



Tool consolidation: how to avoid the added costs of multiple performance monitoring tools

It's easy to understand how tool sprawl happens. Putting in a new wide area network (WAN)? Get a performance management tool. Deploying a cutting-edge wifi network across your campus? Get a different tool. Then, if you merge with or acquire a new company that went through a similar process across its IT network infrastructure, your team could easily be managing a dozen or more management tools for your network.

Deploying multiple performance monitoring tools for different parts of your network infrastructure can raise your total cost of ownership (TCO). To properly assess TCO, organizations must look at a wide range of hidden costs, including per-module fees, storage, hardware, additional staffing needs, application programming interface (API) access, vendor lock-in and many others. This paper exposes those costs and examines a network and 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 associated 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 such as premier seating, ancillary costs can mount quickly when you add the individual features and functionalities you need — and expect — from a performance monitoring solution.

This white paper examines the total cost of multiple 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 consolidating tools because of the cost of a replacement platform, it's smart to do a reality check on how much IT budget your current systems consume. Read on to discover some additional fees you may already be shelling out for — often for what may be suboptimal performance monitoring.



What are the hidden costs of your existing solution?

- If you're relying on multiple tools from various 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 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 labor 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.

Changes such as 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 to feed to the main software application and database, the labor hours can add up fast, especially if staff has to administer and upgrade them regularly 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 associated cost.

A real-life example comes from a chief technology officer for a government contractor:

"I avoid agent-based monitoring whenever possible. 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 your performance monitoring solution can increase IT operating expenses significantly. 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 IT staffing organizational chart.

You may also experience 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 to certify 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:

Seven sources of added costs

1. Architecture deployment

You must provision and administer various servers for polling and data collection, databases, reporting, alerting and so on. Often, a monitoring solution's architecture is such that each of its NPM servers has limited scalability. Adding more capacity often means deploying "yet another NPM server" with its associated direct costs to license, along with indirect, ongoing costs to deploy and maintain it. With organizations' growing networks, that per-server capacity limit can make it cost-prohibitive to get the coverage they need.

2. 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 forced to report on such large data sets.

3. Vendor lock-in

Unlike an open system, the vendor prevents interoperability with other platforms and, thus, costs you potential savings gained through lack of automation and information sharing.

4. 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.

5. Scalability limitations

Monitoring and reporting slow 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.

6. 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."

7. Add-on modules

You may need separate modules to collect and monitor different data types (SNMP, Flow, WMI, JMX and so on), each purchased at an additional cost.

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 number of PS included is a good indicator of the solution's ease of implementation. Moreover, the more PS 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 can be a major source of ongoing additional costs along with administration, storage, staffing, agents and the other expenses detailed above. You might absorb one, maybe two, of these associated 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. 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. You need to look at the fine print. Is all the software you need for your deployment included? You may need to spend more for the database license, and more 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 performance monitoring solution can avoid most, if not all, of the additional costs and drawbacks described above. Offering much more capability and functionality, this kind of plug-and-play alternative also usually provides simpler upgrades. Can such a solution appear more expensive on the surface? Well, yes — but only if you ignore the wide range of hidden costs associated with other approaches.

A cost-effective alternative

Migrating to a modern performance monitoring solution can be as easy as putting an [IBM® SevOne® Network Performance Management \(NPM\)](#) software appliance in your data center and watching the platform discover what's on your network. SevOne NPM provides cost predictability and avoids the budgetary pitfalls of other approaches by eliminating the hidden costs. That's because SevOne NPM 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 your company ingests
- **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 virtual appliance, and millions when clustered together as a single system
- **Self-contained.** Doesn't require a database administrator, because SevOne NPM supports the embedded database as part of the maintenance contract
- **Vendor-agnostic.** Collects metrics across heterogeneous network and data center environments
- **Storage-independent.** Maintains a year of as-pollled data without any external storage devices
- **Responsive.** Includes a guaranteed 10 business-day turnaround on new device certifications for SNMP polling

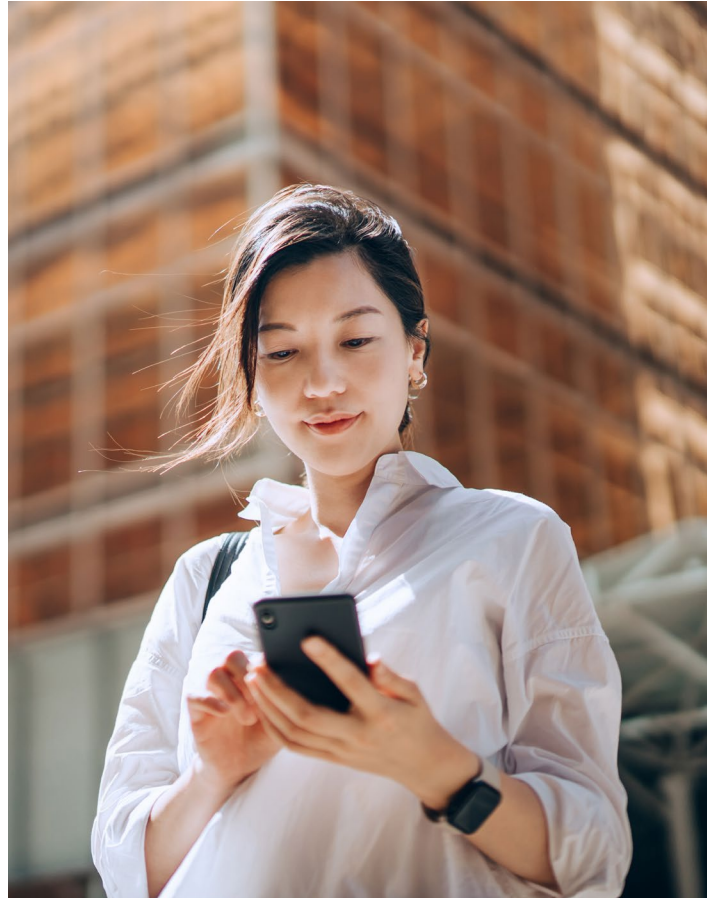
The additional costs discussed in this paper are eliminated with SevOne NPM, and that translates into upfront cost predictability and helps with long-range planning, scalability and expansion opportunities. SevOne NPM offers sub-minute polling capability, robust visibility across your entire infrastructure on customizable dashboards, and the ability to handle massive amounts of data at speed. The solution monitors everything for you and reports on any performance variation from baselines created from your data and the history of your network and infrastructure.

The bottom line: Unlike the airlines, we won't stick you with additional expenses once you're on board. SevOne NPM can help you cost-justify a tool consolidation program with an upgrade to a new NPM system by eliminating most, or even all, of the ancillary and hidden costs that may be associated with your current systems.

Why IBM?

IBM SevOne Network Performance Management (NPM) provides a single source of truth to help assure network performance across multivendor, enterprise, communication and managed services provider (MSP) networks.

[Learn more](#) about SevOne NPM and how it can help your organization monitor and manage the performance of both your existing and next-gen network and infrastructure resources more effectively.



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New Orchard Road
Armonk, NY 10504

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