

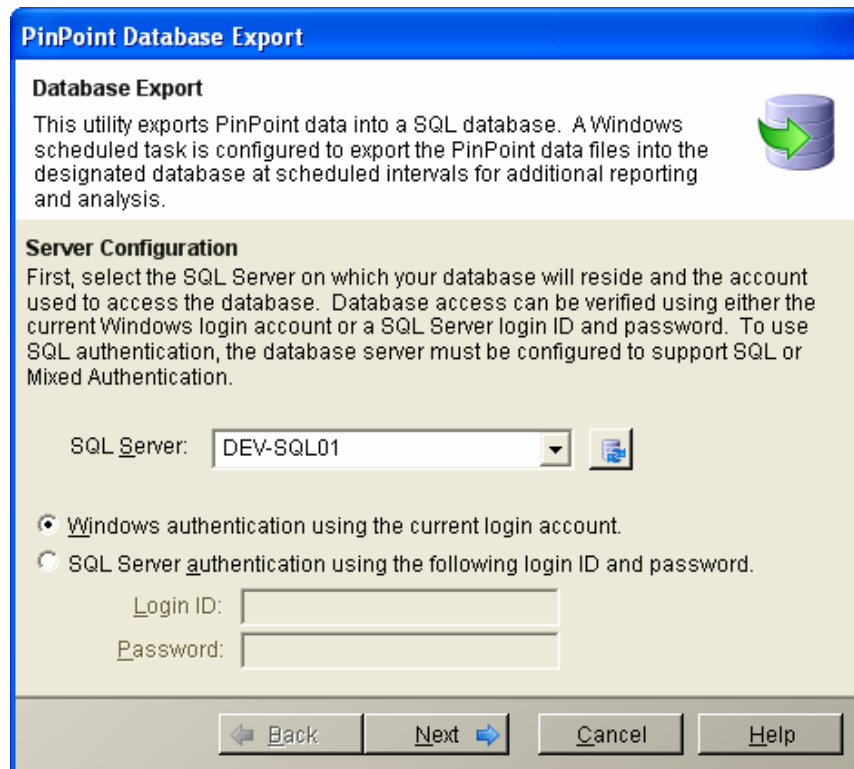
RTO PinPoint Performance Data Export

The RTO PinPoint Data Export Utility is used to export RTO PinPoint data store files from a RTO PinPoint Analysis Engine into an external SQL Server database for third party reporting and analysis. When first run, the user must identify an existing database on a SQL Server and select the level of data detail to be exported to the database. After specifying these database settings, all RTO PinPoint export tables will be created (see database schema description) and a scheduled task will optionally be created to export RTO PinPoint data at regularly scheduled intervals.

RTO PinPoint Data Export Wizard

If RTO PinPoint data export settings have not already been configured when the export utility is first run then a configuration wizard is shown to guide the user through selecting database options and creating RTO PinPoint database tables.

On the first wizard panel the user chooses a SQL Server from an enumerated list and selects the authentication method for database access. Clicking the button next to the list of SQL Servers will refresh the list.



The screenshot shows a Windows-style dialog box titled "PinPoint Database Export". It is divided into two main sections: "Database Export" and "Server Configuration".

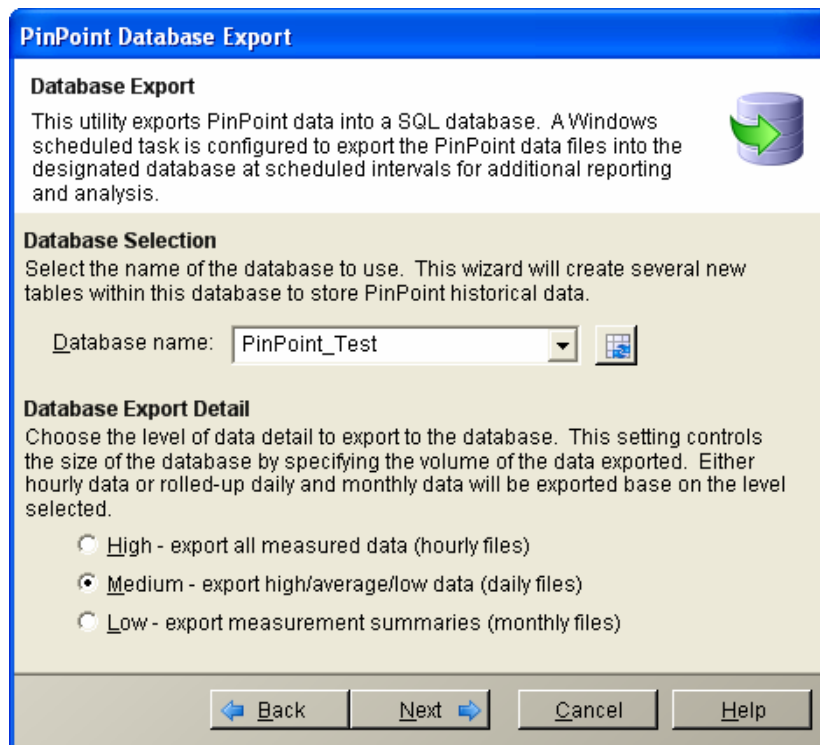
- Database Export:** Contains a descriptive paragraph and a database icon with a green arrow pointing to it.
- Server Configuration:** Contains instructions for selecting a SQL Server and authentication method. It includes a dropdown menu for "SQL Server" (currently showing "DEV-SQL01") and a refresh button. Below this are two radio button options: "Windows authentication using the current login account." (which is selected) and "SQL Server authentication using the following login ID and password." (which is unselected). Under the second option, there are input fields for "Login ID:" and "Password:".

