

Tivoli software



**Select a solution to manage mission-critical applications
from end to end.**

Find a solution with the breadth to match the complexity of your applications

An on demand business depends on the performance of mission-critical applications. For example, an online business application may have a J2EE™ front end but rely on legacy subsystems for its back-end functionality. It may span server platforms (distributed and mainframe) and subsystems (such as IBM CICS®, IBM IMS™ and IBM WebSphere MQ®, as well as J2EE).

Because applications such as these have such strategic value to the business, their performance and availability are crucial. In addition to downtime, an on demand business must guard against performance degradation and slowdowns that frustrate customers and threaten revenues.

And yet, most companies lack an application management solution that is equipped to properly monitor and optimize mission-critical applications. They rely on:

- *Point products that measure the performance of individual resources within the environment – but must be correlated manually by IT staff.*
- *Tools that track aggregate and average performance, not individual transactions – and aren't aware of performance degradation until its impact is already substantial enough to affect the average.*
- *Products that monitor performance without providing any capabilities to help solve them – such as tracking slowdowns to the responsible system resources and proactive management, as well as integration with both application development tools and business performance management solutions.*



When your organization looks for a solution that has the breadth to help you maximize the efficiency and effectiveness of your application management processes, what specific criteria should you use? This buyer's guide provides checklists that you can use when requesting proposals for application management solutions — and for evaluating responses. Look for a solution that enables you to:

- *Easily install and configure the solution for your existing environment.*
- *Accurately and rapidly identify problems using a variety of methods.*
- *Streamline diagnosis of the root causes of performance problems.*
- *Enable your IT staff – operations managers, subject-matter experts and developers – to work together.*
- *Support the full life cycle of applications, from development through monitoring and problem resolution to ongoing improvement.*
- *Partner with a leading vendor that has the resources to support your current initiatives and those you choose to pursue in the future.*

Easily install and configure the solution

The ideal application management solution works with your existing infrastructure and management tools. You shouldn't have to spend a great deal of time and staff energy on customizing the solution — or additional money to purchase additional add-ons to monitor various components throughout your environment. The solution should make it easy to maximize the value of your existing resources.



Look for a solution that enables you to:	IBM	Other vendor
<ul style="list-style-type: none"> Use the solution as it comes out of the box. 	✓	
<ul style="list-style-type: none"> Manage ISVs' and third-party vendors' applications without having to access the source code or manually enter specific class names into the appropriate data set and Java™ Virtual Machine argument. 	✓	
<ul style="list-style-type: none"> Automate discovery of the transaction paths across systems rather than manually entering the systems a transaction uses. 	✓	
<ul style="list-style-type: none"> Automatically establish baselines of normal transaction performance to eliminate guesswork when setting performance thresholds. 	✓	
<ul style="list-style-type: none"> Leverage included agents for monitoring IBM WebSphere, database calls, memory leaks in Java and more — and thereby avoid the cost of purchasing additional components. 	✓	
<ul style="list-style-type: none"> Utilize your existing monitoring tools with a minimal amount of customization. 	✓	
<ul style="list-style-type: none"> Install the solution on a single server to minimize the cost and complexity of application management. 	✓	
<ul style="list-style-type: none"> Automate installation and configuration of the solution, including a database. 	✓	

Accurately and rapidly identify problems

You need a way to monitor both the availability and performance of your applications to quickly isolate problems and optimize performance. As a result, the solution you select needs a robust set of capabilities, including measuring, reporting, transaction simulation, visualization and historical tracking. Look for a solution that helps you achieve great visibility into transactions and locate problems proactively.

