



Brochure

IT Operations Management

Gut Feel Is Not Good Enough for UX

Why you need proactive synthetic monitoring
to thrive in a user-centric world.

Are You Staying Ahead of Skyrocketing User Expectations?

There is a huge disruption underway in today's marketplace, with the rising expectations of the user dominating the strategic choices businesses must now make. Today's user demands "Google-like" response times from the apps they use, so performance and availability issues must be discovered before the user finds them.

In this user-centric environment, applications and operations teams are using a combination of monitoring approaches. They are using traditional methods of measuring application availability and performance data, but they also have increasingly relied on monitoring technologies that consider real-time, end-user experience, transaction tracing, and user sentiments to make decisions about application design, development, deployment, and maintenance. While these tools are critical, even broader capabilities are needed in the face of today's ever faster release cycles. Otherwise it is likely that issues will escape detection and will be found by today's increasingly impatient users once an app is in production.

We will focus here on synthetic monitoring tools that can be used to proactively measure the user experience and to uncover and resolve issues before apps are released into production. A proactive approach is replacing the applications and operations teams' reliance on gut-instincts, and is also disrupting the way application performance management tools are used to develop and deliver applications that meet end-user SLA expectations.

For a gauge of the impact of proactive monitoring, just take a look at the disparate experiences of two health insurers operating in the same intensely competitive industry.

Company A recently jumped onto the consumerism bandwagon, launching a new customer portal and companion mobile app. The functionality is limited, though, and for good reason. The development team has its hands full trying to react to frequent problems that lead to poor response times and frequent crashes. Due to the lack of proactive verification, it becomes aware of problems only after real users encounter them and complained. The MTTR is unacceptably high, and the team is unable to operate in a real DevOps mode. Issues that ultimately are simple to resolve end up taking many hours, days, or even weeks to isolate and fix. Customers frustrated with the poor performance are flooding the company's service center with calls, and attrition is at an all-time high.

Company B has a relentless focus on quality and customer service that permeates its entire business, including the company's DevOps team. Team members are incentivized to maintain KPIs that measure SLA around 99.9%. As a result, the team has invested in sophisticated

synthetic monitoring tools, continuously evaluates app performance, and quickly triages any performance-impacting issues to move its metrics from red to green. Customers feel well served and are among the most loyal in the industry.

Which is most like your company?

Relying on "Gut-Feel" Isn't Enough

"If it doesn't feel slow and it doesn't crash, it's ready for production."

Sound familiar? In an environment where consumer opinions can make or break your success, going with your gut can lead to intense heartburn.

That's certainly true in today's app world. If your latest offering doesn't live up to expectations, the punishment is quick and severe. Users will discard the app you worked so hard to build and will leave behind scathing reviews on their way out the door.

A recent survey by Dimensional Research, called "DevOps, APM & the User Experience" shows that the most mature DevOps teams have gotten the message loud and clear: 94% of the respondents agreed that proactive monitoring used both in testing and development produces better quality apps. More than two-thirds of the DevOps teams using APM throughout the application lifecycle said they extracted more user experience benefits, such as improved performance, increased stability, and fewer defects found in production.

What Is Synthetic Monitoring?

Synthetic monitoring emulates the user and devices for web, mobile, and SaaS-based services. These scripts simulate an action or path that a user would take on a site. Monitoring 24x7 lets you be the first to know when the app is down—before your users do.

If you want to break away from the competition and deliver apps that keep your users coming back for more, it's time to let facts—not feelings—guide your work.

Fact-Based Synthetic Monitoring Is on the Rise

To meet ever-increasing user expectations, you don't need a crystal ball. However, you will need tools that can give you trusted information about all your applications, all the time. That's where synthetic monitoring shines.

Full-featured synthetic monitoring tools can help you flex the muscles of your Web, mobile apps, and cloud applications using geographically dispersed agents collecting data during scheduled tests. You can develop and record scripts that continuously emulate the steps taken by real users and how they interact with your applications.

Surveys show developers and DevOps teams with the most frequent app releases are the most proactive adopters—helping them stay ahead of their customers and their competition.

