



Five Factors to Consider When Selecting an IT Infrastructure Monitoring (ITIM) Solution



August 2022

Introduction

IT Infrastructures are becoming exponentially more complex to meet enterprise demands for monitoring & infrastructure management

Enterprises continue to invest in diverse, traditional infrastructure components & modern cloud assets

+15%

Increased annual spend on Infrastructure Monitoring Tools¹

Organizations are solving for new infrastructures by adding more tools

80%

enterprises have between 10-30 different ITIM solutions²

Adding more tools creates more noise

79%

Of IT teams report reducing alert noise is #1 priority³

Adding more tools creates more blind spots

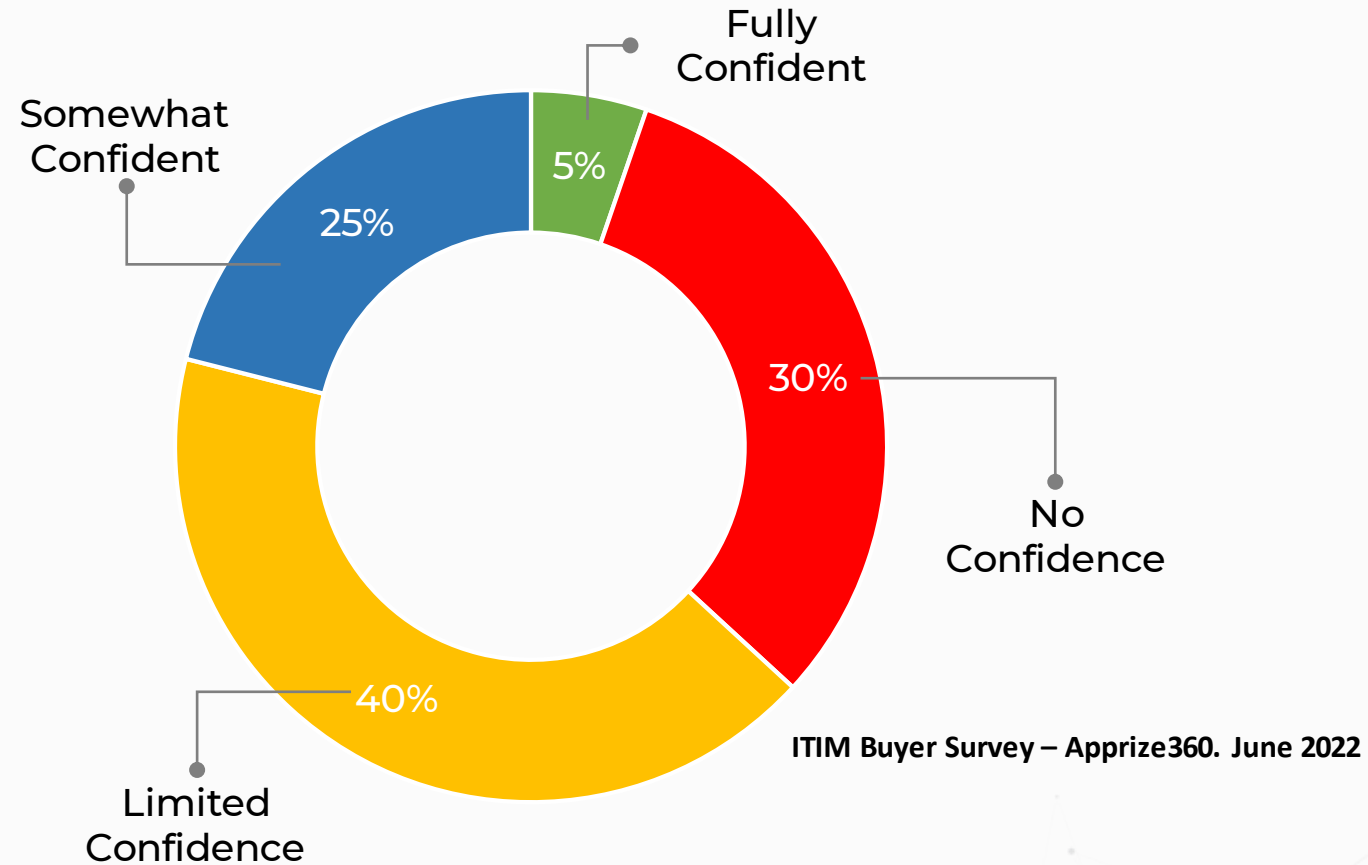
75%

Of interview IT directors reported less visibility of their infrastructure when they added more tools⁴

