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Site24x7 plugin integrations for visibility into your entire IT stack

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Introduction

Organizations today contend with the intricacies of managing increasingly hybrid and distributed systems, which contain an array of applications and processes that are tailored to each organization's unique requirements. As tech stacks get more dynamic and complex, the need for observability to capture all the gaps that exist in the IT ecosystem deepens, so that issues can be prevented and, if they occur, can be identified and addressed quickly.

However, getting visibility into all these diverse applications, services, and processes presents significant challenges.

Monitoring gaps

IT teams often rely on multiple monitoring solutions to cater to the diverse range of applications, services, and custom processes utilized by their organizations. Oftentimes, this leads to a gap in understanding of the entire IT landscape, leaving critical components unmonitored. Without a holistic, full-stack view, organizations face the risk of overlooking potential issues and performance bottlenecks that may arise within specific applications or custom workflows, because they have not been monitored at all.

Lack of unified visibility: Siloed data and increased troubleshooting time

The absence of a unified performance visibility platform compounds the challenges faced by organizations. Often, monitoring solutions operate in isolation, leading to siloed data scattered across various tools. This fragmentation hinders the ability to assess the health holistically and performance of all applications and services. When trouble shooting issues, IT teams are forced to navigate through disparate systems, prolonging the time it takes to correlate the problems. This lack of a centralized, full-stack view not only impacts the efficiency of issue resolution leading to increased MTTR but also limits the organization's capacity to proactively address potential bottlenecks before they escalate.

Introducing Site24x7 plugin integrations

Site24x7's plugin integrations, or simply plugins, offer organizations a comprehensive solution to monitor their entire IT ecosystem. By leveraging over 100 out-of-the-box plugins, Site24x7



empowers organizations to gain real-time insights into the performance and health of critical applications, servers, databases, and more. These plugins cover a wide range of technologies and platforms, providing organizations with the flexibility to monitor diverse components of their IT infrastructure seamlessly. Moreover, Site24x7 extends its capabilities beyond its plugin library by providing features like custom monitoring through user-generated plugin scripts. This empowers organizations to tailor their monitoring approach to address specific requirements, thereby gaining visibility into areas not covered by standard solutions.

Navigate observability challenges and optimize IT operations with plugins

1. Achieve observability

Site24x7 addresses the challenges of monitoring diverse services through an extensive library of over 100 ready-to-install plugins. In addition, its custom monitoring feature with user-generated scripts can enable you to fill in the gaps for applications and processes that might not be available out of the box. These, combined with Site24x7's powerful platform features, enable you to get unified visibility, understanding, and control of your IT infrastructure. You can leverage custom dashboards and log management to correlate data from every different element of your infrastructure so that you can pinpoint issues as soon as they happen. AlOps features like anomaly detection and IT automation help you stay on top of your systems at all times with minimal intervention.

Web servers

For organizations relying on web servers like Apache, NGINX, and Tomcat, Site24x7's plugins offer real-time insights into server performance, response times, and resource usage. Beyond immediate issue resolution, monitoring web servers gives IT teams a deep understanding of how server behavior influences overall application performance, facilitating strategic optimizations.



Databases

Efficient database management is vital for success for any application stack. Site24x7's plugins for databases such as Cassandra, Oracle, and MongoDB, and cloud databases such as MongoDB Atlas, provide insights into database performance and health. This data not only helps in troubleshooting but also deepens the understanding of how databases impact the overall application ecosystem.



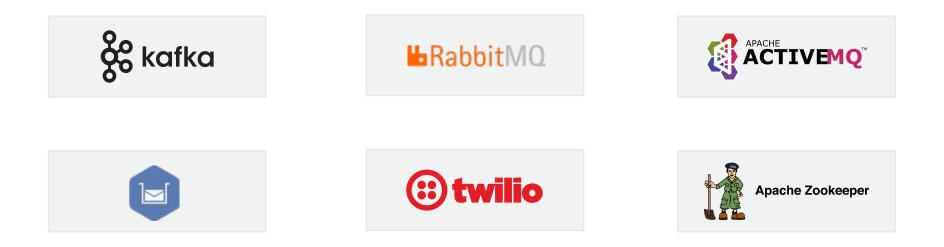
Caches

Caching systems significantly contribute to application performance. Site24x7's plugins for caches, like Redis and Memcached, tracks critical aspects such as cache hit ratios and memory usage. By providing insights into caching mechanisms and performance, these plugins enable organizations to optimize resources and ensure efficient application responses.



