



b4 Synthetic Monitoring

White Paper



Employee productivity and customer satisfaction depend more than ever on the quality of the user experience. Issues such as poor application performance, unexpected downtime and non-intuitive navigation can quickly leave employees unable to do their jobs and customers unable to get the value they expect from your organisation. Taken together, these issues directly and often negatively impact the organisation's bottom line.

INTRODUCTION

The digital world relies on fast and reliable applications and services. The availability and performance of web applications, mobile apps and other digital services can have a direct impact on customer satisfaction, business performance and ultimately a company's reputation.

With AmdoSoft/b4 Synthetic Monitoring you can ensure the availability and performance of your applications and services.

WHY IS SYNTHETIC MONITORING IMPORTANT?

Synthetic monitoring is important to ensure that applications and services are available and performing around the clock. By simulating user interactions with the products being monitored, problems can be detected early and fixed before they affect the user experience. Synthetic monitoring also makes it possible to monitor the performance of applications and services over time and track changes.

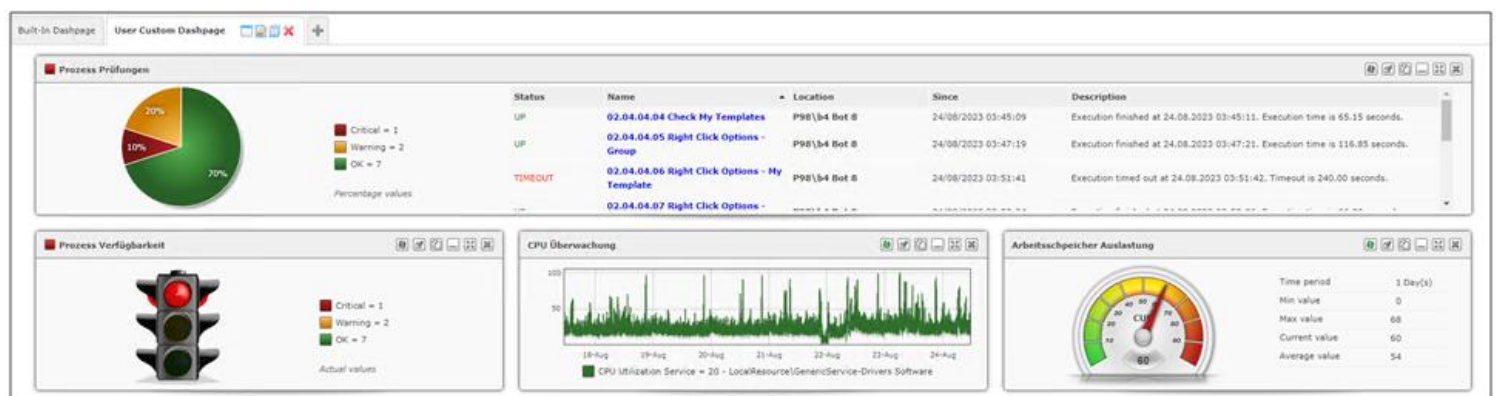
HOW DOES OUR SYNTHETIC MONITORING WORK?

In AmdoSoft/b4 Synthetic Monitoring, software robots b4 Bots simulate user interactions with an application or service to ensure that the expected results (availability, response time, answers...) are achieved. These interactions can include accessing web pages, filling out forms or performing transactions. b4 Bots perform these interactions from different locations and devices and measure the time it takes to complete the actions. This data can then be used to monitor the availability and performance of the application or service and identify problems.

"Synthetic Monitoring - the better way to monitor applications and ensure a seamless user experience!"



Synthetic Monitoring: Availability and Performance Check





TYPES OF SYNTHETIC MONITORING

BROWSER-BASED MONITORING

A web browser is used to simulate the behaviour of an end user accessing the web app via the internet.

API-BASED MONITORING

API calls in combination with network monitoring protocols are used to ensure that the application or system responds as planned.

