TCO

AVOIDING THE
HIDDEN
COSTS OF
PERFORMANCE
MONITORING
TOOLS.

When considering a new performance monitoring solution, it's important to note that the initial purchase price is not a good indicator of the eventual bottom line. To properly assess Total Cost of Ownership (TCO), organizations must also look at a wide range of hidden costs, including per module fees, storage, hardware, additional staffing needs, API access, vendor lock-in and many more. This paper exposes those costs, and examines an all-in-one infrastructure monitoring alternative whose comprehensive licensing model provides greater cost predictability.

Look Beyond the Price of a Ticket

Performance monitoring is a lot like air travel these days. You think you know what the trip will cost when you purchase the ticket, but just wait until the hidden costs start adding up. Still, flying is essential for many businesses – the same way performance monitoring is a must-have for modern enterprises.

Just like when you shop around for the best airfare, it's smart to seek out the best value in performance monitoring. But remember that the licensing fee is just one piece of the puzzle. Like baggage fees and add-ons for things like premiere seating, ancillary costs can mount quickly when you add the a la carte features and functionalities you need — and expect — from a performance monitoring solution.

This white paper examines the total cost of comprehensive performance monitoring solutions, including upfront pricing plus add-ons and conjunctive expenses. To help you decide what's best for your organization, we'll point out hidden costs to watch out for with software-only solutions, whether they're perpetual or subscription-based models.

Before dismissing the thought of upgrading because of cost, it's smart to take a reality check on how much IT budget your current system consumes. Here are some "hidden fees" you may already be shelling out – often for what may be less-than-optimal performance monitoring:

WHAT ARE THE HIDDEN COSTS OF YOUR EXISTING SOLUTION?

- If you're relying on multiple tools from a variety of vendors to monitor individualized segments of your network, you're probably paying a hefty amount in aggregated maintenance contracts. At the same time, you're dealing with troubleshooting delays because you have to check multiple tools, and added costs that come with training new staff on each tool's protocols.

- If your current solution is considered "legacy" technology, you may experience slowness in troubleshooting and have visibility gaps over your infrastructure, putting you at financial risk.

- If you need to upgrade your monitoring platform, you may be forced into regular hardware refreshes in order to maintain compliance with software requirements for improved performance.

Even if you believe your organization can't make a change now due to lack of budget, a second look might show you that another platform with greater functionality and comprehensive features could save you a mountain of man-hours and cut considerable costs in the future. Eliminating inefficiencies in performance monitoring, including engendered downtime, can often offset the entire expense of an upgrade over the course of two to three years.

"The cost to administer our performance monitoring platform was substantial," says a former developer of systems management solutions for a top 10 IT Services Provider in North America.

"When we migrated to a new solution, we realized a 25% reduction in labor within the first six months. We also doubled the number of objects we monitored, giving us much better performance visibility."

Changes like these that promise significant savings in IT staff time and huge advances in technical oversight can persuasively make your budgetary business case for upgrading to a more powerful monitoring solution. Opening your eyes to the shortcomings of your existing solution is the first step toward that goal.

HIDDEN COSTS TO AVOID IN AN UPGRADE.

Even after you've paid the extra fees to get on the plane, you might encounter more unexpected charges: blankets, pillows, soft drinks, maybe even bottled water… it's nuts! (Oh, and those cost more, too.) Well, performance monitoring solutions can also pile on charges you never anticipated.

Take agents, for instance: if a solution requires you to install agents on devices and machines to collect performance metrics for feeding to the main software application and database, the man-hours can add up fast, especially if staff has to administer and upgrade them on an ongoing basis to keep them current with the primary software's latest version. Even some "cloud-based" solutions require you to deploy on-premises software agents throughout your infrastructure, and then monitor and upgrade those agents regularly. Either way, the administration and upkeep of agents can amount to a sizeable hidden cost. "I avoid agent-based monitoring whenever possible," said a CTO for a government contractor. "The time investment in deploying and maintaining agents – especially during upgrades – is usually too costly for the value they provide."

