JENTIS

2025

Beyond Self-Hosting

A Business Guide to smarter Server-side Tracking

Table of Contents

Tracking built for tomorrow

When implementing server-side tracking, businesses face a critical decision: self-host or choose a managed solution like JENTIS. While self-hosting may seem like a viable option, it requires significant technical resources, ongoing maintenance. JENTIS provides a robust, cost-effective, and privacy-first alternative that simplifies operations, improves data accuracy, and enhances marketing performance.

Before deciding on a solution, organizations need to evaluate several factors, including infrastructure management, data accuracy, compliance with evolving privacy regulations, cost of ownership, and long-term sustainability. Choosing the right approach can significantly impact marketing effectiveness, data governance, and operational efficiency.

Considerations

...when implementing server-side tracking

Server-side tracking relies on dedicated tag management systems to control the tracking setup. These systems function similarly to traditional tag managers, still requiring tools, tags, and triggers for implementation, as well as integration with a Consent Management Platform (CMP).
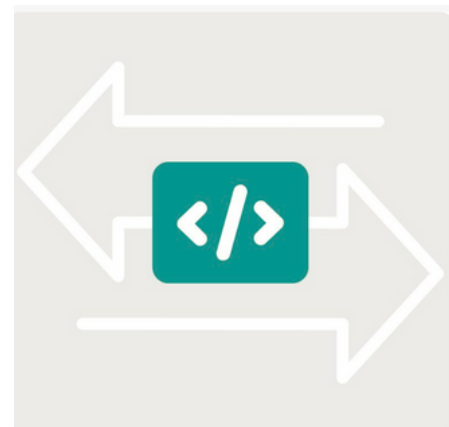
The key difference lies in data processing logic. Before data can be forwarded to various tools in a server-side setup, it must first be collected. Each vendor approaches this process differently, and while it is not inherently complex, it does require a shift in perspective.

From a technical standpoint, depending on your pre-existing setup, most or all of the following aspects must be considered:

- Implementation of the tag manager on the website
- Hosting location and method for the solution
- Compatibility with server-side tools
- Number of events to be collected and forwarded
- Integration of server-side tracking with the CMP
- Proper setup of the data layer (often underestimated)

Since implementing any server-side tracking solution requires a structured migration process, the transition involves rebuilding tools, configuring all tags and triggers for server-side operation, verifying data quality, and routing the processed data to the required platforms, such as Google Analytics.

Did you know self-hosting means managing legal compliance on your own?

Depending on the complexity and technical specifications, such a migration project can take anywhere from one to eight weeks.

Challenges of Self-Hosting sGTM

Weighing the costs and complexities

Self-hosting sGTM requires substantial technical resources and oversight. Businesses must allocate DevOps resources to continuously monitor, provision, and update the system, ensuring uptime, security, and optimal performance.

The need for ongoing maintenance adds complexity and requires dedicated efforts to keep the infrastructure running smoothly, optimize data processing, and manage integrations with marketing platforms.

Additionally, self-hosting places the responsibility of compliance directly on the organization, requiring strict adherence to data protection laws such as GDPR and CCPA. Ensuring data sovereignty, managing audit logs, and enforcing access controls become an ongoing challenge, exposing companies to legal risks and potential fines.

This approach is often used by businesses that require the highest level of data security and customization. The technology stack commonly involves APIs, Node.js, Python, or middleware, with some opting for serverless technologies like AWS Lambda to ensure scalability without relying on physical servers.

While this setup provides full independence from third-party providers, allowing businesses to tailor their data processes to unique needs, it comes with significant downsides.

Development, maintenance, and infrastructure costs can be high, requiring deep technical expertise and dedicated teams to ensure smooth operations. The time-intensive implementation process further adds to the complexity.

Comparing Infrastructure Approaches

Managed Server-Side Tracking with JENTIS

JENTIS removes the burdens of self-hosting with a fully managed solution that improves data collection, compliance, and operational efficiency.

Businesses no longer need to invest in DevOps resources or manage infrastructure. The platform provides seamless hosting with automatic updates, proactive monitoring, and scalable provisioning—without internal technical oversight.

Beyond hosting, JENTIS enhances data accuracy through improved collection and enrichment. Integrations with Google Ads, Meta, and Analytics simplify setup and reduce maintenance.

The real-time processing capabilities further optimize data streams, ensuring that marketing campaigns operate with the most reliable insights available.