NETWORK-BASED MONITORING

API calls are simulated to ensure that the application or system works as expected.

SYNTHETIC MONITORING APPLICATIONS

WEBSITE PERFORMANCE MONITORING

The performance of a website is monitored to ensure that it is fast and reliable for the end user.

APPLICATION MONITORING

The performance of an application is monitored to ensure that it is fast and reliable for end users.

NETWORK MONITORING

The network behaviour of an application or system is monitored to ensure that it behaves as expected in a particular environment.

LOAD TESTS

Stress tests are performed to determine how an application or system behaves under certain load conditions.

CLOUD MONITORING

Monitoring cloud-based services and applications to ensure they are working as expected.

TRANSACTION MONITORING

This application refers to monitoring transactions in an application to ensure that they can be completed quickly and reliably.

SAAS APPLICATIONS

By simulating user interactions such as opening a specific page, filling out a form or triggering a function of an application, the performance and availability of SaaS applications can be monitored.

TRACKING OF EXTERNAL CONTENT

Monitoring external content such as advertisements, cookies and scripts that are loaded into an app or website. These important checks counteract the potential failure of this content, which can affect the overall performance of the app/website.

*"From applications to systems -
With b4 everything in view for
smooth operation!"*

While Synthetic Monitoring types monitor different areas of the application or system, application areas specifically monitor certain functions of the application or system behaviour to ensure proper operation.





ADVANTAGES OF SYNTHETIC MONITORING

Synthetic Monitoring gives you the possibility to check the performance and availability of applications or systems from the user's point of view. AmdoSoft/b4 Bots allow you to do this around the clock and independently of real users, enabling proactive maintenance and optimisation.



Detect errors more quickly



Plan maintenance windows



Test complex transactions



Secure weak points



"Continuously monitor your systems, applications and services to be able to improve them on an ongoing basis!"



Cross-site monitoring



Ensure SLA compliance



Improve benchmarking



Prepare for seasonal peaks



BEST PRACTICES

To get the most out of b4 Synthetic Monitoring, we recommend following these best practices:

DEFINE CLEAR GOALS

Before you start implementing Synthetic Monitoring, you should define clear goals. These goals should be measurable, specific and related to the performance of your applications. By setting clear objectives, you can measure the success of your Synthetic Monitoring programme and ensure that it meets your business needs.

MONITOR END-TO-END PERFORMANCE

It is important that you monitor the end-to-end performance of your applications. This includes the performance of the application itself as well as the performance of the underlying infrastructure and network components. By monitoring end-to-end performance, you can ensure that your applications are working optimally and quickly identify and fix problems.

USE DIFFERENT TYPES OF TESTS

Synthetic monitoring with AmdoSoft/b4 offers a variety of test types, including HTTP tests, load tests, API tests and simulations of cross-platform and application-independent user input directly on the desktop. It is important to combine different types of tests to ensure that a holistic picture of the controlled applications and their performance can be obtained.

REALISTIC TEST SCENARIOS

Test scenarios should reflect realistic user scenarios under which your applications are used. They should also be updated regularly to ensure they remain current and reflect changing conditions.

MAIN TRANSACTIONS FIRST

Focus should be placed on the most important transactions in your application. By focusing on the most important transactions, you can ensure that you monitor and optimise the performance of your most critical business processes.

AUTOMATE TESTS

Automating tests is critical to ensure that you continuously and consistently monitor the performance of your applications. Automated tests also reduce error-proneness and save time and resources.

ANALYSE RESULTS

It is important that you regularly analyse your results and derive actionable insights. By analysing your results, you can identify trends, quickly detect and fix problems and continuously improve the performance of your applications.





MANAGED SERVICES

Synthetic Monitoring with AmdoSoft's b4 platform provides a powerful solution in the managed services sector to improve services and ensure that service levels meet expectations.