At the bottom of the dialog, there are four buttons: "Back" (with a left arrow), "Next" (with a right arrow), "Cancel", and "Help".

On the second wizard panel the user chooses an existing database to use and selects the level of data detail to be exported to the database. Clicking the button next to the list of databases will refresh the list. The detail level controls the granularity of data exported to the database and therefore the relative size of the database.

RTO PinPoint stores all sampled data for 24 hours in hourly data store files. Hourly files in turn are periodically rolled-up into daily files by computing the average, maximum, and minimum sample values over 10 minute intervals. Daily files are then rolled-up into weekly files of 30 minute intervals and weekly files are rolled-up into monthly files of 1 hour intervals.

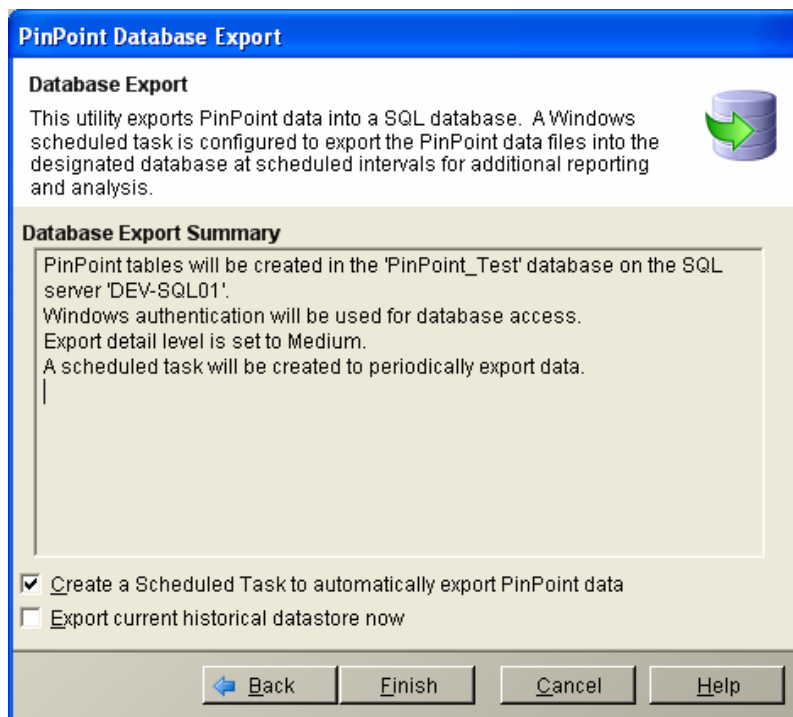
A 'high' detail level exports data from hourly data store files therefore all sample values are stored. The typical size required to store data for a single server using the 'high' detail level is about 50 MB per day. The 'medium' detail level exports daily data store files and requires about 1 MB per server per day and the 'low' level exports monthly data store files requiring about 200 KB per server per day.



The screenshot shows the 'PinPoint Database Export' wizard panel. It has a blue title bar and a light beige background. The panel is divided into three sections: 'Database Export', 'Database Selection', and 'Database Export Detail'. The 'Database Selection' section contains a dropdown menu for 'Database name' with 'PinPoint_Test' selected and a refresh button. The 'Database Export Detail' section contains three radio button options for data detail levels: 'High', 'Medium' (which is selected), and 'Low'. At the bottom, there are four buttons: 'Back', 'Next', 'Cancel', and 'Help'.