- Eighty-two percent of the DevOps teams who stated they have high-velocity daily app releases are using APM proactively both in the development and testing phase.
- Seventy four percent of those with monthly release cycles use tools to monitor app performance proactively.

It is no surprise that these are the most productive DevOps teams delivering the highest rated applications.

Synthetic Monitoring in Action

One IT team, from an employee healthcare benefits company, recently adopted synthetic monitoring and reduced app response times by 33% by simulating user sessions and identifying the issues impeding performance. See the case study [here](#).

Synthetic vs. Real-User

Real-user monitoring measures actual user experiences as they interact with your applications. Synthetic monitoring uses “robotic playback engines” to proactively identify performance and availability of your apps remotely—even when there is no user traffic.

It's Time to Face the Truth

For your app and your business to thrive in today's consumer-driven world, it's important to have a firm grip on reality. Here are five truths that can help you avoid common pitfalls.

1. The Most Expensive Way to Monitor Your App Is to Let Your End Users Do It for You.

Today's users have zero patience with apps that perform poorly and deliver a lousy experience. In fact, nearly 7 out of 10 users say app issues will cause them to have a lower opinion of the company and the brand that created the app. That makes application performance monitoring

more critical than ever. It is time to get proactive and uncover issues before users experience them.

HOW SYNTHETIC MONITORING CAN HELP

Proactively using synthetic monitoring tools helps you predict the behaviors and actions of users and gives you valuable information about what they will experience—before your release goes live. So test your applications from points of presence around the globe to validate that the user experience is as expected, and when it is not, make the needed changes.

2. An App That Works on Day One Can Collapse by Day Two.

So you've carefully tested your app or update and have released it, hoping for glowing reviews. Now is not the time to step away. You wouldn't welcome guests into your home only to dart out the back door and leave them unattended. The same should be true of your app. While it might work perfectly in the lab, you never know how the application will behave under load—pushed and prodded by actual users and routed across your global infrastructure.

HOW SYNTHETIC MONITORING CAN HELP

Synthetic monitoring lets you create processes that run continually or at predetermined intervals to mimic consumer behavior. You can anticipate how your app will perform under load and when traveling over various transmission paths, not just in the lab. It's the only way to assure those perfect “day one” experiences extend into day two and beyond.

3. Looking Back Can Help You Move Forward.

Application release management is all about continuous improvement. You want to build on past successes instead of carrying forward pesky issues that impact performance, availability, or resource utilization. Is that new feature you added to your app unraveling the gains you made in Web load times? Having a historical perspective can make all the difference. You can determine whether you are on the right path and are continuing to improve over time with each new release.

HOW SYNTHETIC MONITORING CAN HELP

Synthetic monitoring tools gather the data you need to build a historical record of your app's performance, so you can evaluate and monitor changes over time—all the way down to the components of each page.

4. It Pays to Keep Your Third-Party Services in Check.

Bringing a user-centric view to app performance involves more than your own code and infrastructure. Users can't distinguish your flawless code from a buggy third-party e-commerce engine or a partner's overloaded authentication server embedded in your application infrastructure. It takes

a watchful eye to make certain your third-party services are performing at the top of their game and helping you meet or exceed user expectations.

HOW SYNTHETIC MONITORING CAN HELP

Transaction “robots” can simulate user sessions to ensure availability and performance of your third-party services and allow you to become aware of issues before they are reported by users.

5. Fast-Track Development Is Here to Stay.

Rising consumer expectations are driving shorter application release cycles. Companies are accelerating the delivery of new features to keep users engaged and are fixing problems at a more rapid pace for a more positive user experience. In fact, surveys show that 73% of apps now have monthly releases, while 16% have an even higher-velocity daily release cycle. As the release cycles become faster, there is a risk that some issues will be found only in production.

HOW SYNTHETIC MONITORING CAN HELP

Point-and-click synthetic monitoring tools support fast-track development by significantly reducing the time it takes to create and launch test scripts. You can even record scripts and reuse them when an app is released into production for zero monitoring downtime.

