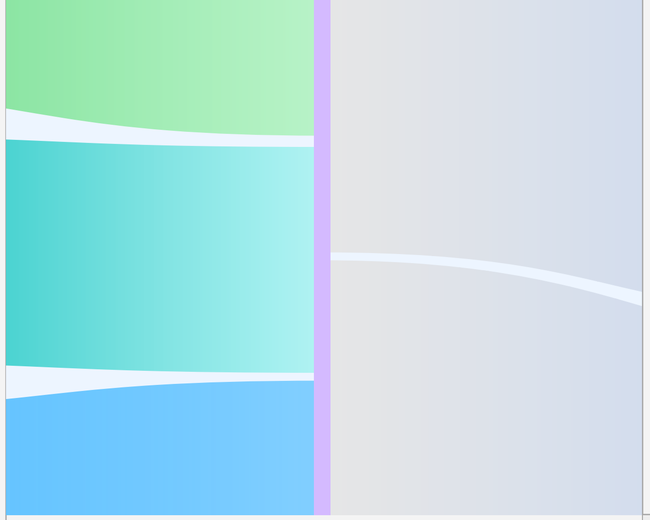
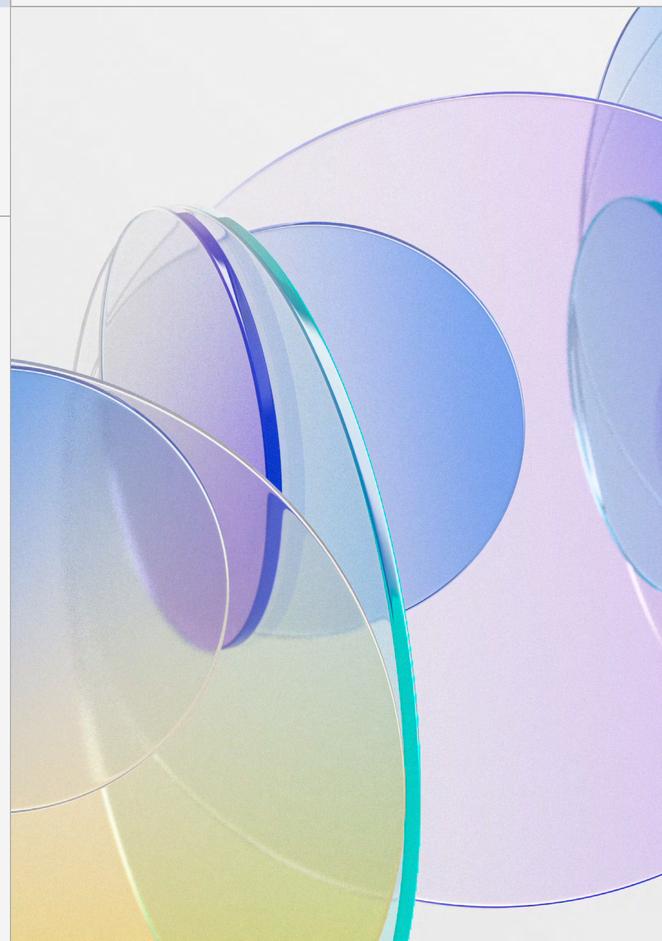
2025 solutions guide

IBM observability

Maximize resilience in a complex cloud-native world with AI-powered observability tools





Contents

01

Why full-stack observability?

Managing complex infrastructures, sprawling applications and multicloud environments is a daily challenge—and it's only getting harder. As the adoption of generative AI (gen AI) accelerates, so does complexity. Without deep visibility and automation, DevOps, NetOps and gen AI teams find themselves reacting to incidents they didn't anticipate, driving up costs and risking system reliability. By embedding intelligence and observability from Day Zero, organizations can proactively manage IT performance, control costs and ensure resilient operations at scale.

What you need to know

IT automation is the launchpad for business innovation. And gen AI is the enabler. 65% of surveyed tech leaders expect gen AI to automatically resolve IT issues with little to no human intervention[2]—liberating IT teams from reactive firefighting to proactive, strategic initiatives that drive peak performance. With IT automation, organizations can significantly enhance the ways and speed at which they operate to position themselves more competitively in the market.