As a Managed Service Provider (MSP), you can use b4 Bots to work specifically for and with your customers and help ensure that the systems and applications you support are available and performant at all times.

SLA Support

Here are some ways you can support b4 Bots in your service level agreement and ensure that the agreed service qualities and performance targets are met.

REAL-TIME MONITORING

b4 Bots continuously run synthetic tests to monitor the performance of digital services in real time. This allows you to immediately identify and react to deviations from SLA commitments before they affect the user experience.

NOTIFICATIONS AND ALARMS

If the b4 Bots detect deviations from the defined SLAs, they can automatically generate notifications and alerts and send them to the responsible team so that they can quickly initiate measures to rectify the problem.

HISTORICAL DATA AND REPORTING

AmdoSoft/b4 records detailed performance data that can be presented in reports and dashboards.

You can use this time history to track SLA compliance, identify trends and make projections for future performance.

SLA MEASUREMENTS FROM DIFFERENT LOCATIONS

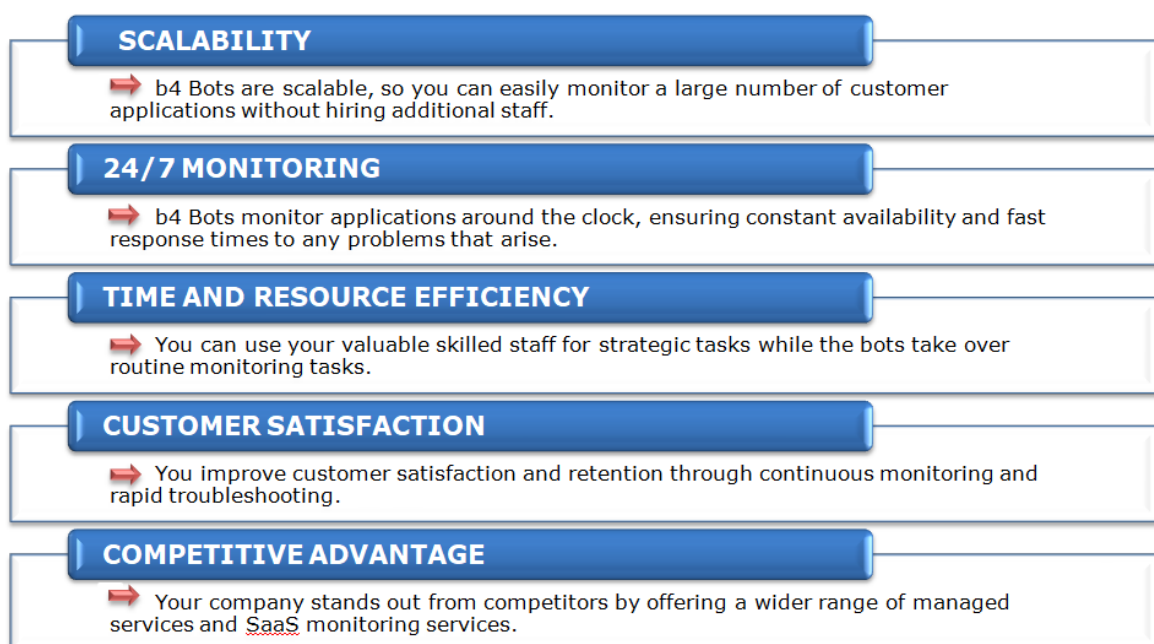
b4 Bots can run tests from different geographical locations. This way you can ensure that SLAs are also met by users in different regions and gain insight into possible regional differences in service quality.

SLA ADJUSTMENT:

The configuration of the b4 Bots allows the SLAs to be adapted to the specific requirements (systems, users, applications, tasks) and seasonal fluctuations. This makes the solution flexible enough to support different SLAs for different services or applications.

b4 SaaS Offer

b4 Bots can autonomously and precisely perform complex synthetic monitoring tasks. Human resources are not required. This allows managed service providers to use their limited skilled staff more efficiently while monitoring a wide range of customer applications.





