

# Introduction

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## Introducing Precise

Precise is an integrated software solution suite that improves the performance and availability of enterprise applications. Precise components have extensive diagnostic capabilities in the Web, application, database and storage tiers, which facilitate the isolation and resolution of transaction performance issues.

Precise consists of a framework and of various agents. The Precise Framework must be installed for any type of performance monitoring to take place, and Precise agents need to be installed per technology to enable performance monitoring for that technology.

It is highly recommended to install the Precise Framework on a dedicated server.

## Old and new terms

Compared to previous versions of Precise, some terms have been changed and/or removed. The following table gives a short overview of those term and their replacements (if any). For a full definition of these terms and others, see the Glossary section at the end of the guide.

**Table 1** Changed/removed terms

Old Term	New Term
Indepth (example Indepth for Web)	Precise (example Precise for Web)
Inform (example Inform Alerts)	n/a (eample Alerts)
Inform Foresight	Report Manager
Performance Warehoust	PMDB
Performance Warehouse FocalPoint	PMDB FocalPoint
Browser Side	Client-side
Service Time	Response Time
Environment	Application
Application Tier (AppTier)	Tier

## Precise architecture

Precise monitors the performance of your system by correlating performance information from the products that are installed and running on the servers within your organization. To do so, it needs to have software components running on various machines in your application.

Precise supports a federated architecture. A single Precise deployment may contain multiple framework nodes (each using a dedicated PMDB); this allows a large-scale installation supporting thousands of monitored instances. AdminPoint (the administration console) provides a single point of installation, management, and maintenance of all attached framework nodes.

Global resources such as Users, Roles, and Permissions are shared by all framework nodes.

Global and local resources such as Locations, SLA definitions, and Groupings can be defined globally, or defined differently per framework node.

The Precise architecture consists of the Precise Framework and agents.

## Precise Framework

The following Precise Framework components are automatically installed with the Framework Installer:

- **Precise FocalPoint.** The primary management component for all Precise agents.
- **PMDB FocalPoint.** The agent periodically loads and summarizes resource consumption and response time data from monitored instances, and saves the information in the PMDB (hosted by an Oracle or SQL Server database).

- **Alerts FocalPoint.** The agent responsible for alerting.
- **Report Manager FocalPoint.** The agent responsible for scheduling reports and defining custom reports.
- **Insight FocalPoint.** The agent that provides SmartLink correlation (transaction breakdown into application tiers).

It also manages all Collectors of the following technologies:

- Operating System (OS)
- Network
- Tuxedo
- WebSphere MQ
- Oracle Applications
- Citrix
- Add-ons

## Overview of all Precise components

This section gives a short description of all Precise components.



Not all application versions are supported. For more information, see the Precise Support Matrix at <https://idera.secure.force.com/precise/>.

### About Alerts

Alerts is an alerting product that helps you proactively manage your system's performance. With Alerts, you can effectively detect availability and performance issues and react quickly to solve them.

Alerts samples data collected by other Precise products for the values of a set of metrics and compares these values with a predefined set of values called thresholds. When the value of a metric exceeds, or does not meet the metric's threshold value, Alerts notifies you through its user interface, an email, SNMP traps, and so on. It can even perform a defined corrective action.

The Alerts agents are called InformPoints. They retrieve performance data collected by other Precise products, analyze it, and generate alerts if the predefined thresholds are exceeded. For more information, contact [Precise Customer Support](#) or your SE.

### About Report Manager

Report Manager is a reporting tool. It queries the PMDB and displays the results in reports that are generated according to schedule, or on demand.

The reports present historical information. They are designed to help you identify problematic conditions before they turn into performance issues; track long-term performance and trends; plan for future growth; compare performance of similar systems and time periods; correlate performance metrics of different products; and generate customized reports. For more information, contact [Precise Customer Support](#) or your SE.

### About Insight

Insight is a monitoring product that measures the real end-user response time of a multi-tier application and, within an end-to-end view, breaks down the response time by the technology tiers, such as Web server, application server, database server or storage so IT staff know where to prioritize their efforts. Insight also provides application-specific performance metrics for SAP, Oracle, PeopleSoft, Siebel, Tuxedo, J2EE, and Citrix-based applications. For more information, contact [Precise Customer Support](#) or your SE.

### About Precise for Web

Precise for Web helps you build performance metrics based on performance data gathered from the browser and/or the Web server. The metrics can be correlated with the site's business goals to verify that improvements are prioritized by their impact on the business. For example, the Web page takes a long time to render. This has an impact on SLAs, etc., so we need to improve Javascript performance and minimize the number of Web components on the page.

