

# Introducing Precise for Microsoft .NET

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## About Precise for Microsoft .NET

Precise for Microsoft .NET is a comprehensive performance management product for .NET applications that addresses the needs of system operators, managers, quality assurance specialists, and planners. It provides the specialized data collection and analysis capabilities demanded by the critical role of the .NET in application performance and scalability.

Precise for Microsoft .NET offers a wide range of data presentations to enable quick and accurate monitoring and performance analysis.

Operational data is summarized to enable easy identification of abnormal conditions.

Precise for Microsoft .NET also archives performance data and provides a fully detailed display of this historical data for use in performance, QA, and capacity planning analysis.

## Improved performance management

IT staff frequently search for answers to questions like Why did the application run so slowly last night? or Where is the application spending its time?.

Precise for Microsoft .NET can help IT staff find the answer to these questions by pinpointing bottlenecks inside the .NET application or bottlenecks caused by calls to Web services and ADO.NET executions.

Application event correlation provides the power of Precise for Microsoft .NET's analysis component. To give IT staff the necessary information to effectively evaluate performance and resolve problems, Precise for Microsoft .NET correlates data in many ways. For example, .NET application components and database requests are correlated with end user requests to give IT staff a unique understanding of application performance and scalability in terms of end user demands. Multiple levels of calls among .NET components are correlated to reveal quantitative relationships among application components.

Precise for Microsoft .NET correlates application components with database activity to isolate scalable bottlenecks between the mid-Tier and the database Tier. Using correlation technology, Precise for Microsoft .NET analyzes mid-Tier activity and associates user requests with database activity. For example, Precise for Microsoft .NET can tell IT staff what SQL Statements or stored procedures were called from each Service Request, and how long it each took to complete. In addition Precise for Microsoft .NET automatically ranks contributors to response time and other performance metrics.

IT staff can use these rankings to quickly drill down to the root cause of a problem.

## Integration with other Precise products

Precise for Microsoft .NET has been integrated with Precise Insight, Report Manager, SQL Server, Alerts, and TPM (Transaction Performance Monitoring).

Insight monitors the response times of systems and breaks these times down into their various Tiers and components. Insight also provides Tier-specific metrics to help understand the activities in each Tier. Precise for Microsoft .NET shares its data with Insight and can be launched in-context from Insight.

The Precise Custom Portal, is a lightweight, configurable portal application that provides access to various types of data from different applications. The Precise Custom Portal features a Web-based view. It is highly customizable and extensible, allowing you to build a dashboard for each user or each function within your organization. For example, you can build a dashboard for all the information that a system administrator or director of IT operations would need to constantly follow up on. This component is automatically installed as part of the Precise framework installation.

Report Manager gathers and organizes historical information that enables the IT team to focus on infrastructure hot spots. Report Manager is a reporting tool that resides on a Web server. You can use Report Manager to compare period-to-period performance against a baseline and identify response time problems at-a-glance, before they affect your bottom-line. It queries the PMDB and displays the results in reports that are generated on a scheduled basis or on demand.

Precise for SQL Server allows you to go into the detailed transaction information contained in the SQL database while maintaining the context you have specified while working in Precise for .NET. Integration with Precise for SQL Server allows you to drill down further on a specific performance problem, helping to detect the root cause of the problem.

Alerts provides a notification system that will alert you to application response time problems and enables you to launch Precise for Microsoft .NET in context, to view more detailed data.

TPM is a correlation technology based on a coloring algorithm that identifies specific activities across all Tiers. TPM correlates end-to-end activities and provides information on the application's performance, from the users perspective. The information includes total response time, broken down into Tiers.

## How application instrumentation works

Application instrumentation inserts special fault-tolerant recording hooks at critical points in the .NET application. During application execution, these hooks record events and time tags that are analyzed to provide an accurate and detailed history of performance. With its close ties to the application, instrumentation provides an application-centric view of performance correlated with both service requests and back-end relational database requests.

## What you can do with Precise for Microsoft .NET

Use Precise for Microsoft .NET to detect, diagnose, and resolve performance problems in our .NET applications. Precise for Microsoft .NET enables you to identify real-time performance problems and monitor a complete history of your .NET application activity.

## Where to get more information

More information on Precise, its products, technical notes, and so on, can be found in the Release Notes document for this version.