Find the Perfect Fit

Wondering what to look for in a synthetic monitoring solution? Here are eight features you should insist on to ensure you get the best return on your investment.

1. **A single pane of glass** that enables you to monitor Web and mobile apps and cloud-based services from the same solution
2. **Visibility** into multiple applications in real time—on-premises or in the cloud—with drill-down into key performance and reliability metrics
3. **Reusable dev** scripts that promote collaboration among development, quality assurance, and operations teams and end the finger pointing when something goes wrong
4. **Proactive monitoring**—continuous or at scheduled intervals—so you can predict and resolve issues before end users are even aware of them
5. **Service-level management** that lets you monitor app performance against a wide range of SLAs in real time
6. **Root cause identification** of performance and availability issues by app, location, transaction, or component

7. **Support for agile development** with a continuous flow of information and feedback from production to development—fueling ongoing improvement
8. **Quick and easy installation** right out of the box, with no agents to download or deploy

Take It Up a Notch with End-to-End Monitoring

Once you’ve incorporated synthetic monitoring into your operations, you will be poised to leverage your investment and expand your monitoring capabilities. When you do, look for compatible tools that can be set up in minutes and integrate seamlessly with your synthetic monitoring software. Here are two complementary technologies to consider:

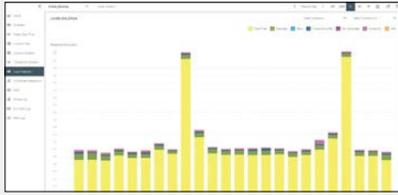
- **Mobile monitoring.** To complement synthetic monitoring, look for tools to measure and score real-time data from mobile users so you can understand the business impact of the issues you uncover and triage what needs your attention first.
- **End to end monitoring.** To give you a clear, well-documented roadmap to issues lurking beneath the surface, add end-to-end monitoring to the mix. You will be able to track a transaction from the time a synthetic transaction simulates a screen swipe or mouse click, across all your application tiers. By correlating user experiences with what happens on the execution side, you can drill down to a precise line of code, exception, or transaction-specific log message and identify what’s going wrong.

Combining synthetic monitoring with real-time monitoring and end-to-end monitoring tools can take your operations a new level—helping you work smarter and faster. For example, when synthetic monitoring proactively identifies a performance problem with a Web app, you can correlate user actions with specific server-side issues. If your real-time mobile monitoring tools detect a failed HTTP request, you can drill down through all the service tiers involved to discover what’s causing the problem. Ultimately, you will be poised to join the ranks of the most mature DevOps teams.

Figure 1. Layer Isolation: With AppPulse Active, you can view the transaction layer response times for a selected transaction at a specific location



Figure 2. AppPulse Active Overview: Use a single-pane-of-glass to check your app status at a glance: View all synthetic monitor transactions and locations of an application and their status over time



Take Control with Micro Focus AppPulse Active

With Micro Focus® AppPulse Active you can take control of monitoring applications and services on a 24x7 basis. It gives you the ability to create synthetic monitors in minutes using the industry's broadest set of protocols. Based on the industry standard, Micro Focus LoadRunner, Micro Focus AppPulse Active offers more than 35 protocols. The scripts used in LoadRunner are easily exported to AppPulse Active, and you can reuse them from development to production.

You can monitor the end-user experience from multiple locations inside and outside the firewall, including your Web, mobile, and cloud-based services, and supplement the information you obtain from real-user monitoring. This expansive view helps your DevOps teams proactively see and isolate issues by application, location, transaction, or

component layer—so you can quickly address the root cause of performance and availability problems.

Find Out More

Learn about Micro Focus solutions and services for application monitoring and measurement by visiting www.microfocus.com/appulse. Or download any of these resources and get the details about our point of view and approach to creating a superior user experience for superior business outcomes.

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Micro Focus Synthetic Monitoring website: www.microfocus.com/appulse

Case Study: Independent Health uses AppPulse Active to improve end-user experience

Free Trial: Know how your applications perform anywhere, anytime

Learn more at www.microfocus.com/appulse

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