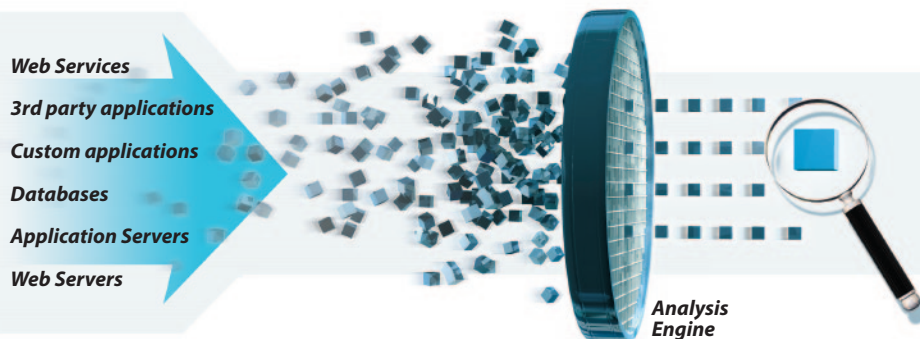


AppInternals xpert™

Improve Performance of Key Applications

AppInternals Xpert™ delivers comprehensive performance management for critical web applications throughout the application lifecycle, beginning with development and QA, and continuing through deployment and operations. AppInternals Xpert continuously monitors thousands of application, system and database metrics within each server, across all tiers, and automatically spots performance anomalies with patented real-time analysis. With deep transaction tracing, AppInternals Xpert provides method-level visibility into Java/.NET application code, enabling root-cause analysis and rapid problem remediation.



Monitor application components for comprehensive web performance management

AppInternals Xpert provides comprehensive 24x7 application monitoring across Java, .NET, and database components. Thousands of performance metrics are collected across all application tiers every second. AppInternals Xpert's unique high resolution data collection detects causes and symptoms that might otherwise be overlooked or "averaged out." Event-triggered captures of detailed forensic data, such as heap snapshots, transaction traces, or log files, enable troubleshooters to quickly resolve problems without having to invest time and effort in reproducing problems to obtain the relevant information.

Save staff time with easy setup and maintenance

AppInternals Xpert's auto-configuration and tuning ensures rapid ROI because more staff hours and expertise are available for strategic projects. AppInternals Xpert automatically discovers key metrics and populates application-specific dashboards based on your unique environment. Hourly thresholds are established dynamically using auto-baselining, and are continuously adjusted based on actual performance as AppInternals Xpert learns what is normal vs. abnormal behavior for each application environment. Intelligent auto-tuning ensures low overhead.

Benefits

- Significantly reduce costs and risks associated with performance "brownouts" during production
- Accelerate problem remediation and enhance IT staff productivity with automated expert analysis
- Identify and resolve performance issues before end users are affected
- Deploy critical applications faster by proactively analyzing performance
- Reduce "finger-pointing" among various teams responsible for application performance

Features

- Compatible with hundreds of custom and 3rd party business applications, including SOA environments
- Deep application monitoring across web server, application server, and database components
- Real-time granular visibility into virtualized environments
- Real-time dashboards for visualizing key performance indicators
- Automatic configuration of thousands of metrics straight out-of-the-box
- Dynamically established thresholds based on historical performance
- "Forensic" snapshots for automatically capturing in-depth data on key events
- Transaction tracing, enabling analysis of method call execution times for slow transactions
- Detailed memory analysis and real-time leak detection
- Integration with OPNET's Application Performance Management (APM) solutions for end user monitoring and client-side analysis
- Scalable architecture supporting hundreds of servers

Analyze performance during production and QA

AppInternals Xpert monitors production applications and integrates with load testing tools to analyze performance bottlenecks under transaction load conditions. Key performance indicators are visualized for your critical applications via live or historical dashboards. Multiple dashboard views can be easily configured to analyze performance by application, server, or business unit. Performance views graph load, throughput, and response-time for each server, and enable drill down to specific application or database components. AppInternals Xpert's Transaction Visualizer provides visibility into individual transactions and application code (e.g. the exact SQL statement that is causing delay).

Accelerate problem resolution with advanced real-time analytics

With its patented analytics, AppInternals Xpert automatically sifts through thousands of data points to identify patterns and relationships across multiple tiers.

Metrics that exhibit **deviations** from normal are automatically identified and assigned scores based on how abnormal their behavior is. This enables disparate metrics from different tiers to be compared and ranked.

AppInternals Xpert's statistical **correlation** engine provides the unique ability to relate events and metrics across multiple application tiers, technologies and platforms. Metrics that move in tandem over time, or exhibit limit violations at the same time, are automatically identified as related metrics, and can be brought into a single view for analysis.

“ [AppInternals Xpert] has proven successful where traditional tools and approaches have fallen short. With [AppInternals Xpert], we now resolve more than 95% of the reported cases and have been able to significantly reduce the mean time spent on each case. ”

Web Applications Engineer
National Instruments



MetricName	Deviation	From Normal
Pool Paged Resident Bytes	2724.7	
System Code Resident Bytes	1610.8	
Pool Paged Allocs	636.8	
Pool Paged Bytes	277.2	
total active time	130.6	
max. response time	110.0	
total active time	103.9	
max. response time	16.4	
max. response time	0.1	

Quickly identify metrics whose values have been the furthest outside of their normal range for a specified time interval.

Correlate real-time values or analyze historical data to automatically generate sets of related metrics.

Patented Deviation and Correlation Technology

AppInternals Xpert's unique technology enables you to rapidly sift through large amounts of data to quickly pinpoint the root causes of performance problems. AppInternals Xpert allows you to ask:

- My application is slow. What should I investigate first?
- Did any metrics, on any tier, change dramatically relative to what's normal for that time of day?
- Did these changes occur at the same time the application exhibited performance problems? Do they occur every time the application is slow?
- Is there a relationship between intermittent CPU spikes and the execution of particular ASP.NET pages, servlets, or generic classes?
- Whenever a particular webpage is slow, are any database metrics correlated?
- Database connections are accumulating. Which Java methods are not closing their JDBC connections?