How observability can help

Imagine being able to quickly identify issues, optimize resources and mitigate risks—while boosting performance across your entire tech landscape. Observability products can provide the kind of deep visibility into modern, distributed applications needed to achieve faster, automated problem identification and resolution. This visibility increases opportunities for teams to make smarter, value-driven decisions about how resources are allocated.

Why tech leaders should act now

Leaders who embrace end-to-end IT modernization today position their organizations for long-term agility, reliability, innovation and growth. By upgrading every layer of the IT estate, they gain control by leveraging full-stack observability. This method empowers teams to proactively manage performance, resolve issues before impacting users and help ensure continuous, automated application optimization at minimal cost.

02

Questions you should ask any observability technology provider

To help sort through the many observability products available today, consider asking providers the following questions

1. **What important observability features does your product offer?** Ask the vendor if their solution provides features, such as distributed tracing capabilities, automated resource optimization, real-time monitoring alerts, automated root cause analysis and anomaly detection using AI and machine learning (ML), and full end-to-end visibility across the stack.

2. **How does your product handle data ingestion and storage?** Inquire about the product's ability to handle data volume, retention and scalability.

3. **What are the key performance indicators (KPIs) your product tracks?** Make sure the product covers the essential KPIs for your organization, such as mean time to repair (MTTR), response time, peak load, requests served, CPU capacity, memory use, error rates and latency.

4. **How does your product support integration with existing tools and systems?** Integration can sometimes require custom configurations or plug-ins. Ask about how the vendor's solution integrates with existing monitoring and application development tools—specifically APIs, plug-ins and compatibility with your current tech stack.

5. **What are the deployment options: on premises, cloud or hybrid?** See if the product aligns with your organization's infrastructure preferences. Does the vendor's solution just focus on specific cloud or on-prem environments, with less flexibility for hybrid and multicloud scenarios?

6. **How does your product handle data security and compliance?** Ask about encryption, access controls and compliance with relevant regulations.

7. **What kind of support and documentation do you offer?** Inquire about response times, available resources and the quality of documentation.

8. **What are the pricing and licensing options?** See if the product offers flexible licensing terms. Is pricing rigid, based on the number of nodes or applications? Does the vendor charge extra for additional features, such as real-time monitoring or extended data retention?

9. **Is your product easy to use, supporting collaboration and teamwork?** Some UIs can be complex and not intuitive, requiring significant training and onboarding. Make sure the product's dashboards are customizable. Ask if the solution requires manual setup or configuration for new services or infrastructure components.

03

IBM observability: Products, capabilities and real-world impact

The IBM observability product portfolio

IBM Instana

Need to track app performance like a pro? IBM Instana gives you the clarity of a Bloomberg terminal—but for your software.

Full-stack observability software
By employing IBM Instana® software, users can automatically discover, map and monitor all services and infrastructure components. These capabilities provide complete, contextualized visibility across the application stack.

IBM Instana helps DevOps and SRE teams simplify cloud complexity and maximize uptime. It does so by using AI-powered, automated observability to proactively resolve issues.

Watch the video →

IBM Turbonomic

Imagine IBM Turbonomic as an AI and ML-powered financial advisor for your apps. It automatically optimizes resources to help ensure top performance without overspending.

Application resource management software
With IBM® Turbonomic® software, organizations can continuously and automatically allocate resources to help ensure application performance, availability and efficiency.

IBM Turbonomic helps ITOps, CloudOps and SRE teams take near real-time, automated actions, such as rightsizing, scaling and workload placement. These actions help reduce infrastructure and cloud costs while maintaining service levels across hybrid multicloud environments.

Watch the video →

IBM Concert

IBM Concert helps you assess assets, liabilities and goals—like an estate planner—to help you better understand your resilience and compliance postures.

Application management software
Using IBM Concert® software, users can strengthen resilience and use AI insights to help demonstrate continuous compliance across hybrid and multicloud environments.

IBM Concert helps SREs and application owners aggregate siloed data, transform best practices into automated workflows and map controls to regulatory standards—delivering near real-time information for auditing purposes.

Watch the video →

IBM SevOne

Think of IBM SevOne like a smart car dashboard for your network—it shows what's working, what's not and helps you steer clear of trouble.

