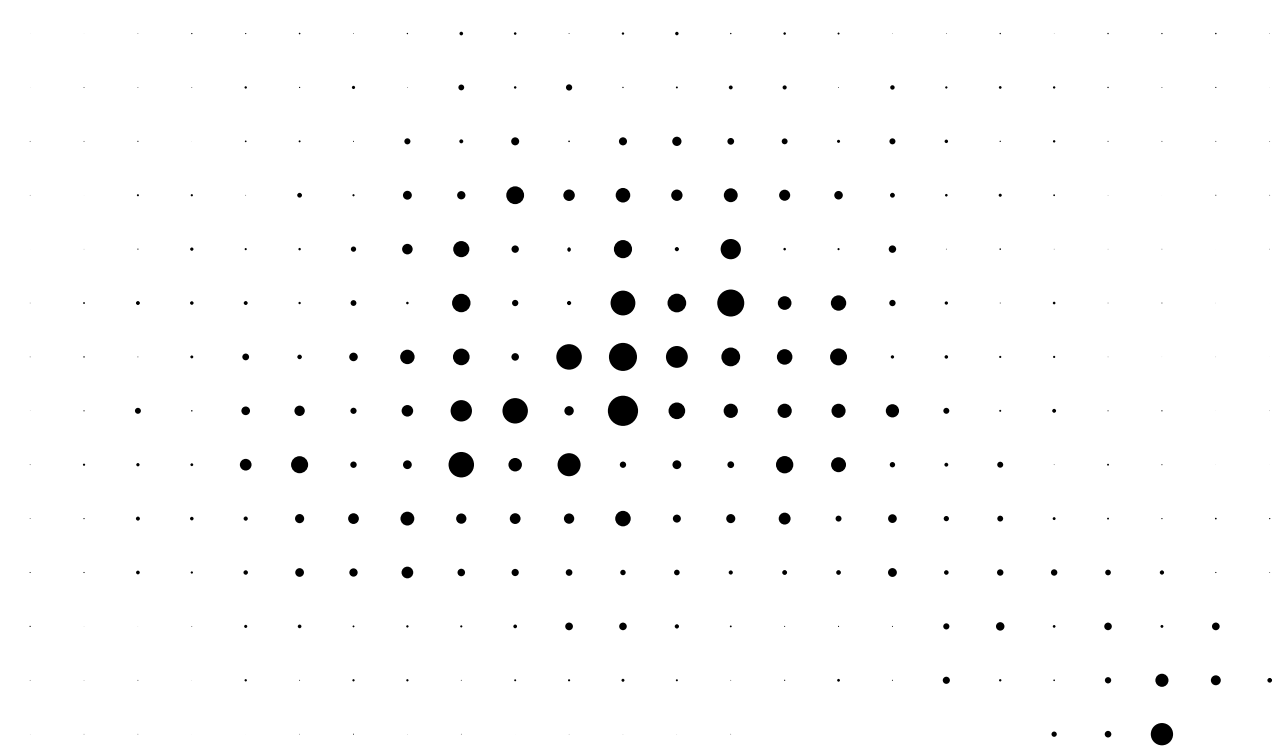
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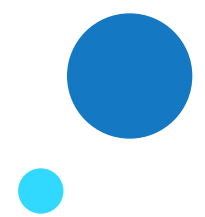




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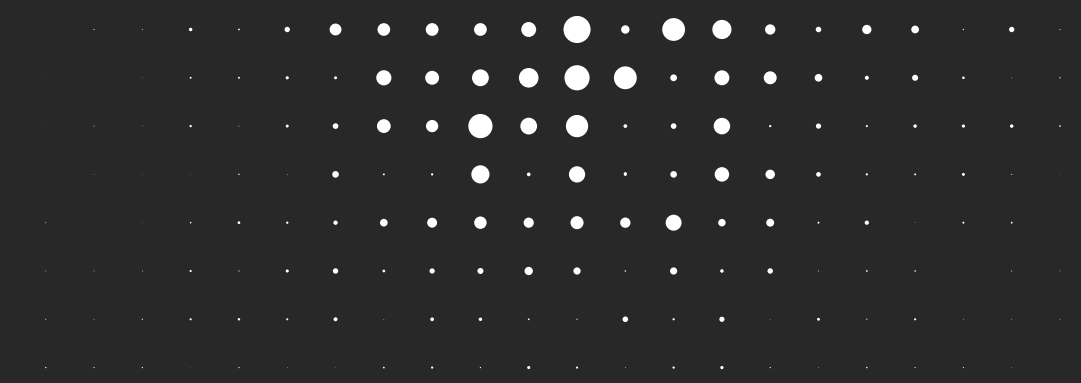
Plan Ahead to Know (and Avoid) Your Breaking Point