1) [Persistent Market Research Study](#) – August 2021
2) [451 Research](#) – October 2021

3) IDG Quick Pulse Research
4) Apprize360 ITM Survey – June 2022

Confidence in ITIM Solutions in 2022



70% of IT decision-makers lacked confidence in their companies' current ITIM solutions - only 5% expressed complete confidence.

Introduction

Apprize360 interviewed enterprise IT decision-makers in the United States and the United Kingdom regarding their experiences with each of six platforms, their solution buying criteria, and which ITIM solutions are best meeting their needs.

Interviews were conducted with decision-makers whose represented organizations had over 10,000 devices and infrastructure elements under management and annual revenues exceeding \$500 million.

Interviews were conducted with customers of the following 6 ITIM solutions

- 1 SolarWinds
- 2 Microsoft Operations Manager (formerly Microsoft System Center Operations – SCOM)
- 3 LogicMonitor
- 4 ScienceLogic
- 5 Zabbix
- 6 DX Unified Infrastructure Management (DX UIM) by Broadcom Software

Introduction

Enterprise IT leaders consistently reported five factors they would consider when evaluating future ITIM solutions.

1

Does the platform support full-stack observability?

2

Does the solution offer dynamic discovery and flexible configuration capabilities?

3

Can the solution provide advanced, actionable analytics to support IT operations (IT Ops)?

4

What service and compliance management capabilities does the solution provide?

5

Does the platform have demonstrable scalability that can keep pace with increasing enterprise complexity?



Part 1

Factors to Consider When Selecting an ITIM Solution

Does the platform support full-stack observability?

Does the vendor offer a single solution that provides end-to-end visibility across your entire infrastructure?

- Interviewed decision-makers reported seeking an ITIM solution that could facilitate the monitoring of multiple infrastructure elements and environments to create end-to-end visibility.
- In addition, they wanted a single platform that could provide a single source of oversight across multiple hybrid environments. Interviewees reported that it was critical for a solution to offer visibility across the following elements:
 1. Infrastructure devices: The solution should include monitoring for server, storage and network devices
 2. Virtualization platforms: The platform should include monitoring for VMware and vCloud Monitor, Microsoft Hyper-V, Solaris Zones, IBM PowerVM, Citrix Hypervisor (formerly XenServer), Citrix Virtual Desktops (formerly XenDesktop) and Red Hat Enterprise
 3. Databases: Solution should include monitoring of Oracle, Sybase, Microsoft SQL Server and IBM DB2
 4. Applications: The solution should include monitoring for Microsoft Exchange, Microsoft IIS, Active Directory, Citrix, WebSphere, JBoss and applications developed in-house; the platform should also have the ability to perform synthetic end-to-end (E2E) application response monitoring to track end-user experiences
 5. Public, private, and hybrid cloud platforms and platforms: The selected application should include the ability to monitor mixed cloud environments, including Docker, Kubernetes, OpenShift, VMware, Nutanix, OpenStack, AWS, Azure, and Salesforce; the solution should include the ability to analyze public cloud billing and resource utilization

Questions to ask vendors:

- Which infrastructure environments and gaps does the solution cover?
- Is the solution able to provide a single source of oversight across the entire infrastructure?

Does the solution offer dynamic discovery and flexible configuration capabilities?

Does the solution support policy-based configurations? Does the solution support automated onboarding and intelligent grouping?