Messaging queues

In the world of distributed applications, Site24x7 addresses the practical challenges of messaging queues with plugins tailored for RabbitMQ and Apache Kafka. These plugins offer essential metrics like queue depths and message delivery rates, facilitating practical insights into the health and efficiency of messaging systems. Site24x7's focus is on providing data to empower organizations to proactively manage their messaging infrastructure, avoid disruptions, and ensure reliability.



2. Optimize IT operations

Site24x7's suite of plugin integrations can help improve day-to-day IT operations, helping teams stay on top of their processes. These plugins are tailored to address specific aspects of resource management, file and data handling, network connectivity, security, and process optimization.

Here's a look at some key plugins that play a crucial role in improving IT operations.

Plugin	What is does	How does it help improve IT operations?		
Resource monitoring and optimization plugins				
Windows Task Scheduler Monitor	Monitors scheduled tasks to ensure the health of servers	Proactively tracks and manages scheduled tasks, contributing to better resource planning and server performance		

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GPU Monitor	Monitors GPU servers to optimize resource usage	Offers insights into GPU performance, aiding in resource allocation and ensuring efficient utilization for enhanced server functionality			
File and data management plugins					
File Count Monitor	Monitors the number of files in a folder	Enables tracking of file counts, assisting in maintaining system efficiency and preventing potential data overload			
Partitions Monitor	Checks the status of partitions for seamless data storage	Ensures the health of data storage by monitoring partition status, preventing potential data loss or system disruptions			
File Metadata Monitor	Monitors changes in metadata attributes of crucial files	Offers insights into file metadata changes, facilitating efficient data management and ensuring data integrity			

Network connectivity and security plugins				
Software Updates Monitor	Ensures server security and up-to-date software by monitoring pending software updates	Mitigates security risks by keeping software current, contributing to a secure IT environment		
TCP and UDP Listening Connections Monitor	Monitors TCP and UDP connections	Provides real-time insights into network connections, ensuring stability and identifying potential issues promptly		
VPN Checker	Checks the functionality of VPN networks	Ensures seamless and secure VPN connectivity, contributing to uninterrupted and secure remote access		

Process and performance optimization plugins				
Open Files Count Monitor	Monitors the number of open files in a folder	Optimizes server performance by monitoring the number of open files and notifying when thresholds are breached		
Zombie Process Count Monitor	Identifies the number of running zombie processes	Proactively addresses potential issues by monitoring and managing zombie processes, ensuring stable and efficient operations		

Tailor monitoring needs with custom plugin integrations

Site24x7 custom plugins are user-created scripts that allow you to monitor specific metrics or data points that are not covered by out-of-the-box plugins. This enables you to gain deeper visibility into your unique IT environment and applications, filling in any blind spots that standard monitoring solutions might miss. You can create the custom scripts from a range of supported languages: Python or Shell for Linux servers and PowerShell, Batch, VB, or DLL for Windows.

Here are some use-cases on how you can leverage Site24x7's custom plugins feature.

1. In-house applications:

Track key metrics from tailored applications specific to your industry that might not have built-in monitoring or are not available out of the box. You can develop the plugin to derive critical metrics with custom indicators or even get user insights, so you can identify issues before they impact users and optimize workflows for peak performance.

2. Unique business and IT workflows:

Monitor the efficiency and performance of your internal IT workflows, such as automated tasks, server backups, and network configurations. Identify bottlenecks and optimize processes for improved efficiency and stability.