Usually, an influx of new visitors to your website is a good thing. However, a sudden increase in web traffic during peak periods – whether anticipated or not – can quickly reach unsustainable levels. In fact, a sudden spike in visitors to your website could look like an attack, causing your site to slow down or crash entirely. Slow sites negatively impact revenue and reduce user numbers while fast sites boost conversions and encourage repeat traffic.

The most successful digital companies prepare ahead of time for peak periods. Use this eBook to understand how to better gear up and analyze what happened afterwards to bake site readiness into your core culture.

This eBook will help you understand **how digital experience observability can:**

- Help you prepare your website for peak events
- Enable you to act proactively during traffic spikes
- Equip you with critical tools to evaluate how the event affected your website



Deploy Observability Before, During, and After Peak Periods

Anticipate and prepare for peak periods by putting a digital experience observability strategy into place before, during and after.

Prepare Beforehand

Follow these five steps prior to the peak event occurring:

01

Deploy proactive monitoring (synthetics) and RUM: set up single-pane simplified dashboards that give a clear picture of all your data sources across not only your site's key metrics, but all the underlying Internet infrastructure that supports it. Measure everything: latency or downtime can be introduced at any stage.

02

Stress-test your system to understand how performance varies with different amounts of traffic to identify bottlenecks. This involves testing all APIs and third-party services (including your CDN provider/s) as well as the monitoring and observability tools in your stack.

03

Set up proactive monitoring to script and monitor multi-step transactions to ensure all components of your site and third-party services are working properly, including APIs.

04

Use Real User Measurement (RUM) to identify traffic patterns ahead of time (as well as during) to ensure you prepare accordingly. If you see that mobile gets more traffic, for instance, you can make appropriate investments in that space.

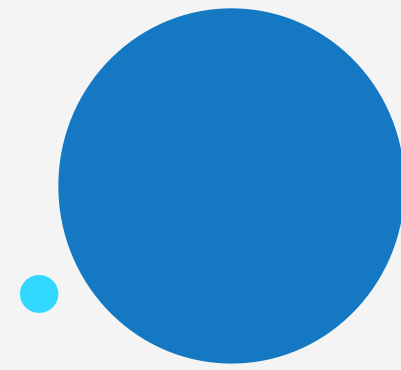
05

Configure your alerts so that your dashboard show only necessary information. This way, the level 1 team in your Network Operations Center (NOC) will be focused and ready to respond to issues that arise. Also, review your alerts to ensure their thresholds are appropriate and fall within your performance budget.

