Incident Report

Dec 1, 2023 : Increased error rate of DNS servers

Status Page URL	https://status.vtex.com/incidents/01HGKD036C4N2PHCNZYJE9PFSJ
Impacted accounts	Stores with domains provisioned in Azion
Duration	4 hours and 34 minutes
Availability	Degraded Performance / Partial outage

Summary

On December 1st 2023, at 16:54 UTC, an internal monitoring system notified us of increased errors when trying to render pages from VTEX stores. We were then notified of a degradation of DNS query resolutions in Azion, one of our upstream CDN partners.

The degradation was most visible in the southern LATAM region, but other parts of the world were also affected by this issue. Our team implemented the workaround recommended by Azion and the incident was completely mitigated at 21:28 UTC.

Symptoms

On December 1st 2023, from 16:54 to 21:28 UTC, shoppers that tried to access VTEX stores would experience intermittent errors or increased latency when visiting a store for the first time. Once the first access was successful, clients would be able to shop normally. According to our monitoring systems, there was no meaningful impact in orders.

Timeline

[2023-12-01 16:54 UTC]	Our end-to-end shopping tests warned us about errors when trying to connect to some stores.

[2023-12-01 17:20 UTC]	We identified the error on the DNS query resolutions in one of our CDN partners and started to mitigate domains that we knew were affected, in an ad hoc manner.
[2023-12-01 19:11 UTC]	Our CDN partner issued a workaround that fixed the issue globally without having to shift traffic away from the CDN. We started to implement the workaround.
[2023-12-01 21:11 UTC]	We implemented the workaround and started to migrate all domains to this solution, even if they were not impacted.
[2023-12-01 21:28 UTC]	All domains were migrated and the symptoms were fixed. Stores went back to normal behavior.

Mitigation strategy

At first, our strategy was to migrate affected domains to a different CDN in an ad hoc manner. This would make the store slower for a few minutes because of the lack of the CDN's cache, but would ultimately solve the issue.

After the workaround was issued, we changed our strategy to instead make all domains point to different DNS records, but that made shoppers connect to the same CDN servers that they were connecting before, keeping the CDN cache that existed previously.

Follow-up actions: preventing future failures

In case this incident happens again, we now know how to quickly identify the issue and we now have workarounds ready to be implemented again. We are creating internal documentations and alerts to track similar issues to this behavior.

We are also working with our CDN partner to ensure that they have a better monitoring and mitigation system regarding their DNS entries. We are committed to being your trusted partner for success.