3. Compliance monitoring:

Create custom plugins to track adherence to specific industry regulations or internal compliance policies. Monitor key metrics and receive alerts for potential violations, ensuring peace of mind and regulatory compliance.

4. Payment gateway performance:

Gain insights into the health and performance of your third-party payment gateway, ensuring seamless transaction processing and a smooth customer experience.

5. IoT device monitoring:

Track the health and performance of your connected IoT devices, ensuring they are functioning optimally and collecting data as expected.

6. Custom hardware monitoring:

Monitor the health and performance of specific hardware components not covered by out-of-the-box plugins, such as specialized sensors or network appliances. Gain insights into potential hardware failures before they cause downtime.

Maximize monitoring potential: Your plugin implementation guide

How do plugins work?

Site24x7 plugins function by leveraging open-source scripts to gather monitoring data from your applications, services, or hardware.

1.Script execution:

- You choose a plugin (out-of-the-box or custom) designed to monitor a specific service or application.
- □ The plugin script, written in languages like Python or PowerShell, is deployed on the server monitoring agent installed on your server.
- Any credentials like username and password provided in the plugin CFG file are

securely encrypted in the agent.

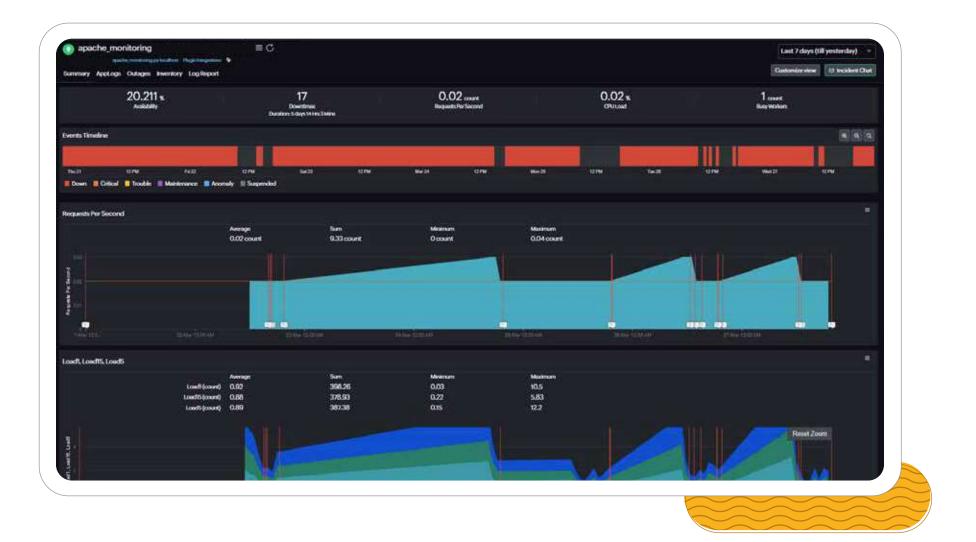
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2. Data collection and transmission:

The collected data, which is in JSON format, is then formatted, and the server monitoring agent transmits the formatted data to the Site24x7 data center at regular intervals.

3. Data processing and presentation:

- Site24x7 processes the received data and generates charts based on performance metrics.
- You can access the processed data and visualize it on a single pane of glass through the Site24x7 web client as well as leverage several platform features to make the most out of plugins.