A superior application management solution helps you:	IBM	Other vendor
<ul style="list-style-type: none"> Track the flow of transactions from end to end across distributed and mainframe platforms and their subsystems (J2EE, CICS, WebSphere MQ, IBM WebSphere Business Integration Message Broker, IBM WebSphere InterChange Server, IMS) from the user all the way to the database. 	✓	
<ul style="list-style-type: none"> Identify the specific system causing performance problems with easy-to-use transaction topology displays that show transaction flow in a graphical format. 	✓	
<ul style="list-style-type: none"> Leverage agent-based technologies that return highly accurate data and scale well in enterprise environments. 	✓	
<ul style="list-style-type: none"> Measure both application availability and response time. 	✓	
<ul style="list-style-type: none"> Display and track active transactions at the instance level, rather than rely on aggregated and averaged metrics that mask problems until they are so persistent or widespread as to affect the average. 	✓	
<ul style="list-style-type: none"> Simulate end-user behavior through synthetically generated transactions. 	✓	
<ul style="list-style-type: none"> Integrate application monitoring with other monitoring tools, such as network monitoring. 	✓	
<ul style="list-style-type: none"> Automate event and transaction correlation across servers and databases, even large numbers of resources. Because Web transactions typically span multiple servers and databases, select a solution that doesn't force your IT staff to manually correlate information across your interconnected resources. 	✓	
<ul style="list-style-type: none"> Effectively monitor performance problems in production environments — multiple applications in real time. You shouldn't be forced to take your servers offline to diagnose a problem. 	✓	
<ul style="list-style-type: none"> Switch between monitoring levels without restarting the application server. Monitoring levels should include: <ul style="list-style-type: none"> Low-overhead, real-time monitoring of server and system resource availability, application performance and workloads. Deeper problem-determination focus on J2EE APIs to determine relationships between applications and common business objects and services. Full profiling and tracing capability, down to the Java method level. 	✓	
<ul style="list-style-type: none"> Dynamically adjust the level of monitoring based on preset thresholds and timing parameters — without operator intervention. 	✓	
<ul style="list-style-type: none"> Leverage user-defined traps and alerts to take a snapshot of the circumstances around a problem in production. Trap and alert capabilities enable you to: <ul style="list-style-type: none"> Specify actions that should be taken when previously defined thresholds are exceeded. Receive alerts sent by e-mail or Simple Network Management Protocol (SNMP), or view them in a searchable repository. Set trap conditions such as specific application request, method and structured query language (SQL) call, as well as erratic conditions such as excessive resident, CPU and wait times. 	✓	
<ul style="list-style-type: none"> Perform historical performance analysis on data that has been saved. You can use this data to understand application usage patterns and plan for future capacity growth. 	✓	

Streamline diagnosis of the root causes of performance problems

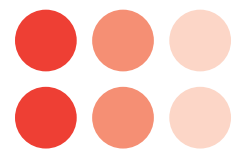
In today's IT environments, problem diagnosis is a highly time-consuming and frustrating task. Without an integrated solution that automates the correlation of event data and the analysis of that data, an IT staff spends too much time manually sifting through large amounts of information from multiple applications. Look for an application management solution that helps you quickly determine the root cause of a problem.

A single solution should allow you to:	IBM	Other vendor
<ul style="list-style-type: none"> Perform deep-dive analysis into J2EE, WebSphere MQ, WebSphere Business Integration Message Broker, WebSphere InterChange Server, IBM DB2®, CICS, IMS, Siebel, SAP, IBM WebSphere Application Server, IBM WebSphere Portal, BEA WebLogic and other environments. 	✓	
<ul style="list-style-type: none"> Enjoy broad drill-down support into applications, systems, network and security devices. 	✓	
<ul style="list-style-type: none"> Correlate mission-critical application transaction flows. 	✓	
<ul style="list-style-type: none"> Simplify the dashboard used for problem identification and isolation by grouping servers by location, by operating system, by performance level and by other criteria your users define. 	✓	
<ul style="list-style-type: none"> Display all active transactions and their associated values, such as host server, resident time and thread ID — then drill down to problematic requests to view a complete picture of the request. 	✓	
<ul style="list-style-type: none"> Free up system resources by changing the thread status or canceling a problematic transaction. 	✓	
<ul style="list-style-type: none"> Quickly and easily detect resource-specific issues, such as thread pool starvation, that directly impact application performance. 	✓	
<ul style="list-style-type: none"> Automatically compare delays at each node with normal times to facilitate rapid identification of the problem node. 	✓	
<ul style="list-style-type: none"> Leverage a simple, Web-based interface to enable access by multiple users from anywhere. 	✓	

Enable your IT staff to resolve problems quickly

The gap between resources monitoring and application management can feel like a chasm to an organization that lacks a true end-to-end application management solution. When you implement a superior solution, you give your staff access to more complete information from across the enterprise. Using that information, they can rapidly address problems and drive application refinement.