App-centric network observability
IBM SevOne® software provides near real-time visibility into hybrid cloud and SD-WAN performance by combining app-aware insights with network intelligence to accelerate resolution, reduce complexity and enhance digital experiences.

IBM SevOne helps NetOps teams move from reactive troubleshooting to proactive optimization through intelligent automation, ML-driven insights and streamlined operations.

Watch the video →

What problems do our products help solve?

IBM Instana

- Siloed data and limited visibility that make it hard to detect and fix issues before they escalate
- Monitoring challenges driven by the continuous adoption of microservices, containerization and hybrid cloud infrastructures
- Lack of end-to-end visibility into user journeys that hinders seamless digital experiences
- Overwhelmed IT teams that spend too much time firefighting, with little time for strategic work
- Delayed incident response times that affect customer satisfaction

IBM Turbonomic

- Inconsistent automation strategies across environments, making it hard to scale optimization efforts
- Overburdened ITOps, DevOps, CloudOps and SRE teams who have to perform manual guesswork on application demands, resource requirements and scaling in complex IT environments
- Limited ability to proactively optimize application performance and resource usage in real time, leading to reactive firefighting and missed service-level agreements (SLAs)
- Siloed tools and teams that reduce visibility into resource usage—leading to inefficient provisioning, increased licenses and hardware requirements, and other unnecessary spend

IBM Concert

- Siloed data across tools that prevents teams from gaining a holistic view of applications
- Increased licensing and security risks from managing multiple applications
- Inconsistent approaches to application resiliency because different teams are using disparate tools
- Too many common vulnerabilities and exposures (CVE) that make it difficult to effectively prioritize vulnerabilities
- Expired or misconfigured certificates that cause outages, disrupt continuity and expose security risks
- Time-consuming compliance audits

IBM SevOne

- Limited visibility into network performance across hybrid environments
- Difficulty integrating and managing multivendor network systems
- Pressure to maintain high availability and reduce latency in increasingly complex environments
- Managing operational complexity due to fragmented toolsets and disjointed monitoring systems
- Frequent, unplanned outages with slow issue detection and resolution
- Ensuring compliance in fast-evolving cloud environments

Key capabilities by product

IBM Instana

Automated full-stack observability
Automatically discovers, maps and monitors apps, services, infrastructure, web browsers and more, with minimal manual intervention and rapid deployment

Immediate contextual insight
Delivers immediate insight into how infrastructure and service dependencies interact to expose the broader impact of issues and manage rapid changes

Intelligent incident investigation
Leverages agentic AI and AI-powered incident remediation to help reduce downtime, enhance service reliability and accelerate incident resolution

IBM Turbonomic

Full-stack near real-time visibility
Connects to your existing infrastructure to provide visibility into resource usage across on-premises and hybrid multicloud environments

Rightsizing recommendations
Continuously generates rightsizing recommendations for resources to help maximize efficiency and performance of applications and infrastructure

Smart resource alignment
Aligns resource decisions with business goals such as cost governance, sustainability and service-level objectives (SLOs)

IBM Concert

Accelerated insights
Unifies disconnected data from apps, infrastructure and tools across hybrid and multicloud environments by using AI to correlate this data into a single, actionable view

Automated workflows
Maps controls to standards, recommends actions and triggers automated remediation to help ensure faster recovery and continuous compliance

Proactive risk-based app resilience
Provides a measurable, scalable framework to evaluate and improve application resilience by prioritizing risks

IBM SevOne

Correlated flow and app data
Surfaces traffic bottlenecks and performance issues so you can quickly see which services are affected and act accordingly

End-to-end observability
Delivers full-stack observability across hybrid, multivendor environments, collecting and analyzing performance metrics from SDN, SD-WAN, Kubernetes and cloud networks, such as Amazon Web Services (AWS), Microsoft Azure, Google Cloud Platform (GCP) and traditional systems

Abnormal network behavior identification
Uses ML to optimize network performance with automated actions

Real-world impact

IBM Instana

SIXT used Instana to unlock insights and efficiency across their complex cloud systems.

70%
decrease in problem detection and resolution time

50%
faster detection of anomalies

IBM commissioned Forrester Consulting to conduct a Total Economic Impact (TEI) study that provides analysis of the impact Instana would have on a composite company based on real-world interviews.

