Managing data

As soon as the PMDB contains long-term application data, you can start analyzing this information.

You can identify resource consumption trends and track performance deviation. You can analyze the effect of load patterns, entity changes, entity statistics, or component parameter changes. You may also examine data growth or data distribution changes and detect performance bottlenecks proactively, before they turn into performance problems.

Analyzing the collected data is closely related to managing the PMDB settings. These settings are described in the following:

- Defining Hour Groups
- Summarizing Data
- Purging Data

For more information, see the *Precise Administration Guide*.

Defining Hour Groups

The PMDB data is summarized into hourly-based time units. In large environments with a high volume of transactions, the PMDB may use a lot of disk space. To reduce disk space consumption, Precise automatically aggregates hourly data into daily, weekly, and monthly data. Aggregation saves space, but it eliminates the raw details of hourly performance data. To specify the hours for which you want data maintained, you can use the **Hour Group** option in AdminPoint.

The **Hour Group** option divides the week into hour groups. The default groups are day, morning, night, and weekend. During the installation, you, as administrator, can create your own hour groups or change the defaults to whatever is appropriate for your environment. For example, you could define a peak hour every day between 10 a.m. and 11 a.m.

Once you have declared the hour groups you want, you can further define which performance data will be collected within each hour group. For information on how to customized hour groups, see the *Precise Administration Guide*.

> ⓘ When you change hour group definitions, the changes apply only to data loaded subsequent to the change; hour group definitions are not applied retroactively.

Summarizing Data

The PMDB can summarize hour group data per day, week, and month. The summaries are based on performance data that is collected by the Precise agents and loaded into the PMDB. The summaries are stored in summary tables, which are partitioned according to the time interval. Summary tables store the same data in different levels of granularity: time slice, hourly, daily, weekly, and monthly.

By storing data in multiple summary tables, Precise can present a detailed view and progressively higher-level views of the same data. Summary tables are particularly useful for data aging. You can implement a data purging policy for each summary table and make sure detailed data is retained for short-term historical analyses while more summarized data is used for long-term analyses and trending.

Purging Data

Purging removes performance information that is no longer useful for analyzing trends in your system. You can purge old data from the PMDB to save disk space and to enhance the overall performance of the PMDB.

The purging methodology is based on a cascading approach to keep time-slice-, hour-, day-, week-, and month-based summary tables that contain historical data. The purging option enables you to distinguish between the summary time period levels and to set a purging limit for each level.

For example, suppose you save information about a Web server AppTier and an Oracle AppTier in the PMDB. For the Web server you may want to save daily performance information for one month and monthly summaries for two months. For the Oracle performance information, you may want to save daily summaries for two months and monthly summaries for one year.

The purging intervals you choose depend on your organization's need for historical data in each AppTier. The purging settings are set from AdminPoint. For each AppTier and for each summary level, you can set how many weeks or months back you want to keep data. Once you have specified this settings, a batch procedure periodically removes all the data that is older than the values in the purging settings.

To set purging criteria

1. Open the Warehouse Processes view in AdminPoint.
2. Select the **Purge Data** process, and then click **Parameters**. The Purge Data Process Properties dialog box opens.
3. Enter the required values for each technology.
4. Click **OK**.