- Interviewed decision-makers reported that the solutions they considered had to incorporate dynamic discovery capabilities and the ability to automatically apply appropriate monitoring configurations to expedite monitoring and reduce manual efforts.
- They also sought, and will seek in the future, platforms with intelligent discovery capability and configuration scalability to keep pace with the exponential growth of IT environments
- Interviewees expressed their desire for a monitoring platform that enforces real-time controls using templates or other 'guardrails' that incorporate industry best practices. Three additional capabilities that the interviewees reported as critical to their vendor evaluations included:
 1. Dynamic discovery of inventory and applications running on devices: The platform should include automated identification of infrastructure elements and applications with automated grouping and quick inventory onboarding; tools should also be capable of organizing infrastructure into a hierarchy of static and dynamic groups and subgroups according to service, customer, organization or technology
 2. Configuration of agents and alarm profiles: The solution should include dynamic thresholds with the ability to define separate thresholds for different devices or groups
 3. Automated configuration: The solution should include the ability to configure and standardize monitoring at the group level and across groups

Questions to ask vendors:

- Does the solution support a standardized, automated approach to monitoring and deployment?
- How accurate are the solution's automated discovery capabilities?

Can the solution provide advanced, actionable analytics to improve IT efficiency?

Does the solution leverage analytics to improve IT efficiency and drive intuitive, out-of-the-box dashboards and reports?

- ITIM vendors have made advanced analytics a critical part of their solution.
- However, the interviewed decision-makers aimed to avoid “insight fatigue” by selecting solutions that would only highlight “actionable insights.”
- These insights should support anomaly detection and root cause analysis, provide oversight of infrastructure performance, and enhance understanding of the digital user experience. Interviewees reported that their ideal solution would have advanced, actionable analytics driven by intuitive, out-of-the-box dashboards and reports :
 1. Advanced analytics: Analytics that provide out-of-the-box, actionable intelligence for proactively identifying potential performance issues and anomalies by correlating multiple data sources across all layers of infrastructure and displaying intuitive dashboards and reports

What service and compliance management capabilities does the solution provide?

Can the solution manage the service levels for heterogeneous technologies in a hybrid infrastructure environment?

- Interviewed decision-makers reported a dramatic increase in the internal need for IT service monitoring.
- The solutions they considered and would consider in the future should be able to monitor service levels across hybrid infrastructures and define service level objectives (SLOs) based on quality of service (QoS) parameters, service level agreements (SLAs), and defined service-level objectives (SLOs):
 1. SLOs: The solution should have the ability to create granular SLOs based on QoS constraints and detailed compliance metrics
 2. SLA alerts: The solution should have the ability to send alerts regarding specific breaches to specific groups and individuals through intelligent workflows
 3. Statistical algorithm baselining: The solution should have the ability to create specific thresholds in a particular SLO according to baseline values determined from QoS samples collected over a specific period

Questions to ask:

- Can the solution calculate detailed SLOs based on specific QoS constraints and metrics for each infrastructure element?
- What type of intelligent alerts does the solution support for SLM breaches?

Does the solution have demonstrable scalability that can keep pace with increasing enterprise complexity?

Can the platform meet the current and emerging enterprise complexities associated with multiple business units and hybrid infrastructures?

- The interviewed decision-makers reported needing a solution that could “grow with them” as their enterprises, government agencies, and managed service provider customer bases grew in new and unexpected ways.
- ITIM platforms are expected to handle the complexities of large enterprises, government agencies and MSPs, including support for multiple ITIM operations groups with varying IT and business service stakeholders. This includes
 1. Support for federated IT structures: The solution should support multiple IT operation units with different IT requirements and service owners
 2. Low staff and resource utilization: Limited monitoring capabilities make it difficult for teams to understand usage and resource utilization trends, often meaning that businesses waste resources on over-provisioned on-premises or cloud-based solutions; decision-makers stated that solutions should not require custom scripting or intensive management and should not increase the cost of solution setup, management and maintenance
 3. Integration: A broad range of integrations should be supported, including integrations with popular ITSM applications, network monitoring tools, and AIOps solutions
 4. APIs: The solution should have a set of well-published APIs for integration with a wide range of complementary IT products
 5. Scalable licensing model: The solution should employ a flexible, scalable licensing model that does not undermine an organization’s growth and changing needs

Questions to ask:

- Is the solution able to meet the future needs of companies based on open APIs and SDKs?
- What type and number of integrations does the solution support?
- Can the solution provide business unit-specific information for different IT and business service owners?



Part 2

ITIM Vendor Considerations

Does the platform support full-stack observability?