Unlock the capabilities of robust platform features

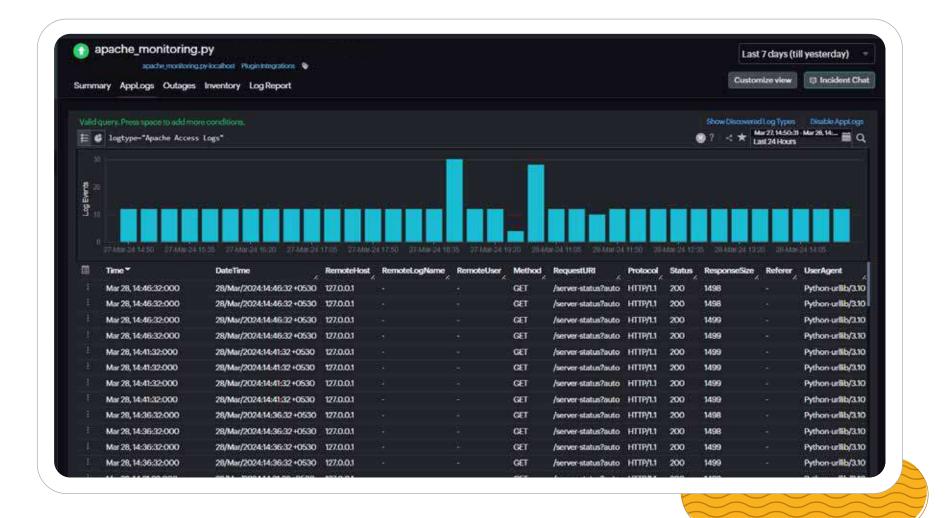
Threshold-based alerts: Threshold-based alerts enhance monitoring capabilities with plugins by notifying administrators of potential issues or anomalies in real time. By defining threshold levels for critical metrics, you can proactively address issues before they escalate, minimizing downtime and maximizing system reliability.

Custom dashboards: Custom dashboards play a crucial role in giving a holistic view of systems, allowing users to visualize data from multiple sources in a single view. By creating custom dashboards tailored to specific use cases or business objectives, organizations can quickly identify performance issues. You can drag and drop key metrics as widgets to create a comprehensive overview of your application stacks.

Al-powered anomaly detection: Utilize Site24x7's anomaly detection

feature to identify unusual trends and performance deviations, and take corrective action. These indicators are benchmarked based on dynamic usage patterns and seasonal thresholds, and notifies you when there are sudden spikes or dips. Proactively optimize your IT stack and allocate resources effectively based on data-driven insights.

Analyze with logs: Plugin integrations seamlessly sync with AppLogs, Site24x7's log management solution. With AppLogs, you can get granular insights into the performance of your applications by combining metrics and logs to identify the root cause of issues faster and reduce mean time to repair.



Integrate with third-party communication channels: Site24x7

enables organizations to collaborate effectively by integrating with third-party tools and platforms. This includes integration with popular communication channels, such as Slack, Microsoft Teams, and PagerDuty, as well as ITSM and CMDB tools like ManageEngine ServiceDesk Plus. By integrating with third-party tools, organizations can streamline communication and collaboration between different teams, ensuring timely resolution of issues and minimizing downtime.

Automated incident response with IT automation: With Site24x7's

self-remediation using IT automation, organizations can achieve greater efficiency, reliability, and agility in managing their IT infrastructure. When a threshold is breached or an issue is detected, such as a server going offline or memory usage increasing beyond limits, users can enable automated workflows through Site24x7's IT automation capabilities using scripts. These actions can include service restarts, execution of specific scripts, or even scaling resources.

Ensure comprehensive visibility into your IT ecosystem with Site24x7's plugin Integrations

Site24x7's plugins provide a holistic solution for monitoring complex IT environments. With a wide range of **out-of-the-box plugins** and support for custom scripts, organizations can achieve comprehensive visibility across their IT stack. By utilizing features like threshold-based alerts, custom dashboards, anomaly detection, and integration with third-party tools, Site24x7 enables proactive management and risk mitigation so that you can stay ahead of performance issues and enhance overall IT efficiency. Gain the necessary visibility to navigate the challenges of today's dynamic IT landscape effectively.

About ManageEngine Site24x7

ManageEngine Site24x7 is an AI-powered observability platform for DevOps and IT operations. The cloud-based platform's broad capabilities help predict, analyze, and troubleshoot problems with end-user experience, applications, microservices, servers, containers, multi-cloud, and network infrastructure, all from a single console. For more information about Site24x7, please visit www.site24x7.com.

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