90%
reduction in developer time spent troubleshooting

219%
ROI achieved

IBM Turbonomic

Hyland automated more than 2,000 resourcing actions in the first month and reduced computing spend by more than 15% within one year using Turbonomic.

15%+
hardware reduction

IBM commissioned Forrester Consulting to conduct a Total Economic Impact (TEI) study that provides analysis of the impact Turbonomic would have on a composite company based on real-world interviews.

75%
reduction in app performance-related tickets

247%
ROI over three years

IBM Concert

The IBM software SRE team used Concert to automate CVE analysis, streamline certificate management and strengthen their resilience posture.

62%
faster enterprise-wide resilience posture evaluation

72%
faster monthly operation review (MOR)

The IBM software SRE team used Concert to automate CVE analysis and certificate inventory.

98%
faster certificate inventory management

90%
faster CVE mitigation

IBM SevOne

Devereux used SevOne to proactively detect SAN capacity issues quickly to resolve incidents faster.

3 hrs
of downtime per incident

BT Business used SevOne to enable simpler integration and a major reduction in software licensing costs.

5.5M
monitored network objects across hundreds of customers

Practical applications of IBM observability

IBM Instana

- **Cloud-native performance monitoring**
  Help ensure optimal performance of microservices and containerized applications, particularly those running in Kubernetes and hybrid cloud environments.
- **Gen AI performance monitoring**
  Gain complete observability for AI and ML workloads to help ensure efficient performance of gen AI models in production environments.
- **Application incident remediation and digital experience monitoring**
  Use agentic AI to automate incident response to quickly fix app issues, maintain uptime and monitor the user experience in near real-time for fast, seamless digital interactions.

IBM Turbonomic

- **VMware and Kubernetes optimization**
  Optimize data center investments and gain longer infrastructure lifespan by automating timely resource allocation to meet mission-critical SLOs for your apps.
- **AI and ML workload optimization**
  Maximize the efficiency of graphics processing unit (GPU) resources while preventing waste and helping assure continuous performance.
- **Cloud cost optimization and sustainable IT operations**
  Contain cloud spend while preserving app performance with automation, and understand current energy use, execute sustainable actions and compare carbon dioxide equivalent (CO2e) emissions.

IBM Concert

- **Application vulnerability management**
  Minimize application security risks and speed up resolution by eliminating false positives and duplicates, and prioritizing CVE based on impact.
- **Application compliance management**
  Streamline how security standards are managed as applications grow to minimize resource use and enhance security.
- **Application resilience**
  Standardize a reliable, consistent resilience posture and have a clear, complete view of resilience gaps across all applications.
- **Application certificate management**
  Manage certificate renewals in a timely fashion to prevent operational disruption.

IBM SevOne

- **Hybrid cloud network monitoring and observability**
  Achieve unified visibility across AWS, Azure, GCP and Kubernetes—helping NetOps troubleshoot faster, optimize performance and maintain uninterrupted hybrid cloud connectivity.
- **SDN and SD-WAN monitoring and observability**
  Monitor next-gen networks with greater control by consolidating performance insights from SDN, SD-WAN, Kubernetes and wifi networks into a single view.
- **Wifi monitoring for today's networks**
  Help ensure fast, reliable wireless connectivity across your enterprise by analyzing performance data with the speed and scale today's users demand.

04

What makes IBM the smarter choice?

IBM Instana

IBM Instana has been identified as a Leader in Application Performance Monitoring (APM) by customers on G2. It has also been rated a top product by TrustRadius and awarded CRN Product of the Year for Application Performance/Observability.

Flexibility

- Delivers real-time monitoring for containers, virtual machines (VMs) and bare metal across hybrid and multicloud environments
- Provides configurable AI-driven insights tailored to specific environments and use cases
- Offers availability as both software as a service (SaaS) and on-prem, with feature parity, so customers with strict compliance or security requirements can maintain full control over their observability data

Price

- Offers easy-to-understand pricing with a single pricing metric and no hidden or surprise fees
- Comes with fewer additional costs due to automated setup and monitoring

Integration

- Offers out-of-the-box support for over 300 technologies, including AWS, Kubernetes and microservices
- Provides deep integrations with continuous integration and continuous delivery (CI/CD) tools and cloud-native architectures for seamless observability

Ease of use

- Discovers all services and components across hybrid environments automatically without manual setup or tuning
- Provides a streamlined user interface with contextual insights and a minimal learning curve for DevOps and SRE teams

Enterprise-ready

- Documents value in complex, large-scale environments with real-time accuracy and continuous updates

IBM Turbonomic

IBM Turbonomic has been named a Grid Leader in the G2 Spring 2025 Grid Report for Data Center Infrastructure Management (DCIM). It has also been rated a top product in 2024 by TrustRadius.