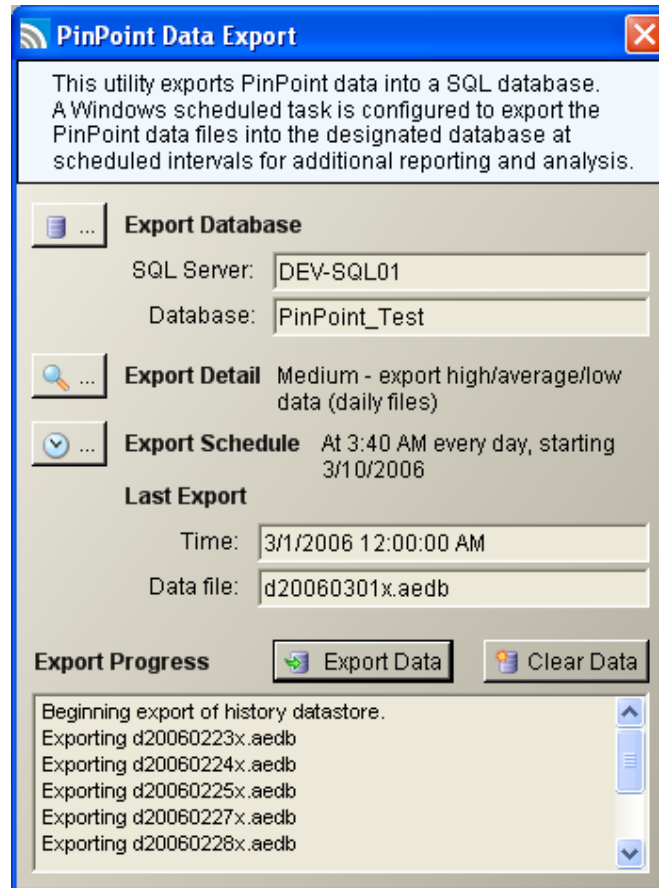
The third wizard panel provides a summary of the configuration selections made and optionally lets the user choose to create a Windows scheduled task to automatically export RTO PinPoint data and immediately start exporting existing data from the local RTO PinPoint Analysis Engine's datastore. Clicking 'Finish' will create all necessary RTO PinPoint tables (note, any existing table will be dropped before creating new tables).

If 'Create a Scheduled Task...' is checked then the user will be prompted for a username and password with which to run the task and a Windows scheduled task will be created. (Note, the username and password is stored as part of the scheduled task only, it is never stored as part of any RTO PinPoint configuration settings.) The initial schedule for this task depends on the detail level selected. 'High' and 'medium' levels will by default schedule the task to be run every day at 3:40 am. The schedule for the 'low' level is 3:40 am on the first day of each month.



RTO PinPoint Data Export UI

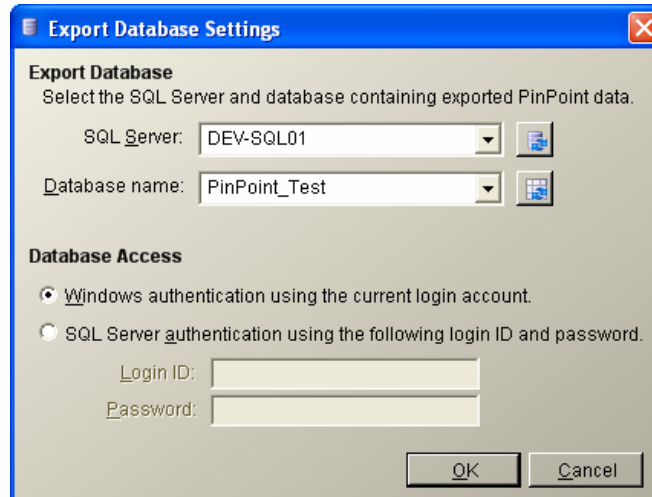
The following is the main screen of the RTO PinPoint Data Export Utility. It shows the currently configured SQL Server and database, the current export detail level, task schedule, as well as the most recent data store that has been exported.



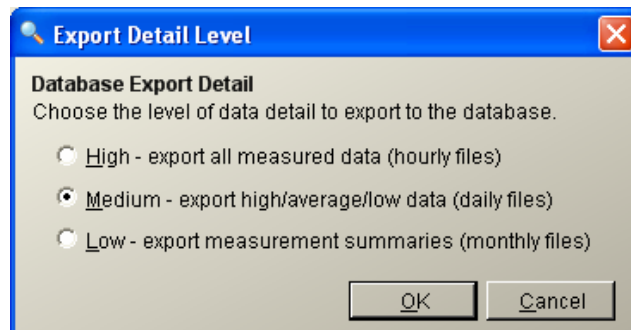
The 'Export Data' button will immediately begin exporting RTO PinPoint data using the current settings. Export progress is shown in the textbox at the bottom. An Application Event Log entry is added each time a data export is completed (either manually using this utility or by executing the scheduled task).

The 'Clear Data' button will clear all data currently stored in the export database.