Self-hosting sGTM has limitations for advanced tracking features like data enrichment, persistency, and logging. These capabilities depend on Google Cloud, making them unavailable for non-GCP or on-premises setups.

A fully managed solution removes this constraint, offering advanced data processing without reliance on Google Cloud. This ensures high-quality data streams, improved attribution, and better customer insights.

Unlike self-hosted sGTM, where raw data export is often restricted to Google Cloud, a flexible solution allows data export across providers. This ensures full data ownership and compliance with regulatory requirements.

General Challenges with sGTM

1

Implementation Complexity

Setting up sGTM requires technical expertise and careful planning, as it involves managing a dedicated server

2

Cost and Resource Requirements

Beyond setup, running a dedicated server or cloud solution brings ongoing costs, often higher than client-side GTM, and requires regular maintenance for security and performance.

3

Dependence on Technical Expertise

sGTM requires expertise in server management, network security, and programming. Setting up secure data pipelines, ensuring compliance, and ongoing monitoring add complexity.

4

Connectivity Challenges

Google provides few direct in-house integrations, requiring businesses to either develop their own solutions or rely on third-party APIs, which can be maintenance-intensive and prone to disruptions.

5

Compliance Challenges

Schrems II raised compliance concerns for GTM and Google Analytics over data sovereignty. While the Data Privacy Framework (DPF) eased restrictions, its legal future remains uncertain, posing regulatory risks.

The Compliance Burden of Self-Hosting

From legal risk to long-term costs

One of the biggest concerns for businesses today is staying compliant with global data protection laws. JENTIS comes with built-in compliance features aligned with GDPR and CCPA, giving companies full control over where data is processed and stored. This reduces legal risk and ensures alignment with evolving regulations. Unlike self-hosted setups that require ongoing legal monitoring, JENTIS automatically adapts to regulatory changes to keep businesses protected.

Financially, JENTIS offers a lower total cost of ownership. While self-hosting demands ongoing investment in infrastructure, security, and DevOps, JENTIS runs on a predictable subscription model with transparent pricing. This minimizes hidden costs and speeds up ROI. Deployment is fast too — going live in days rather than weeks or months.

Managed vs. Self-Hosting at a Glance

This table provides a clear comparison between JENTIS Server-side Tracking self-hosted tracking with sGTM across key aspects such as data quality, hosting, data protection, and advanced tracking capabilities.

	Managed SST with JENTIS	Self-hosted with sGTM
Data Quality	100% server-side Google Analytics 4, unaffected by ad blockers and ITPs	Hybrid Google Analytics 4 (client- and server-side)
Service	SLAs + full customer support	No immediate support
Hosting	Managed cloud	Self-managed Cloud
Connectors	100+ in-house connectors	5+ in-house connectors
Data Protection	Future-proof data protection from an EU provider	Regulatory risks due to volatile legal situation with US providers
Advanced Tracking Capabilities	Raw data feature that enables export of client-side collected and server-side enriched data streams, including both standard and user-defined data points.	Advanced services with sGTM only if it is hosted within Google Cloud

The quickest way to better marketing performance

With over 120 tested connectors and integrations, JENTIS integrates smoothly into businesses' tech setups, including Google Analytics 4, Google Ads, Google Floodlight, Amplitude, Adobe, Meta, LinkedIn, and many more.

As a hybrid solution, JENTIS supports both client-side and server-side tracking.

The transition is seamless, allowing parallel operation while migrating without altering existing data pipelines, avoiding costly tool changes or retraining.

Teams can continue to use their existing reports and tools.

Implementation in minutes

Create JENTIS container

Implement JavaScript snippet

Set DNS A Record

Configure connectors

More than 120 platforms and tool integrations

Google Analytics · Meta · X · reddit · Microsoft Advertising · outbrain · Pinterest · ECONDA · Amplitude · Adobe · Snapchat · CRITEO · hotjar · YouTube · TikTok · LinkedIn

Trusted by

The Washington Post · Santander · KTM · SOCIETE GENERALE · XXXLutz

MARCCAIN · pixum · ANYLINE · EGGER · GIESSWEIN

The fastest way to better campaign performance.

Explore how JENTIS' state-of-the-art data protection measures, unmatched data quality, and compliance capabilities can empower your business to confi dently adapt to evolving regulatory demands globally

Learn how server-side tracking can improve your business.

Book a demo today:
jentis.com/contact