DX UIM was ranked highly by the interviewed decision-makers due to the following three core findings:

- 1 Depth and breadth of coverage monitoring
- 2 Single view of the truth
- 3 Ability to monitor hybrid devices and infrastructure environments



“Before (DX) UIM, we had six point solutions in place. With UIM, we were able to collapse everything into a single interface confidently. This not only made my team’s life easier, but for the first time we had one view of our entire infrastructure, which made optimizing the digital experience much more straightforward.”

— VP of IT operations, large international financial services firm

Customer reported deficiencies with other ITIM vendors:

SolarWinds

- Configuration for cloud monitoring

Microsoft

- Inability to easily monitor non-Microsoft applications, environments & non-support devices

Zabbix

- Inability to scale with growth of devices & expansion of hybrid infrastructure environments

Does the solution offer dynamic discovery and flexible configuration capabilities?

DX UIM ranked highest for the second selection factor supporting dynamic discovery and flexible configuration capabilities.

DX UIM decision-makers rated the solution “high” because of the platform’s “monitoring configuration service” (MCS). MCS offers a template-based approach to monitoring critical services, such as computing engines, Kubernetes, storage, VPC networks, interconnections and file stores.

- In addition, the MCS enables the automatic discovery and configuration of inventory at the group level according to group-specific compliance and organizational standards.
- With MCS, users can copy a device or group profile (the source) and apply it to another device or group profile (the target).



“We have 25,000 devices under management, so managing the monitoring configurations for this would be massively time-consuming. With (DX) UIM, you can leverage MCS to create configuration profiles that can be applied appropriately across device groups — literally hundreds at a time. You can also use MCS to set alarm configurations for those same groups at scale. Therefore, we can apply a specific set of alarm baselines and thresholds and custom alarm messages in bulk. It saves us countless hours when we want to change a setting or alarm configuration.”

— Head of infrastructure management, Fortune 500 financial services organization

Customer reported deficiencies with other ITIM vendors:

SolarWinds

- Mass deployment and configuration require significant focus and time - have to use and subscribe to their SolarWinds Patch Manager or use a third-party automation vendor

Zabbix

- Time-consuming and non-scalable processes required for configuration

Can the solution provide advanced, actionable analytics to improve IT efficiency?

DX UIM tied with LogicMonitor in first place for the third selection factor — advanced analytics that drive intuitive, out-of-the-box dashboards and reports while offering customization capabilities too.

Customers highlighted that DX UIM supports more than 100 out-of-the-box summary analytics dashboards and generates reports for analyzing performance issues, including :

- 1 Health Index Report: Rapid identification of underperforming IT assets based on historical trends, often used to identify aging components or groups of assets
- 2 Top-N Reports: Tabular reports that can be filtered by multiple variables, often used to pinpoint underperforming components
- 3 Situations to Watch: Reports that display the number of days before infrastructure elements reach threshold violation limits
- 4 Trend and Group Trend Reports: Reports that display time-series data for either 1) a single metric and a set of up to 10 devices or 2) interfaces within a group



“The DX UIM reporting is a sold feature right out-of-the-box. It goes beyond metrics with insights into performance, such as the Top-N and Health Index reports. I personally love the “situations to watch” widget on the dashboard because I can proactively understand when we are reaching capacity for a certain resource or environment.”

— IT director, U.S. healthcare services provider

Can the solution provide advanced, actionable analytics to improve IT efficiency?

Customer reported deficiencies with other ITIM vendors:

Zabbix

- Lack of support for customized reports and predictive insights

Microsoft

- Lack of support for customized reports within Systems Operations

ScienceLogic

- Lack of reporting configurability and limited out-of-the-box metrics and reports



"I would like to see [Microsoft] Operations Manager support more customized report capabilities. Admins should have some customization options on the dashboards and in reports to support the tracking of specific environments with custom metrics and KPIs [key performance indicators]."

— Head of infrastructure monitoring, large U.S. media company



"I struggle with ScienceLogic because it does not have out-of-the-box reports and metrics for important KPIs, such as availability and capacity. Overall, there are a minimal number of reports, and the ones they do have are too basic. Also, the dashboards do not support very many widgets, making them limited for creating a specific or configurable dashboard."

— Director of infrastructure monitoring, global IT infrastructure device manufacturer

What service and compliance management capabilities does the solution provide?

Research participants highlighted DX UIM's service-level management as one of the most “easy and impactful” aspects of their ITIM requirements.

