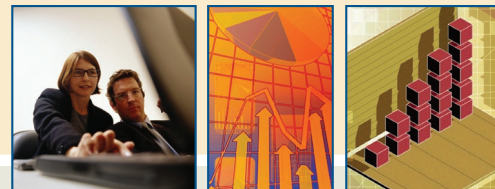


Formula One e.Spreadsheet Engine

Version 11, Technical Summary of New Features

API-driven, Pure Java toolset for building Excel reporting, Excel-based calculations and business rules, and Excel-compatible data grids into Java projects and applications



Introduction to Formula One e.Spreadsheet Engine v. 11.0

The Formula One e.Spreadsheet Engine (version 11.0) includes several new enhancements to the product's Excel report output capabilities. e.Spreadsheet Engine customers can access these new features through several new Java methods if they are accustomed to generating Excel reports using the Formula One API without a template. These new features are also available through the e.Spreadsheet Designer if they are accustomed to generating Excel reports with a template. The new features include:



Analysis Tools for End Users

- **PivotTables:** A PivotTable is one of Excel's most useful and widely used analytical tools for summarizing large amounts of information.
- **Data Filters:** Filtering is a quick and easy way to locate a subset of data in a list. A filtered list displays only the rows that meet the criteria you specify for a column.

Data Access

- **Support for Custom Data Sources:** e.Spreadsheet Engine reports can now access data from standard data sources such as a relational databases as well as custom data sources such as an application layer that implements business rules and security.
- **Enhanced Support for XML Data Sources:** Report developers can map XML documents to relational tables that can be queried using SQL statements.
- **Support for SAP R/3 and SAP Business Warehouse Data Sources:** Build reports against SAP data sources with point-and-click wizards.

e.Spreadsheet Designer Usability

- **ReportRange Editor:** Enhancements include the ability to build different views of the same data without re-querying the data source.
- **ReportRange Wizard:** This feature has been updated to accommodate all data sources.
- **PivotRange Wizard:** A step-by-step wizard has been added to build PivotRanges.

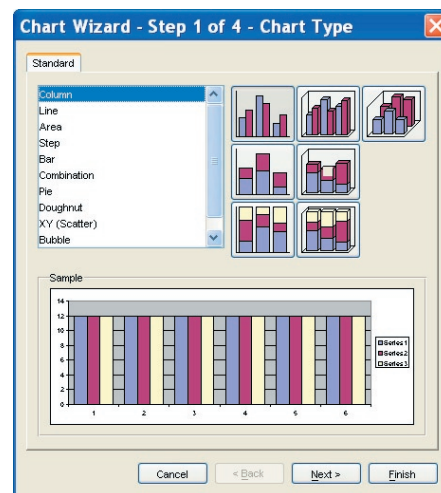


Chart Wizard

	A	B	C
1	City	Date	Books Sold
2	Chicago	Feb	73
3	Detroit	Feb	58
4	Atlanta	Feb	95
36	Portland	Mar	33
37	Boise	Feb	64
38	Dallas	Feb	18
39	Miami	Feb	41
40	Feb Totals		624

Split Windows

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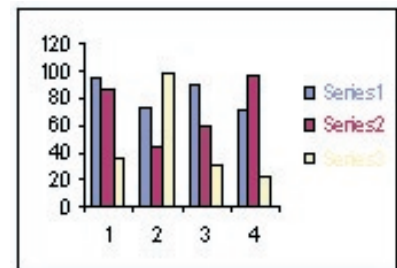
- **Chart Wizard:** This wizard has been enhanced to minimize the amount of clicks required to build a chart.
- **Split Windows:** Worksheets can be split horizontally and vertically into separate panes that can be viewed and scrolled independently
- **Password Protection:** Several layers of security are now available for Excel reports. Protect an entire workbook, a specific worksheet, or specific workbook elements with a password.
- **Freeze Panes:** Rows and columns can be frozen in place as the rest of a worksheet scrolls.

	A	B	C
1	City	Date	Books Sold
7	Boise	Mar	84
8	Denver	Mar	38
9	Chicago	Feb	60
10	Dallas	Feb	72
11	Santa Fe	Mar	154

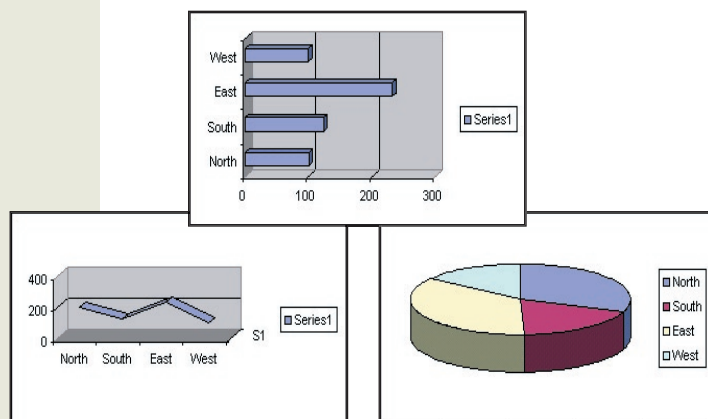
Freeze Panes

Charting

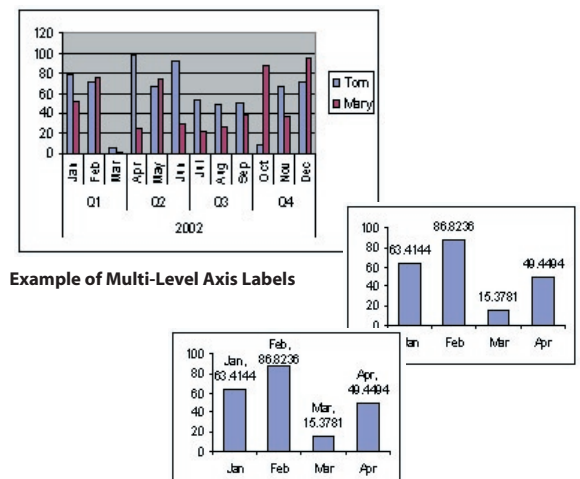
- **3D Charts:** All of Excel's fixed perspective 3D chart types are now supported.
- **Additional 2D Charts:** Pie-of-pie and bar-of-pie 2D charts have been added.
- **Chart Groups:** Properties that are stored only once for an entire chart have been moved to grouped objects so they can be used separately for different chart types or for a different axis location.
- **Legend Item Formatting:** Fonts of individual legend items can be formatted.
- **Time Scales:** e.Spreadsheet Engine's Excel reports are now in sync with Excel, allowing the label interval to be set every month, for example.
- **Auto Scaling of Fonts:** Set the new auto scale font setting to true and fonts of charts will resize as a chart is scaled larger or smaller.
- **Multi-Level Axis Labels:** More than one level of labels can be used on a category axis.
- **Data Source Updates:** A series or data point value will only be displayed if the row is visible in the spreadsheet. