



Topic: Custom Reporting

Company: ABB Semiconductors

Company Background:

ABB Semiconductors is a U.S. Sales Representative for ABB Semiconductors AG. The company sells a range of high power custom and semi-custom modules for demanding applications in traction, heavy industrial and power systems markets. Customers include General Electric, Adtranz, and Bay Area Rapid Transit (BART). The accounting department has many reporting requirements, many of which are described below, in addition to other accounting functions, such as invoicing, and producing checks.

Reporting Need:

ABB required several unique reports that were not readily available in Platinum for Windows. Among the reports they needed were the following:

- On-time delivery report – this series of reports measures how many orders arrive on-time from ABB’s suppliers. Because ABB’s supplier ships from overseas and promises a ship date from their factory, the report needed to be able to calculate the ship date based on the arrival date at ABB. The calculation needed to account for weekends and shipper holidays.
- Obsolete Inventory report – this report identifies inventory items that meet the definition of obsolete, as defined by ABB Semiconductor’s corporate parent.
- Income by product group – this report calculates income and gross margin for ranges of product groups.

The Solution:

The reporting solution chosen was Crystal Reports because of its power and flexibility, and because it is also used by Platinum for Windows, the accounting system being used by ABB Semiconductors. However, the requirements of ABB’s reports were too complicated to use Crystal Reports directly. Instead, Microsoft Access was used as an intermediate step. A series of queries and VB code was created in MS Access to create a table of the data needed for the report. A report was then created in Crystal Reports using the table from MS Access.

For example, the on-time delivery report creates a table of all the orders that have a promise date specified. It then finds the arrival date at ABB’s Pittsburgh office. The shipment date from the supplier is then calculating based on the shipping method specified. Weekends and holidays are not counted in the calculation. Then, the difference in the shipment date and the promise date is calculated, again ignoring weekends and holidays. The final result in MS Access is a table of orders with each order’s promise date, shipment date, arrival date, and a calculation of the number of days the order is late (or number of days the order is early). Reports in Crystal Reports summarize the data in various ways, including a simple listing of late orders, and a graphed summary of all late orders.