Run a site audit with

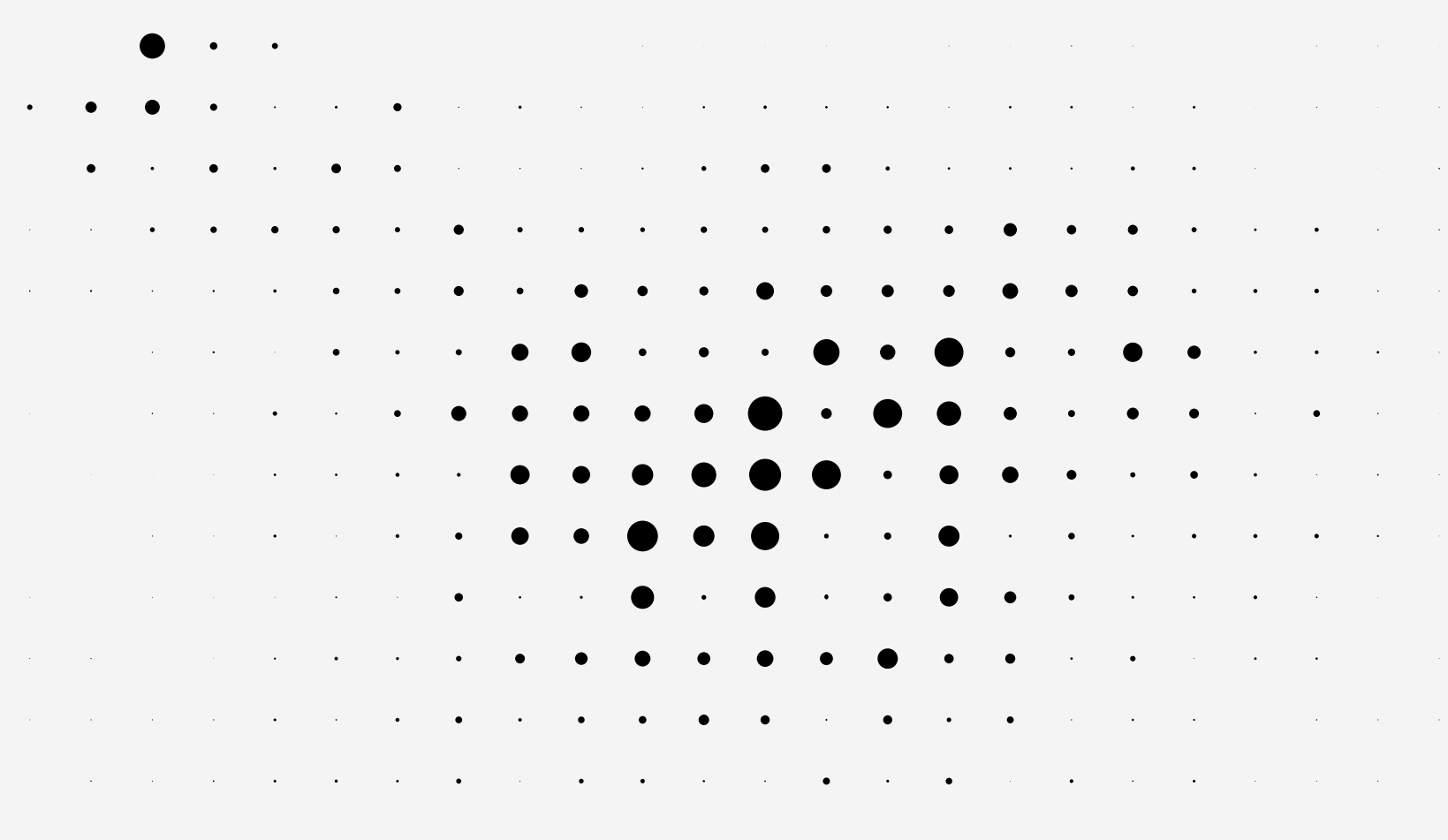
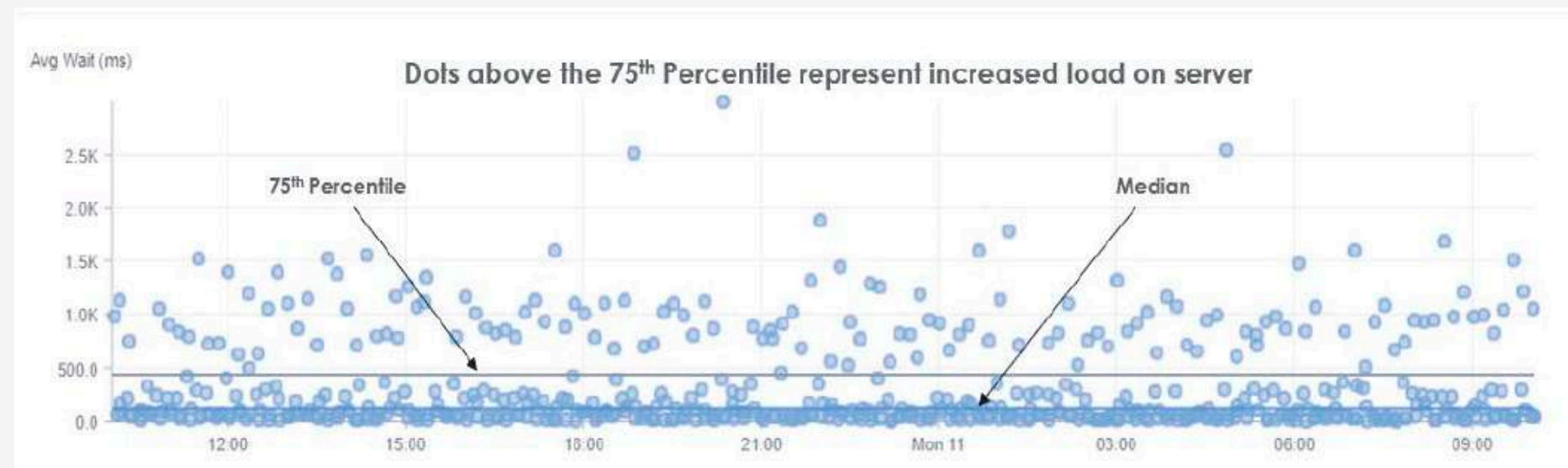
 **catchpoint** WebPageTest