For end-user metrics, Precise for Web uses an agent that collects the end-user response time. The data is then sent to the Precise for Web Collector. For Web server metrics, Web Tier Collectors gather data on Web server response times.

The Web Server Collectors collect response time data on the Web server. They sample the Web filters and correlate this data with the network time spent for each URL. This way, you can see the total response time for the Web server and get a first-level breakdown of the entities that share the response time on the Web server. For more information, contact [Precise Customer Support](#) or your SE.

### About Precise for J2EE

Precise for J2EE is a performance monitoring and tuning product that can help you dramatically improve the performance and efficiency of your server-side Java 2 Enterprise Edition (J2EE) applications. Precise for J2EE allows you to quickly identify the root cause of performance issues in your Java Server Pages (JSP), Servlets, Enterprise JavaBeans (EJB), JDBC/SQL calls and other components conforming to well-known J2EE standards and your own custom application frameworks.

The following Application Servers are supported on a J2EE server:

- Oracle WebLogic
- IBM WebSphere

- JBoss
- Apache Tomcat
- Oracle Application Server
- Sun Glassfish
- SAP WAS J2EE
- other generic J2EE applications

For more information, contact [Precise Customer Support](#) or your SE.

## About Precise for Microsoft .NET

Precise for Microsoft .NET is a performance monitoring and tuning product that can help you dramatically improve the performance and efficiency of your MS .NET-based applications. Precise for Microsoft .NET collects, measures, and correlates performance data about the ASP.NET (Web) and MS .NET instances you want to monitor. It provides detailed information on MS .NET applications.

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 historic data for use in performance, QA, and capacity planning analysis. For more information, contact [Precise Customer Support](#) or your SE.

## About Precise for Oracle

Precise for Oracle is a performance monitoring and tuning product that can help you dramatically improve the performance and efficiency of your business applications running on Oracle databases (including SAP, Oracle e-business suite, PeopleSoft, Siebel, and custom apps). It provides a complete view of application performance by capturing, measuring, and correlating performance metrics from all critical system components.

With Precise for Oracle, you can perform long-term analysis of resource consumption by SQL statements, users, and programs; tune SQL statements and the access path of database objects; generate SQL statement alternatives; simulate database changes for impact analysis; and recommend indexes. In addition, SmartTune discovers performance issues in your Oracle database and instructs you how to solve them.

Based on your application (e.g. an ERP application), you can also install special Collectors (Interpoints), that gather information on the activities and resource consumption of that application. And if your Oracle database is stored on external storage arrays supported by Precise for Oracle, you can install Precise for Storage for a specific storage array. By doing so, you can gain a true end-to-end view, from application user experience over database view into storage. For more information, contact [Precise Customer Support](#) or your SE.

## About Precise for SQL Server

Precise for SQL Server is a performance monitoring and tuning product that can help you dramatically improve the performance and efficiency of your SQL Server-based applications. Precise for SQL Server collects, measures, and correlates performance data about the SQL Server instances you want to monitor. It provides detailed information on the application and the database running on the SQL Server.

Precise for SQL Server enables you to identify the specific cause of a performance issue, monitor SQL Server users, programs, and statements, and get suggestions on how to fix that issue. In addition, you can associate a logical database I/O with its physical device I/O for Windows file systems running on different storage devices, including EMC and HP. This ability enables you to analyze I/O bottlenecks, for example a contention issue caused by two heavy database index files that are accessed simultaneously and located on the same physical device.

With Precise for SQL Server, you can perform long-term analysis of resource consumption by SQL statements, users, and programs. In addition, SmartTune discovers performance issues in your SQL Server database and instructs you how to solve them.

Precise for SQL Server is integrated with Precise for Microsoft .NET, making it possible to analyze the relevant instance across platforms by launching Precise for SQL Server from within Precise for Microsoft .NET.

The SQL Server Collectors collect performance data on SQL Server instances.

Based on your application, you can also install special Collectors (Interpoints), that gather information on the activities and resource consumption of special application components. The Interpoints then correlate this information with SQL Server information so that you can see ERP users, transactions, reports, and so on.

You can install the following Interpoints:

- Interpoint for PeopleSoft
- Interpoint for SAP
- Interpoint for Siebel

For more information, contact [Precise Customer Support](#) or your SE.

## About Precise for DB2

Precise for DB2 is a performance monitoring and tuning product. Precise for DB2 is complementary to IBM's management and analysis tools and together they can be used to minimize system issues and achieve maximum system up-time and performance. It also provides a complete view of application performance by capturing, measuring, and correlating performance metrics from all critical system components.

With Precise for DB2, you can perform long-term analysis of resource consumption by SQL statements, users, and programs; tune SQL statements and the access path of database objects; generate SQL statement alternatives; simulate database changes for impact analysis; and recommend indexes.