SYNTHETIC MONITORING OR END-TO-END MONITORING?

The difference between end-to-end monitoring and synthetic monitoring is how the monitoring is carried out.

End-to-end monitoring refers to the comprehensive monitoring of an entire process or application from start to finish. This approach enables the observation of all components involved in a process, including the interactions between different systems and the impact on end users. Real user scenarios are taken into account.

In contrast, Synthetic Monitoring focuses on the simulation of user interactions to monitor the performance and availability of an application or system. Virtual test scenarios are created to check critical functions and recognise potential performance problems at an early stage before they affect actual users.

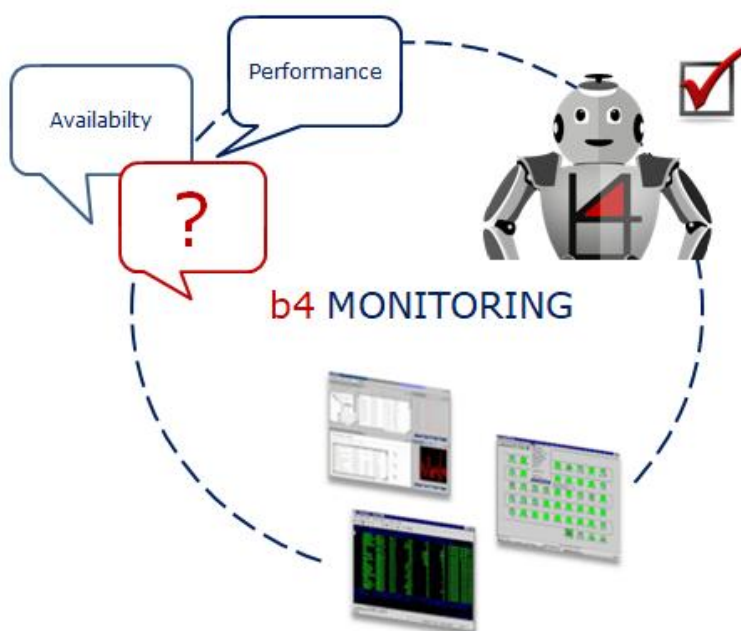
Translated with DeepL.com (free version)
With AmdoSoft/b4 you have the possibility to use both monitoring methods together to get a comprehensive understanding of the performance of applications and websites.

SYNTHETIC MONITORING OR ROBOTIC PROCESS AUTOMATION?

Synthetic Monitoring (SyM) refers to the practice of using simulated transactions to continuously monitor the availability, performance and functionality of websites, applications and IT systems. The goal of synthetic monitoring is to proactively identify and resolve problems before they affect real users.

Robotic Process Automation (RPA) is a technology that automates repetitive, manual tasks through software robots or "bots". RPA can automate a wide range of tasks, from simple data entry to complex processes such as invoicing, claims processing and staff intake. The goal of RPA is to increase efficiency, reduce errors and free up staff to focus on higher value tasks.

b4 Bots are characterised by their versatility and can be used both in the area of synthetic monitoring to monitor application performance and in RPA tasks to efficiently automate repetitive tasks. This allows companies to reap the benefits of monitoring and automation with a single solution.





CONCLUSION

Synthetic Monitoring is an indispensable tool for any organisation running digital applications and IT systems. By simulating user interactions and monitoring performance parameters, problems can be detected early and fixed before they affect the user experience.

AmdoSoft/b4 is a robust solution to ensure the performance and availability of your applications and systems.

Proactive fault detection, scalability, ease of use and cost savings make AmdoSoft/b4 an excellent choice for organisations looking to ensure the reliability of their IT infrastructure.

Don't miss the opportunity to optimise your monitoring strategy and take your user experience to the next level.

We look forward to hearing from you!

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*Our Business
is
to Automate
your
Business
Processes*