Automated resource optimization
- Automates actions to help prevent resource congestion and cost overruns across hybrid multicloud environments at scale

Elasticity
- Sizes resources up or down based on application demand to maximize performance, reduce waste and save costs

Full-stack visibility
- Provides complete visualization of your applications and infrastructure to help you know—instead of guess—what's going on with performance

Sustainability optimization
- Supports sustainability goals by optimizing energy usage and tracking carbon emissions across environments

Integration
- Integrates with your organization's existing tools, providing rapid time to value

Platform
- Optimizes all your resources: on-prem, public cloud, private cloud and multicloud

- Provides one platform to support cloud cost optimization across AWS, GCP, Azure, Kubernetes, the Red Hat® OpenShift® Platform and so on

AI and ML insights
- Delivers real-time insights and automation to optimize performance, efficiency and cost in real time

IBM Concert

IBM Concert has been shown to manage certificate renewals in a timely fashion to prevent operational disruption. Its software composition analysis helps reduce software supply chain risks and open-source software (OSS) tainting in near real-time.

Integration

- Integrates seamlessly with your existing tools and data, from capture to automation
- Uncovers hidden connections in previously siloed data to help you optimize your application's operations

Ease of use

- Provides the ability to view top insights visually in arena view or explore them with a natural language chatbot
- Enhances insights with a gen AI chatbot, deep dives or visual dependency maps

AI insights

- Uses a posture approach to reveal application connections, dependencies and new insights to deliver recommendations and efficient remediation tips that help you focus on what matters most
- Provides a lens that gives you the ability to use your existing data and tools while adhering to industry best practices and standards, resulting in a prioritized, guided approach to driving transformation

Automation

- Provides the ability to take swift action on recommendations and automate tasks through connected tools
- Employs gen AI to quickly act, for example, opening and prepopulating service tickets

IBM SevOne

IBM SevOne has been shown to deliver managed service provider (MSP) network monitoring and flexible, tiered observability for SD-WAN, cloud and on-prem infrastructures. These features provide customized service offerings and reliable network performance.

User experience

- Pinpoint issues at the app, network or infrastructure level to cut MTTR.
- Use LiveMaps and topology for instant drill downs.
- Reduce noise and surface true root causes in seconds.

Proactive intelligence or foresight

- Use ML-powered baselining and anomaly detection.
- Leverage proactive alerts for deviations from normal behavior.
- Minimize false alarms with smart thresholding to minimize false alarms.

Efficiency in automation and integration

- Automate incident creation, escalation and resolution.
- Seamlessly integrates with IT Service Management (ITSM), AIOps and observability tools.
- Build customizable workflows based on business goals.

Clarity

- Gain end-to-end visibility across physical, virtual, SD-WAN and multicloud environments.
- Eliminate silos with a single source of truth.
- Monitor diverse vendors and technologies from one platform.

05

How to get started with IBM observability

Next steps

	IBM Instana	IBM Turbonomic	IBM Concert	IBM SevOne
01 **See how the products work**	Overview →	Overview →	Overview →	Overview →
02 **Experience the product**	IBM Instana Sandbox →	Get a free 30-day trial →	Get a free 30-day trial →	Take the product tour →
03 **Connect with an expert**	Book a live demo →	Book a live demo →	Book a live demo →	Book a live demo →
04 **Buy it**	Go to our pricing page → See the latest plans, pricing and FAQs.	Go to our pricing page → See pricing and ROI estimators.	Contact an IBM representative for pricing →	Contact an IBM representative for pricing →

1. Measuring Progress: Trends in Cloud Native App Platforms Highlight Need for Repeatability, VMware Tanzu Team, 14 June 2024.

2. Turn IT into an investment portfolio, IBM Institute for Business Value, 10 July 2024.