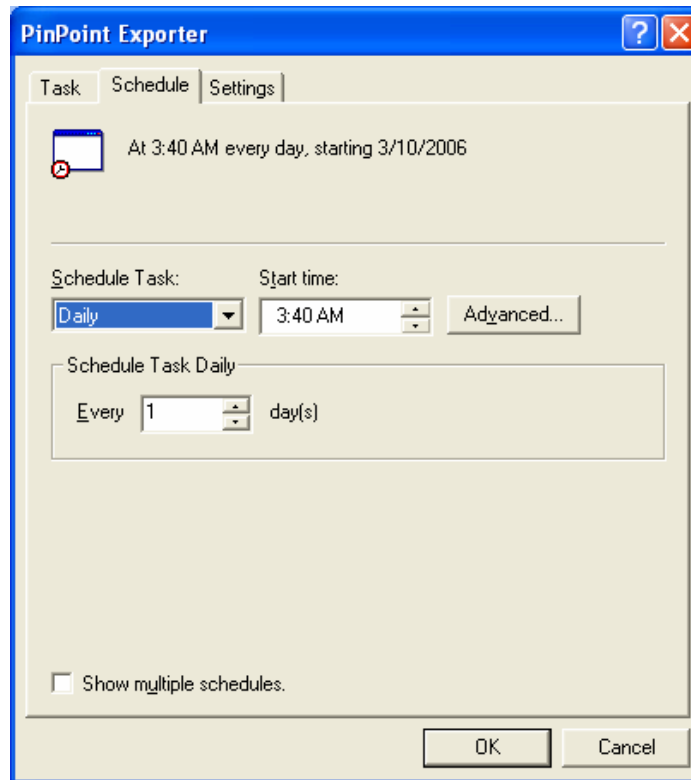
Clicking the button next to 'Export Database' will show the following dialog in which you can change the selected SQL Server, database, or authentication method.



Clicking the button next to 'Export Detail' will show the following dialog in which you can change the selected export detail level.



Clicking the button next to the 'Export Schedule' will show the scheduled task property page. The user may change the current export schedule, task account, or other scheduled task settings.



RTO PinPoint Export Database Schema

The following describes the RTO PinPoint export database tables.

<i>PP_Version</i>	<i>This table contains the version of the PinPoint export database schema for the database.</i>
<i>Version</i>	<i>The version of the RTO PinPoint export database schema (currently 1.0.0.0)</i>
<i>PP_Datafile</i>	<i>This table contains all RTO PinPoint datastore files that have been imported into the database.</i>
<i>Filename</i>	<i>The name of the exported RTO PinPoint datastore file</i>
<i>Engine</i>	<i>The name of the RTO PinPoint Analysis Engine server</i>
<i>Timestamp</i>	<i>The timestamp of the RTO PinPoint datastore file</i>
<i>PP_Sample</i>	<i>This table contains the sample times for all metric values imported into the database.</i>
<i>Timestamp</i>	<i>The timestamp of the data sample</i>
<i>Engine</i>	<i>The name of the RTO PinPoint Analysis Engine server</i>
<i>PP_Application</i>	<i>This table contains application information for all metric values imported into the database.</i>
<i>Application</i>	<i>The internal ID of the application</i>
<i>Name</i>	<i>The display name of the application</i>
<i>Engine</i>	<i>The name of the RTO PinPoint Analysis Engine server</i>
<i>PP_Server</i>	<i>This table contains server information for all metric values imported into the database.</i>
<i>Server</i>	<i>The internal ID of the server</i>
<i>Name</i>	<i>The display name of the server</i>
<i>Engine</i>	<i>The name of the RTO PinPoint Analysis Engine server</i>
<i>PP_Metric</i>	<i>This table contains metric information for all metric values imported into the database.</i>
<i>ID</i>	<i>The internal ID of the metric</i>
<i>Metric</i>	<i>The display name of the metric</i>

<i>PP_Context</i>	<i>This table contains the context information (sample, application, & server) for each metric value imported into the database.</i>
<i>ID</i>	<i>The context ID describing a data sample</i>
<i>Sample</i>	<i>The timestamp of a data sample</i>
<i>Application</i>	<i>The application source of a data sample</i>
<i>Server</i>	<i>The server source of a data sample</i>

<i>PP_MetricData</i>	<i>This table contains each metric value imported into the database along with its sample context and metric information.</i>
<i>ContextID</i>	<i>The context ID of the source of this metric value</i>
<i>MetricID</i>	<i>The metric ID of this metric value</i>
<i>Value</i>	<i>The value of the metric sample for high detail level, or the average value of the metric over a rolled-up time period of other detail levels</i>
<i>Max</i>	<i>The maximum value of the metric over a rolled-up time period</i>
<i>Min</i>	<i>The minimum value of the metric over a rolled-up time period</i>

PinPoint Export Database Schema (1.0.0.0)