- Understand your website performance/site speed today by running a **WebPageTest**. Is it quick? usable? resilient?
- Find areas to improve your site performance/ speed and get optimization suggestions (HTML, image rendering, third party tags) before your performance hurts during a high traffic time.
- Test out how much faster your site can load before implementing the changes. WebPageTest analyzes test results for all users and offers opportunities to improve a site either by running No-Code Experiments or applying suggestions on your own.



Observe During

Perhaps the most important thing during the peak period itself is to ensure you have a set of performance baselines on hand. This is essential to understand what your systems and services are capable of. It'll also mean that when the load on your services increase, digital experience observability will allow you to pick up on issues more quickly.

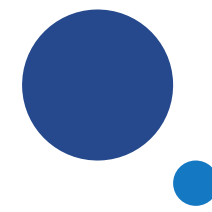


Analyze Afterwards

Once the peak period is over, it's time to reflect on what happened and how you can better prepare for the future. Your observability solution can help:

- 01 Look at RUM data to ensure you have accurate statistics on your site's traffic patterns during the peak event and can see where problems arose during the checkout process. By doing this, you can better understand buyer behavior and collate information about popular browser types, popular devices, popular cities/countries, etc. This will help you prepare for the coming year.
- 02 Run post-mortems regarding any issues and outages you experienced. Determine what worked vs what didn't.
- 03 Finally, lean on your observability platforms to ensure that reverting to normal levels of capacity and redundancy doesn't have any unexpected impact on customer experience.

High Traffic Calendar



2022

July

12-13 | Amazon Prime Day

Amazon Prime Day has generated excitement around summer deals. Other companies, such as Walmart, eBay, and Best Buy, have started to offer competing discounts at the same time.

August

1 | Back-to-School

This time of year is second only in volume to the Christmas shopping season. 90% of shoppers start four to six weeks before school begins.

September

Mid Sept. | iPhone Release

Every September, Apple launches its latest iPhone. The launch will likely take place during the second week of September and on a Tuesday, based on previous annual refresh dates.

October

31 | Halloween

According to NRF, \$8.8 billion was spent online in 2021 in the U.S. on Halloween.

November

11 | Singles' Day - China
20-23 | El Buen Fin - Mexico
26 | Thanksgiving
27 | Black Friday
30 | Cyber Monday

Single's Day is the largest online and digital shopping day in the world. Alibaba sold \$38 billion worth of merchandise on this day in 2019.

December

25 | Christmas
31 | New Year's Eve

December is the second busiest month of the year for sales as people prepare for Christmas.

2023

January

1 | New Year's Day
16 | Blue Monday
22 | Chinese New Year

Blue Monday is often considered the most depressing day of the year. On the third Monday of every January, shoppers head online to chase those blues away.

February

14 | Valentine's Day
9-15 | Fashion Week

Romance keeps the Internet buzzing more than usual across the first two weeks of the month. The majority of shopping for Valentine's Day is completed on February 5 and 6.

March

8 | International Women's Day
17 | St Patrick's Day
23 | Ramadan Begins

Expect higher than average traffic on social media as women take to Instagram, Facebook, and other channels to share their celebrations of International Women's Day.

April

9 | Easter
15 | Tax Day
2 | Ramadan Ends

Webpals Inc. reports that traffic in India was up by 230% during Ramadan in 2019.