If your application is an SAP application with a DB2 database, you can also install a special Collector, an Interpoint for SAP that gathers information on the activities and resource consumption of SAP application components. The Interpoint for SAP then correlates this information with DB2 information so that you can see SAP users, transactions, reports, and so on.

If your DB2 files are stored on external EMC storage units, you can install Precise for Storage to map the DB2 files to their underlying devices of the storage unit and get additional statistics from the storage array. For more information, contact [Precise Customer Support](#) or your SE.

## About Precise for Sybase

Precise for Sybase is a performance monitoring and tuning product that can help you dramatically improve the performance and efficiency by proactively monitoring, analyzing, and tuning Sybase instances. Precise for Sybase collects, measures, and correlates performance data about the Sybase instances you want to monitor.

Precise for Sybase enables you to identify the specific cause of a performance issue, monitor Sybase users, programs, and statements, and get suggestions on how to fix the issue.

Precise provides an initial tuning solution for the Sybase Replication Server integrated with Precise for Sybase. It can monitor Replication Server (RS) statistics information related directly to the ASE in the start/end point of the replication chain. Approximately 90% of all latency issues are caused by the ASEs themselves and not by the RS components. For more information, contact [Precise Customer Support](#) or your SE.

## About Precise for SAP

Precise for SAP is a performance monitoring product that can help you dramatically improve the performance and efficiency of your SAP systems. Precise for SAP collects and measures performance and availability data, such as SAP ABAP application server utilization and workload. The slightest indication of response time degradation can be quickly isolated anywhere in the architecture and the appropriate action taken to minimize the impact on his business.

The SAP Collectors collect performance and availability data on the SAP systems you want to monitor. The SAP solution consists of Precise for SAP and an Interpoint for SAP.

## Using SAP to launch Precise for database

Precise allows you to correlate SAP application performance data with database performance data, for selected databases (SQL server, DB2, Oracle). To do that, you must install the Precise for database FocalPoint and the Interpoint for SAP.



For SAP systems with Oracle or DB2 database, use the PMDB with Oracle database and for SAP systems with SQL Server database, use the PMDB with SQL Server database.

For more information, contact [Precise Customer Support](#) or your SE.



Not all SAP applications are supported. For more information, see the Precise Support Matrix at <https://idera.secure.force.com/precise/>.

## About the Oracle Applications instance

The Oracle Applications Collectors collect performance data on Oracle Application entities. They include Interpoints for Oracle Applications.

The Interpoint for Oracle Applications correlates Oracle Applications entities with resource consumption data of Oracle entities that is gathered by Precise for Oracle. Since the Insight FocalPoint agent is installed automatically through the Framework Installer, you also get the Insight Savvy for Oracle Applications, which provides Forms Server response time data for Oracle Applications entities, such as: Oracle Applications users, Forms, and Screens. For more information, contact [Precise Customer Support](#) or your SE.

## About the Siebel instance

The Siebel Collectors collect performance data on Siebel entities. They include Interpoints for Siebel which correlates Microsoft SQL Server or Oracle entities with resource consumption data of Siebel entities that is gathered by Precise for SQL Server or Precise for Oracle, respectively. For more information, contact [Precise Customer Support](#) or your SE.

## About the Tuxedo instance

The Tuxedo Collectors provide performance metrics for Tuxedo. The Insight Savvy for Tuxedo gathers response time directly from the Tuxedo shared memory to provide response time distribution data for Tuxedo entities. For more information, contact [Precise Customer Support](#) or your SE.

## About the Other Tier

The Other Tier instance is installed for software products that communicate with their clients using standard TCP/IP and that are not specifically supported by the Precise product suite. The Other Tier instance collects network activity between servers. This information is collected and managed by the Insight FocalPoint agent. For more information, contact [Precise Customer Support](#) or your SE.

## About the WebSphere MQ instance

The WebSphere MQ Collectors gather general performance data on IBM WebSphere MQ instances, such as about the applications and users that are part of a process, the message body and the message header. In addition, they collect queue time and work time data. They also calculate the message queue time (the time a message spends in the queue) and the message work time (the time that elapses from the moment a message is read from a queue until a response message is put on another queue). For more information, contact [Precise Customer Support](#) or your SE.

## About the SDK Add-on Tiers

The SDK Add-on Tiers feature is fully described in the *SDK Add-on Tier User Guide*. For more information, contact [Precise Customer Support](#) or your SE.

## About Precise Custom Portal

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.

## Where to get more information

The latest information on Precise and additional information can be found at <https://idera.secure.force.com/precise/>.