

Third-Party Service-level Violations

Many companies have added additional solutions to their site to enhance or extend the value of their primary platform. Some examples that help to improve conversation rates, order value and overall revenue per user, are product recommendations, ratings and reviews, chat and even user generated content. These solutions are commonly added to a website through what's known as a third-party tag. However, sometimes these tags are not operating at a level to consistently deliver an optimum digital experience. Being able to identify specific tags whose services are operating outside of desired limits (violations), and which pages those tags are running on, can allow a targeted approach to site speed optimization. It can also be a way of identifying commerce and marketing technology vendors that are underperforming. YOTTAA lists the third-party tags that may need specific attention to improve site performance, shows the issues they are exhibiting, and which pages they may be impacting.

Poor customer experience on a website can lead to increased bounce rate, abandoned carts and dissatisfied customers. Bulk deferral of tags may fix one issue but introduce others. Being able to identify undesired operation of individual tags, and the pages and devices they are most prevalent on, enables fine tuning of performance for a more optimized website.

Violations and JavaScript Errors

If website performance is not as desired, it is possible to investigate which services have the biggest impact on performance. YOTTAA identifies the services that operate outside of desired ranges, or which are non-functional, and provides information to help assess the full impact on your website.

The Violations and JavaScript Errors on a site are captured and made available as both high level summaries and detailed descriptions. The summaries allow ease of monitoring, while the detailed breakdown enables faster identification and diagnostics, and ultimately helps for making remediation decisions.

Page Delay Violations

When a resource of a third party, or any other resource, that loads before onLoad, takes longer than a set number of milliseconds to load. By default, the threshold is set to 750 milliseconds, which can be changed globally by site. These violations delay the moment when the page becomes interactive to users, which can increase customer bounce rate and reduce conversion.

Size Violations

When a resource, usually an image, is larger than a set number of kilobytes. The default size is 1,024 kilobytes.

Performance Risk Violations

When a third party that loads after onLoad takes longer than a set number of milliseconds to load. By default, the threshold is set to 1,500 milliseconds. Performance risks do not affect onLoad. However, if they take too long, customers might not have access to site functionality like customer reviews, chat, recommendations, and so on.

Load Failure Violations

When a third party fails to load in the browser. Load failures may impact site functionality. They are often the result of ad blockers preventing advertising plug-ins from loading, but could be caused by network outages, or a third-party outage. We recommend alerting third-party vendors about load failures.

JavaScript Errors

When a browser cannot execute some portion of JavaScript, either due to a syntax or a runtime error. This can happen with both first and third parties.

Violations and errors are shown by default for the last seven days. This time period can be changed to predefined periods, from 'Today' to 'This year', or a custom range can be specified.

Each violation type is shown as the frequency of occurrence on each site over the defined time period. More detail shows the number of violations by each third party, the percentage of pages the third party is running on, and the percentage across different categories:

- **Device**
(Desktop, Mobile, Tablet, Other)
- **Browser**
(Chrome, Safari, Firefox, Edge, Other)
- **Page Category**
(Home, Product, Category, Search, Page, Blog, Cart, Uncategorized)

Trend graphs show the occurrence of the violations or errors over the specified time period. A real-time chart (minutes) will also display the violations or errors over the last hour, and this can be stepped back in one-hour intervals.

Diagnostics

More detailed diagnostic information is collected and available for each violation type or JavaScript error. Depending on the violation selected the information displayed includes the timestamp for the occurrence, the third party, the resource URL, the page URL, the number of errors, and the error message. Real time data is collected.

Anomalies

Anomalies are tracked by YOTTAA for several metrics and for violations. Data is monitored over a two-week period and will capture and display any violations or JavaScript error rates that are outside the usual limits. Email and Slack alerts can be configured to provide notification of **anomalies**.

Violations and JavaScript Errors 📊

Last 7 Days

Use this dashboard to monitor violations and JavaScript errors, and to diagnose which resources and third parties are causing problems on your site's pages.



Summary information for violations and JavaScript errors.

Key Insights

THIRD PARTIES CAUSING PAGE DELAY VIOLATIONS			PAGE DELAY VIOLATIONS BY DEVICE			PAGE DELAY VIOLATIONS BY PAGE CATEGORY		
THIRD PARTY	% OF PAGES	PAGE DELAY VIOLATIONS	DEVICE	% OF TRAFFIC	PAGE DELAY VIOLATIONS	PAGE CATEGORY	% OF TRAFFIC	PAGE DELAY VIOLATIONS
Second Party Resources	97.89%	1 per page	Desktop	38.06%	5 per page	Homepage	7.69%	8 per page
Shopify	97.48%	1 every 0.93 pages	Mobile	57.67%	6 per page	Collections	39.03%	5 per page
AddThis	90.17%	1 every 2.57 pages	Tablet	3.53%	6 per page	Products	42.07%	6 per page
Listrak	93.62%	1 every 3.25 pages	Other	< 1%	6 per page	Cart	1.51%	2 per page
Yotpo	90.85%	1 every 4.41 pages				Checkout	4.25%	2 per page
Google Ads	99.99%	1 every 6.11 pages				Order Confirmation	< 1%	4 per page
SearchSpring	91.12%	1 every 6.66 pages				Uncategorized	4.91%	5 per page
jQuery	92.65%	1 every 6.78 pages						
Gorgias	99.15%	1 every 7.4 pages						
Google Analytics Universal	99.94%	1 every 11 pages						
OneTrust	92.58%	1 every 12 pages						
Google Tag Manager	99.99%	1 every 13 pages						
Paypal	33.71%	1 every 13 pages						
Pinterest	87.99%	1 every 15 pages						
Facebook	87.84%	1 every 17 pages						
Rise.al	91.1%	1 every 18 pages						

Violations by third party and category

Being able to see detailed information on the violations and errors occurring on your website allows informed decisions on the potential impact, and how they could be handled. Both high level summary and in-depth data, along with configurable notifications allows maximum awareness and greatest site optimization to be performed.