

Auditing Third-Party Tags

YOTTAA detects, and continuously monitors for any changes to, third-party tags on a company's site, unlike tag managers that may not even know what they deploy. All third-party tags will be captured and catalogued within YOTTAA's commerce and marketing technologies knowledge base. Many third-party tags are invaluable for optimizing the digital experience. The services provided by using them can include personalized recommendations, discounts and special offers, reviews, marketing messaging and many other capabilities. Gaining visibility of all third-party tags, together with characteristics of the tags, make it possible to understand the full impact of these resources allowing for a more intelligent optimization of site speed performance.

Tag Discovery

Often vendor solutions need to be directly deployed to your source versus using a Tag Manager. Close tracking of who has added and/or removed these tags is frequently not maintained and the impact of these tags may not be known. One large apparel company, after running an audit with YOTTAA, learned they had five vendor tags still collecting user behavior even though they believed they had taken them off the site.

Third-Party Tag Visibility

YOTTAA's third-party tag auditing capability will show all resources making network requests after the YOTTAA JavaScript has loaded. A single line of JavaScript is deployed at the start of each web page (single-page apps are also supported) to provide complete visibility into all external resources. Once captured, each resource is checked against the YOTTAA Knowledge Base to identify the vendor and the resource's characteristics. This information, along with how the resource is behaving on the website, is listed in the various dashboards within the YOTTAA product. The following is the third-party tag information provided by YOTTAA:

Number of third parties on your site

This includes identified and unidentified resources. 'Identified' are the third parties that are in the YOTTAA library. 'Unidentified' are resources which are not yet in the YOTTAA library. The fully qualified domain name and event count are shown for unidentified resources, and their details are captured for continuous review and vendor identification in the library.

Category

Each tag listed is identified by category (eComm Tech, Security, Ad Tech, Social Media, Analytics, Video, etc.)

THIRD PARTY	CATEGORY	DATE DISCOVERED	PAGE %	PAGE DELAY VIOLATIONS
Adobe Tag Manager	Tag Management	2020-11-16	100%	1 every 5.41 pages
jQuery	Core JavaScript Library	2019-06-16	99%	1 every 4.1 pages
Rich Relevance	Personalization	2018-05-01	99%	1 every 102 pages
jsDelivery	CDN	2020-12-01	99%	1 every 3.04 pages
Dynamic Yield	Personalization	2022-02-01	99%	1 every 5.47 pages
Facebook	Social Media	2018-05-01	99%	1 every 33 pages
Yahoo CDN	CDN	2019-06-13	98%	1 every 227 pages
Google Tag Manager	Tag Management	2018-06-06	98%	1 every 41 pages
Userway	Accessibility	2022-06-10	98%	1 every 12 pages
Impact	Other	2020-01-31	98%	1 every 229 pages
Amobee	Marketing Tech	2019-01-16	98%	1 every 19 pages
PerimeterX	Client-side Security	2018-05-01	98%	1 every 25 pages
Google Ads	Ad Tech	2018-05-01	97%	1 every 11 pages

Third-party tag listing on Performance Inventory page.

Page %

The percentage of site pages the tag executes on.

Page Delay Violations

A Page Delay Violation is a request that took greater than 750ms to load before the page finished loading. More details on violations are described in the Third-party Service-level Violations datasheet.

Page Category View

Different page types can be selected/filtered on to understand what third-party tags are running. Types include Home, Product Description, Cart, Checkout, Confirmation.

Impact

A Service Flow view is available for all third-party tags which shows the impact on performance, in milliseconds, for each tag. The tags can be sorted to list the tags in order of highest impact.