Decision-makers reported that DX UIM allowed them to quickly define and deploy SLAs based on SLOs and QoS constraints.



“[DX] UIM’s newer SLA wizard leverages the [DX] UIM grouping model to automatically include all the devices in a given group for an SLO. Before, we struggled to define SLOs for certain infrastructure items and ultimately would just turn them off. However, the new capability allows us to bulk assign and edit SLA configurations within minutes.”

— Head of infrastructure monitoring, large US energy provider

Customer reported deficiencies with other ITIM vendors:

Zabbix

- Limited ability to configure and monitor complex SLA requirements



“Zabbix’s SLA monitoring and reporting are sufficient for a smaller company without IT complexities. However, if you have a contracted MSP or CSP or a shared services team, the SLA capabilities will not be enough. Zabbix’s SLA monitoring only collects data across six parameters: reporting period, time zone, SLA schedule, effective data, description and service tag. It does not support some of the capabilities that more commercial platforms support, such as automated baselines, quality of service analytics or advanced SLA alerts.”

— Head of IT, online health food retailer

5 Does the platform have demonstrable scalability that can keep pace with increasing enterprise complexity?

DX UIM also led in the scale and enterprise complexity category due to reported capabilities:

1 Ability to handle enterprise complexity

2 Native remediation capabilities



“As a company with an IT team with many responsibilities, it was important to have an infrastructure solution that could automatically handle lower-level fixes. We have only scratched the surface of what it can do with automating component restarts. We are planning to expand to include automated resource provisioning as well.”

— Director of IT, large US financial services provider

Customer reported deficiencies with other ITIM vendors:

Microsoft

- Scaling a significant concern as IT infrastructures expand to include non-Microsoft devices and environments and third-party management applications, which Microsoft does not integrate with or support



“As we have undergone digital transformation, we are growing our infrastructure outside of the Microsoft environment for virtual machines, cloud platforms, and containers, and we are adding more and more third-party management applications that Microsoft Operations Manager does not integrate with.”

— Lead network engineer, middle-tier oil company

Part 3

Vendor Comparison

Apprize360 asked interviewees to rank their currently deployed solutions using a 5-point measurement scale to determine the strengths and weaknesses of their deployed ITIM solution. The following table provides a comparative assessment of vendor-specific capabilities based on interviews with decision makers using one or more sized studied solutions.

Legend

- Fully Present (100%)
- ◐ Partial Functionality (~75%)
- ◑ Half Functionality (~50%)
- ◓ Minor Functionality (~25%)
- Feature Absent (0%)

Categories of Assessment	Broadcom DX UIM	LogicMonitor	Microsoft Operations Mgr	ScienceLogic	SolarWinds	Zabbix
Full-Stack Observability						
Depth and Breadth of IO	●	●	●	●	◐	◑
End-to-End Visibility	●	●	◓	●	◑	◓
Dynamic Discovery and Configuration						
Automatic Discovery	●	◓	◑	◓	◐	◓
Monitoring Configuration Service	●	◓	◓	◓	◑	◓
Advanced, Actionable Analytics						
Intuitive Dashboards and Reports	●	◐	◑	◐	◓	◓


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- ◓ Minor Functionality (~25%)
- Feature Absent (0%)

Categories of Assessment	Broadcom DX UIM	LogicMonitor	Microsoft Operations Mgr	ScienceLogic	SolarWinds	Zabbix
Service Level Management						
Service Level Objectives	●	●	◐	●	◑	◓
SLA Alerting	●	●	◑	●	◐	◓
Intelligent SLA Baseline	●	●	◑	●	◐	◓
Enterprise Scalability and Ability to Manage Complexity						
APIs	●	●	◑	●	◑	◑
Integration	◐	●	◑	●	◑	◑
Complex Enterprise Structure and Infrastructure Handling	●	◑	◑	◑	◑	◓
Flexible, Scalable Licensing Model	●	●	◑	◑	◑	◓



Thank You!



Note: This assessment was based on interviews with current customers of each solution and was not a statistically significant quantitative study. The opinions, vendor rankings, and reported solution strengths and weaknesses can change without notice based on newly released vendor features, improved functionality, and changing customer perceptions.

