

WHAT IS SYNTHETIC TRANSACTION MONITORING AND HOW DOES IT BENEFIT ITOPS?



Don't be caught off guard

We've all experienced that moment when you send a valuable web link to a colleague, client, or prospect and they respond with *"Oh, that link you sent me does not work."*

No one likes to be caught off guard. We want to make sure that everything is ready for important circumstances. We hold fire drills to make sure we're ready in the event of an actual fire. Sports teams do repetitive practice drills so when they're in a game, they're well prepared.

This practice is "not real" in a sense—we're *simulating experiences that are like the real activity*. If we're not practicing or checking to make sure we're always ready, a fire could have deadly consequences. In a sports game, we'll lose the play or miss a goal.

This kind of simulation can be very useful in today's digital IT transformation initiatives.

"With a greater focus on consumer expectations for all users, the ability to avoid any slow or down time for end users can make all the difference when transforming digital business. [Digital transformation](#) can be filled with tradeoffs that were not present in legacy monitoring strategies for end user experience." - CTO, Large Enterprise

Why Synthetic Monitoring and APM for IT Operations?

Like everything else in the digital era, the pace and variety of application change is staggering. Legacy, monolithic apps that are fairly stable can easily be monitored with packet capture or instrumentation by agents deployed on web servers. In pursuit of SLA adherence, synthetic monitoring is a natural way to ensure the performance of these types of applications. Regular checking for the response time and availability of any end point or page view in a hosted web application is very common in IT operations monitoring environments.

"To deliver on digital business, top-performing enterprises are writing 30% more software than average-performing organizations in order to differentiate their businesses, exploit product leadership, customer intimacy and/or operational efficiency." What CIOs Need to Know About Software-Defined Infrastructure and Digital Business, Gartner, 10 July 2017, G00325934

As application environments are now changing in real time—keeping up with changes in monitoring can be less straight forward and leave blind spots. There's a trade-off between instrumenting every aspect of this changing environment versus having just the right amount of monitoring that fits the need. The cost of having a view of everything in production in real time might not be an economically wise decision nor be technically feasible. Visibility of every transaction, tier, level of code, database call, storage, and even security concerns can be very expensive and isn't necessarily the right approach in the modern app stack.

A lot of technologies, a lot of monitoring strategies

Most enterprises evolve their business through both innovation as well as acquiring other businesses and technologies. Thus, their IT operations rely on and often inherit a variety of vendor tools to monitor these environments. No one vendor or monitoring technique is the be-all, answer-all for the whole environment. There are always blind spots somewhere. Either the budget does not support a robust monitoring environment or there are gaps in coverage while making the choice between one vendor over another.

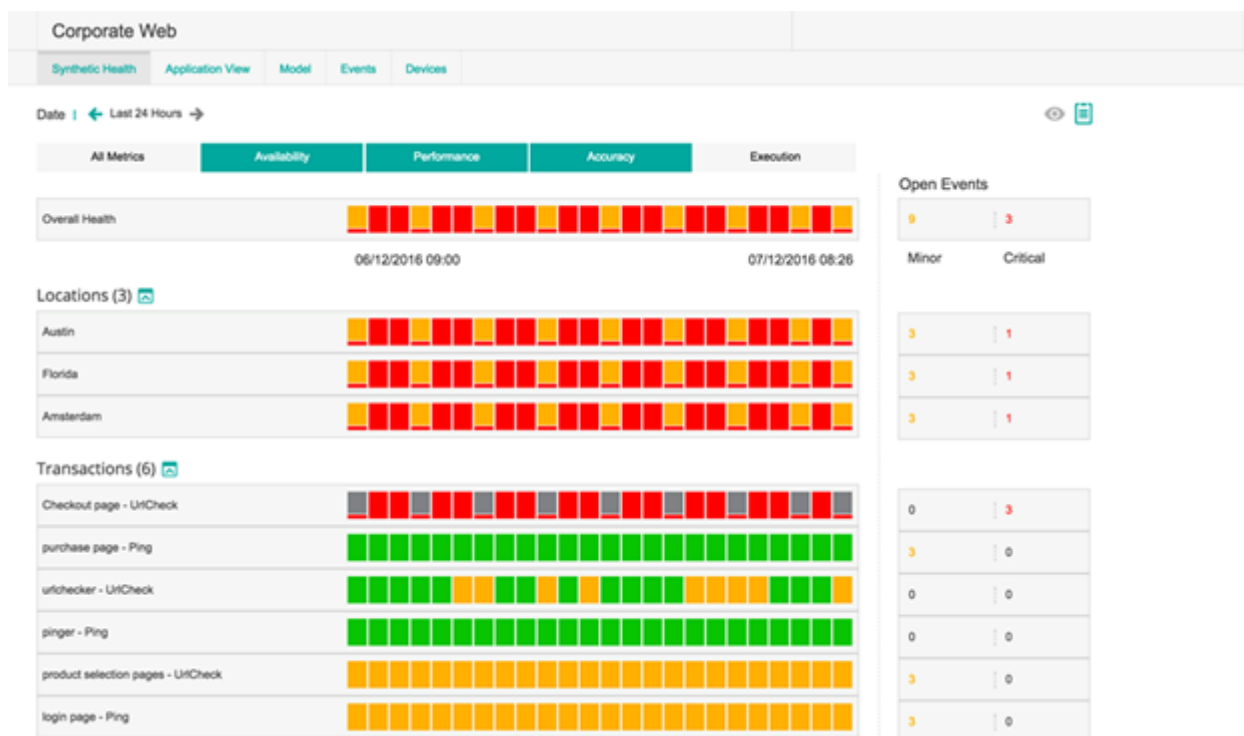
Mitigate risk and reduce monitoring sprawl

More rapid development and delivery of production apps can introduce unexpected changes to the environment in a routine update—or it might even be an automated change—causing one of the elements in the delivery of the app to slow down or become unavailable. No one is using the environment so there are no violations in performance to report from real users. By having a synthetic transaction checking this environment, you get notified right away. You begin solving the problem before it mounts into a fiasco for your users, and you gain greater IT operations credibility.

With synthetic transaction monitoring included with your APM solution, you can avoid having to flip through yet another console to check for the blind spots in your environment. By simulating user experience, you can get alerts when something goes awry at any time and not just for pages hosted by web applications.

Having a synthetic transaction monitoring strategy in place for hosted web apps, native mobile apps, SaaS apps, as well as apps running in environments like Citrix or SAP completes your IT operations toolset.

Here's an example view of synthetic monitoring for locations and transactions related to an eCommerce app.



A modern APM for IT operations strategy using TrueSight from BMC includes comprehensive synthetic monitoring for transactions throughout your entire IT infrastructure for apps hosted on premises or in a cloud environment to help you have actionable insight before users are impacted.

Instead of relying on the users themselves to report the issue or having yet another monitoring tool in your environment uncover the issue, simulate user experience to get information at your fingertips about a potential issue.