Waterfall

The service flow table also includes a waterfall view showing, by default, the order all tags are loaded. Several metrics are displayed in the waterfall view to help visualize and understand the page and tag loading:

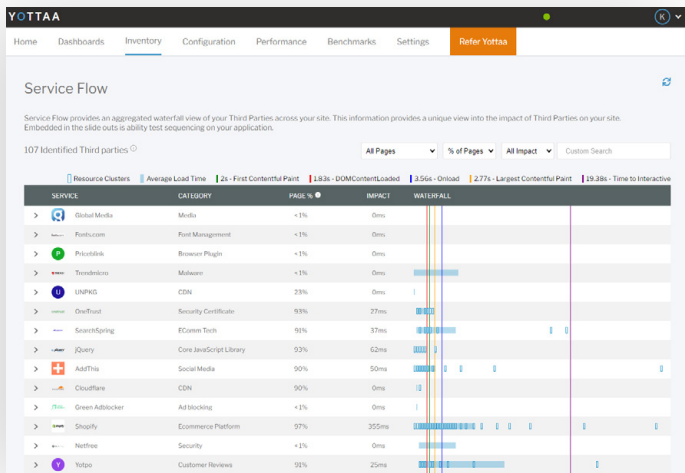
- **Average Load Time** - for each tag is shown, with a graphical representation indicating the start time to last byte.
- **First Contentful Paint** - is when the browser renders the first bit of content from the DOM, which signals to the shopper that the page is loading.
- **DOM Content Loaded** - is when the initial HTML document is loaded and parsed, without waiting for stylesheets, JavaScript, and other resources.
- **Onload time** - At this point the page is interactive to users as the initial HTML document has been loaded with all stylesheets, images, and subframes, and all event handlers for window.onload have been called.
- **Largest Contentful Paint** - the time taken for the largest piece of visible content on a page to load.

All third-party tags identified and listed in the different dashboards can be expanded individually to show additional performance information. The performance data, including page delay violations described above, is shown as an average over the last seven days by default. This time range may be changed to cover 'Today' through to 'This year', or a custom range may be entered. The individual tag performance data includes:

- **Page percentage and Page Delay Violations** – described on page 1.
- **Performance Risk Violations, by number of pages** – This is when a third party, or other resource, that loads before onload, takes longer than a set number of milliseconds to load.
- **Load Failure Violations** – is when a third party fails to load in the browser and may impact site functionality. Often the result of ad blockers preventing advertising plug-ins from loading.

The above violations and many of the metrics can be seen on a trend chart which displays the optimized and unoptimized data over the selected time period. Real-time data is also displayed for the selected violation or metric and shows data at 5-minute intervals over the last, and previous, one-hour periods.

A community 'site detection' number is shown to indicate the percentage of all YOTTAA monitored sites that the tag appeared on.



Service Flow table showing third-party tag impact and waterfall.

Diagnostics

A deeper dive into the individual third-party tags is available to show the resources used by the tag, the specific page details of where the tag has violations, and where the tag script appears in your source code. The diagnostic information is shown over the most recent one-hour intervals:

- **Resources** - lists the number of occurrences, the start and last byte times, the number of page delay violations, and the resource URL.
- **Most Viewed Pages** – lists the number of page views, page category, and page URL for the top viewed pages with the tag.
- **Violations** – the violations tables show the page URL and page category and the number of violations occurring on that page.
- **Site Code** – shows the number of occurrences and where in your site's code the tag appears.

The third-party tag information maintained by YOTTAA provides a deeper understanding of each tag and potential impact adding tags to a site may have. The main locations this information is held is:

- **Third-party Knowledge Base** – YOTTAA's knowledge base library is a compilation of over 12 years of third-party tag examination. More than 1,000 third-party applications have been characterized and are used in site performance assessments.
- **eCommerce Technology Index** – This annual report benchmarks the optimized performance of the most adopted third parties across the YOTTAA community of eCommerce websites. The Performance Index Rating in this report measures a third party's overall performance across sites and assigns a rating of: little to no impact on performance (PIR of 15 or below); inconsistent negative impact (PIR between 16 and 150); Consistent negative impact (PIR score of 151 or above). Customers have access to the ratings by third party with real time visibility, or the public report can be downloaded annually.

YOTTAA's third-party tag auditing capability provides the information and understanding to intelligently approach site speed performance optimization. Rather than a 'sledgehammer' approach where all tags are deferred or handled in the same way a more intelligent, fine tune approach can be taken. The detailed information on each tag, including the page URLs and script locations, enables faster diagnosis of problems, more informed decision making and allows faster remedial actions to be taken. This insight, and appropriate application sequencing and rule implementation, results in higher conversions and lower bounce rates.