Look for an application management solution that helps you:	IBM	Other vendor
<ul style="list-style-type: none"> Integrate infrastructure monitoring with resource management tools, such as those for provisioning, change and configuration management, and more. 	✓	
<ul style="list-style-type: none"> Use common tools when managing Web, distributed and mainframe resources. 	✓	
<ul style="list-style-type: none"> Manage your J2EE environment — adopt both transactional and resource-based views to pinpoint problems to a server or J2EE application. 	✓	
<ul style="list-style-type: none"> Visualize trends of resource consumption and related workloads. Your staff can use this information to facilitate tuning and proper allocation of resources — and thereby efficiently respond to changes in application demand. 	✓	
<ul style="list-style-type: none"> Seamlessly hand off problems from IT infrastructure managers to subject-matter experts and developers. Doing so helps your staff avoid the burden of recreating problems. 	✓	
<ul style="list-style-type: none"> Identify and resolve problems during development or testing — before applications are deployed into production. 	✓	
<ul style="list-style-type: none"> Provide performance data gathered in production directly back to developers' desktops. This information facilitates in-depth problem analysis and software repair. 	✓	



Support the full life cycle of applications

The information that your organization learns about an application in development shouldn't be hidden from operations. A business that uses an application management solution to integrate application development, infrastructure management and business process management is a business that has taken a significant step toward becoming an on demand business.

The solution you select should enable you to:	IBM	Other vendor
<ul style="list-style-type: none">Integrate application management with other monitoring tools (including network monitoring), business process management initiatives and application development tools.	✓	
<ul style="list-style-type: none">Reuse the same test scripts created during QA to monitor and manage complex transactions in production.	✓	
<ul style="list-style-type: none">Provide data and event feeds that you can use to track compliance with service level agreements and business policies. By integrating these solutions, you can further minimize downtime and optimize tracking.	✓	
<ul style="list-style-type: none">Deliver data from production to developers to facilitate ongoing software enhancements.	✓	



Partner with a leading vendor

The right application management solution isn't just a software package. It also includes proven expertise and best practices that help you make the most of the solution and tailor it for your environment. The global resources you need to support your operations worldwide. And the breadth of products that you need to target your greatest needs now and expand into other areas over time.



Make sure the provider of your application management solution:	IBM	Other vendor
<ul style="list-style-type: none">Provides a complete application life-cycle solution that spans build, test, deploy and manage capabilities.	✓	
<ul style="list-style-type: none">Knows best how to monitor your subsystems (WebSphere, CICS, IMS, WebSphere MQ and more) because it designed those subsystems in the first place.	✓	
<ul style="list-style-type: none">Has solutions that work throughout heterogeneous environments and across operating platforms.	✓	
<ul style="list-style-type: none">Supports leading standards such as Java, XML and SOAP.	✓	
<ul style="list-style-type: none">Delivers a comprehensive portfolio of services to help you accelerate deployment and automate your business processes.	✓	
<ul style="list-style-type: none">Offers modular solutions that allow you to maximize the use of your existing IT infrastructure and add new capabilities when they are needed.	✓	
<ul style="list-style-type: none">Has truly global reach, with customized local language versions of its products to support the geographic locations where you do business.	✓	

Leverage IBM application management solutions

The performance and availability of mission-critical applications is crucial. Many businesses must spend an excessive amount of time and resources to manage monitoring tools that weren't designed for today's complex application environments.

Turn to IBM when you're tired of the frustrations of monitoring composite applications and resolving transaction problems. Application management solutions from IBM enable you to identify, isolate and resolve problems — rapidly. Use them to help optimize the performance of your business applications.

IBM application management solutions help you:

- ✓ Rapidly install and configure a solution that integrates with your existing tools and resources.
- ✓ Deploy a robust set of end-to-end transaction tracking capabilities to locate problems in a proactive fashion.
- ✓ Automate correlation and analysis of transaction data from across the enterprise to isolate problems.
- ✓ Streamline problem resolution by empowering teamwork throughout your IT organization.
- ✓ Integrate application development, application monitoring and business process management.
- ✓ Draw on the global resources and expertise of an industry leader to meet your application management challenges now and in the future.

For more information

To learn more about IBM application management solutions, contact your IBM sales representative or IBM Business Partner, or visit ibm.com/tivoli



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03-05
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