Similarly, the hardware footprint of the performance monitoring solution can increase IT operating expenses significantly, starting with the energy consumption and cooling costs, which industry analysts put at an average of around $800 per server, annually. You may even need a hardware refresh to accommodate the new solution, which will up the ante significantly. Then there are expenses associated with having your staff deploy the architecture. This may involve several teams, depending on the scope and size of your network infrastructure and your IT staffing organizational chart.

You may have also experienced long wait times for your performance monitoring vendor to turn around a new device certification for SNMP polling, sometimes in excess of six months. You want the vendor to guarantee certification quickly to avoid costs associated with implementation delays. You rightly believe you shouldn't have to pay an additional fee for new device certification. A real-life example comes from a former engineering director at a global investment bank: "We had new packet probes that we needed certified for monitoring, but our vendor said it was going to be six to eight months until they could deliver. When they finally brought something to the table, it didn't work, and they had to go back and spend another six months certifying the devices all over again. Waiting that long to monitor new technology puts you at significant financial risk."

Here's a list of seven additional sources of hidden costs that may come into play after you purchase a new performance monitoring solution:

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SOURCES OF HIDDEN COSTS.

• **Architecture Deployment** – You must provision and administer various servers for polling/data collection, databases, reporting, alerting, etc. For example, one prominent performance monitoring vendor's documentation details how it would take 29 servers to monitor one million objects ("object" defined as a component of a device, such as memory, CPU, disc, etc.). The database server alone might run $20,000, with each polling engine server potentially costing $8,000 each (just for the hardware). And don't forget the main application server – another $8,000 or so.

• **Storage** – You need additional storage to maintain raw data for your required period of time. Many performance monitoring tools don't maintain raw polled data more than a couple weeks. Instead, they roll-up data over time into hourly or daily averages, leaving you with less accurate data for historical reporting and capacity planning. How much storage might you need to maintain a year of as-polled data? It depends on the size of your monitored domain. But keep in mind; many tools will come to a crawl if they're asked to report on such large data sets.

• **Vendor Lock-in** – Rather than an open system, the vendor prevents interoperability with other platforms and, thus, costs you potential savings gained through lack of automation and information sharing.

• **API** – Access to a poorly designed API is inconsistent and requires you to repeat the development cycle for every attempt to hook into your performance data, resulting in wasted development hours.

- **Scalability Limitations** – Monitoring and reporting slows down as data sets get bigger, lessening your ability to detect and avoid performance impacting events in real-time, which can lead to downtime and related revenue loss.

- **Staffing Issues** – You need more IT staff to administer the solution, possibly including a database administrator, plus training of additional report writers. As a former developer for a prominent service provider recounted, "We had three permanent staff members dedicated solely to report writing for our performance monitoring platform, because it was simply too time consuming to generate ad-hoc reports from that particular application. You can imagine how those salaries inflated the overall cost of the solution. On top of that, we occasionally had to bring in three or so additional contractors to help with building customized reports. It should never have to be that labor intensive."

- **Add-on Modules** – You may need separate modules to collect and monitor different data types (SNMP, Flow, WMI, JMX, etc.), each purchased at an additional cost. For example, one "low cost" vendor may charge $25,000 for their core monitoring application, but if you want to monitor NetFlow, that's an additional $15,000. Need to monitor servers? That's $3,000 more. What if your server pool is virtualized? Add another $3,000. Storage monitoring? Again, $3,000. Need to ensure VoIP performance? Tack on $1,500 more. It goes on and on...

Another red flag to watch for at the outset, and preferably before you finalize the buy, is the percentage of the initial purchase price allotted to Professional Services (PS). Anything over 35% is a cause for concern. Even 25% should give you pause. Why? Because the amount of PS included is a good indicator of the solution's ease of implementation. Moreover, the more Professional Services supplied at delivery, the steeper the learning curve will probably be. And lots of PS at installation is a good predictor of future PS needs — at additional cost, of course.

Among the eventual tasks that might require more PS help are software upgrades. They should be easy, but they can be a major source of ongoing hidden costs, along with administration, storage, staffing, agents, and the other expenses detailed above. You can absorb one, maybe two, of these hidden costs, but when you start adding them all up, they can make a performance monitoring upgrade a formidable sell.

THE FINE PRINT ABOUT LICENSES AND SOFTWARE-ONLY MODULAR OPTIONS.