May

14 | Mother's Day

Over \$20 billion was spent on mothers in the U.S. in 2021 with \$7 billion of that taking place online. Most shopping takes place immediately before the holidays.

June

18 | Father's Day

In 2018, Father's Day spending landed at around \$15 billion with nearly 30% of that happening online.



Top Tips for eCommerce and Enterprise DevOps Teams

Preparing for a peak period involves slightly different things for eCommerce and enterprise DevOps teams, here are specific best practices for both (to use in conjunction with our observability tips).

eCommerce: Overestimate Heavy Traffic

Heavier traffic than normal during peak periods can cost you if you don't properly plan ahead. On the flip side, if you ensure your website is equipped for above-average traffic, you will set yourself up to reap the rewards.

- Test the performance of third-party tags, hosts, and requests on your web page since not all perform equally well worldwide and some can cause significant performance bottlenecks. Temporarily disable any non-essential third-party adds-on e.g. chatbots or commenting systems.
- Optimize and streamline your page for performance ahead of time to anticipate the rush.
- Make sure you're planning for mobile (retailer mobile apps are largely a connection of API requests) and optimize your page and design for speed and ease of navigation.

Enterprise: Set up Failover Strategies in Advance

At times when your site is likely to be busier than normal (e.g. at the moment of a new software release), think ahead, know your breaking point and set up failover strategies in advance.

- Run website performance tests from as many global locations, devices, and browsers as possible to get a comprehensive understanding of your sites and identify any potential performance bottlenecks ahead of time.
- Consider a multi-vendor strategy, for instance, adopting a multi-CDN approach will allow you to optimize performance and boost failover support when too many customers try to download your new release at the same time.
- Before key company announcements use proactive synthetics to warm the CDN cache ahead of time in order to speed up content delivery for those first users who would otherwise receive a slow 'cache miss' response. This ensures that every visitor on your site has the same experience and will benefit from a similarly fast page load time.

Catchpoint Can Help You Prepare for High Traffic

Our single-pane simplified dashboards give a clear picture of site performance metrics and the entire underlying digital infrastructure, crucial for when traffic spikes.

Catchpoint's enterprise proven digital experience observability platform can help you:

- **Measure everything.** We'll help you monitor every single component, including every third-party and API, so you can rely on end-to-end digital experience observability.
- **Benchmark.** We'll help you benchmark multiple service providers and identify those with ideal performance. You can use this data to optimize the performance of your website and hand-pick reliable third-party vendors.
- **Establish a baseline.** You'll determine:
 - Expected performance when there is a surge in traffic.
 - How to scale your application and services.
 - How an update is performing compared to a previous version.
- **Manage your SLAs.** Our neutral data will enable you to hold vendors to account when your SLAs are breached, and facilitate collaborative troubleshooting during outages and slowdowns.
- **Deliver exceptional digital experiences.** To be competitive, particularly at times of high traffic, you can't afford to deliver anything more than exceptional customer experience. We'll be your 24/7 observability ally at peak traffic times.
- **Test out how much faster your site can load before implementing the changes.** WebPageTest analyzes test results for all users and offers opportunities to improve a site either by running No-Code Experiments or applying suggestions on your own.

“The ability to replicate and measure the actual end user experience, regardless of geography, that Catchpoint provides, allows Xandr to detect performance issues –whether they're rooted in the application, a third party, or at the network level – before users are impacted.”

Shizue Harada, Senior Network Architect, Xandr

For a quick look at your website's performance, run a [WebPageTest](#) for free.

Conclusion

Takeaways

At times of high traffic, DevOps teams at eCommerce and enterprise organizations are on the front line for ensuring website availability, reachability, reliability, and performance. If something goes wrong, as it often does, knowing why and quickly being able to fix the issue is essential. By incorporating a robust digital experience observability strategy into your planning, you can stress-test your systems in advance to streamline and focus your preparation efforts. Similarly, by running a site audit beforehand, you can optimize your site to improve performance speed and remove third-party components that might slow things down.

Built by Experts for Experts

Our customers rely on Catchpoint's enterprise-proven digital experience observability platform and our award-winning 24/7 support team to ensure their websites and services are available and performant at exactly the times they need them most. Experience matters. Allow Catchpoint to help you exceed your customers' expectations.

Catch issues before they impact your business

www.catchpoint.com/trial