Whether you purchase a permanent license or buy one on a subscription basis, you could get tripped up by the fine print. For example, some vendors sell licenses on a silo-specific basis and don't permit customers to move them around to monitor different components. Other vendors may require you to purchase one license for one kind of data/object and another license for other types, such as network metrics vs. VoIP vs. APM, etc. Also, you need to question whether you need a separate install of the application at each branch location, again usually at additional cost.

Another set of cost considerations concerns software-only performance monitoring platforms. At first glance, these modular approaches appear to be a straightforward way to keep costs down, maybe even way down – especially if you only want basic availability monitoring. After all, you won't be paying for any hardware elements. But not so fast. You actually do have to pay for hardware: your own. Unlike an appliance-based solution that includes the hardware in the licensing, it's up to you to provide the hardware to run the software, not to mention the server/ security licensing for that hardware. You may spend in the neighborhood of $5,000 for the database license, another $5,000 for each server license (times the number of servers you deploy), and a separate software fee for each of your polling engines.

So that low-cost option can quickly become much more expensive, particularly when you add in the costs of the hardware you have to supply, plus the aggregated costs of individual modules and the training of your staff.

By contrast, a comprehensive all-in-one performance monitoring solution that includes a hardware appliance with the software already installed avoids most, if not all, of the hidden costs and drawbacks described above. Offering much more capability and functionality, this kind of plug-n-play alternative also usually provides simpler upgrades. Can such a solution appear more expensive on the surface? Well, yes — but only if you exclude the wide range of hidden costs associated with other approaches.

A COST-EFFECTIVE ALTERNATIVE:

SevOne's All-in-One Infrastructure Monitoring Platform

Migrating to a modern performance monitoring solution can be as easy as putting a SevOne appliance in your data center, plugging in the power cord and the Ethernet cable, and watching the platform discover what's on your network. The SevOne infrastructure monitoring solution provides cost predictability and avoids the budgetary pitfalls of other approaches by eliminating the hidden costs. That's because SevOne is:

- **Agentless** – alleviates administrative burden during deployments and upgrades

- **Comprehensive** – includes more than 20 monitoring protocols and technologies out of the box, without the need to invest in additional modules to monitor standard performance metrics

- **Flexible** – instantly moves licenses between monitoring of networks, servers, storage, or any time-series metrics you ingest

- **Appliance-based** – doesn't require additional hardware for polling engines, a database, or a report front end

- **Scalable** – monitors up to 200,000 objects from a single physical appliance, or 100,000 objects from a single virtual appliance

- **Self-contained** – doesn't require a database administrator, as SevOne supports the database as part of the maintenance contract

- **Vendor-agnostic** – collects metrics across heterogeneous network and datacenter environments

- **Storage-independent** – maintains a year of as-polled data without any external storage devices

- **Responsive** – includes a guaranteed 10 business-day turnaround on new device certifications for SNMP polling

SevOne offers two licensing plans: a one-time fee for a perpetual license and a monthly-fee subscription licensing model. The self-contained appliance — which includes the polling engine, database and reporting — is included at no extra cost under both licensing options. Either plan allows you to move licenses around your infrastructure to monitor whatever components you choose. SevOne bases the cost on the number, not type, of monitored objects like CPU, memory, disk, individual components, etc. Unlike other solutions that also charge per monitored object, SevOne has no fees for specific modules or software, and also unlike others you don't have to provision your own hardware. SevOne's all-in-one solution also eliminates the need to set up your own database or employ a database administrator.

The hidden costs discussed in this paper are eliminated with SevOne, and that translates into upfront cost-predictability and helps with long-range planning, scalability and expansion opportunities. A single all-in-one appliance monitors up to 200,000 objects with no additional servers or storage, drastically reducing your hardware footprint and related costs. With sub-minute polling capability, end-to-end visibility across your entire infrastructure on customizable dashboards, and the ability to handle massive amounts of data at speed, SevOne monitors everything for you and reports on any performance variation from baselines created from your data and the history of your infrastructure.

The bottom line: unlike the airlines, SevOne won't stick you with hidden costs once you're on board. This comprehensive performance monitoring solution can help you cost-justify an upgrade to a new platform by eliminating most, or even all, of the ancillary and hidden costs that may be associated with your current system.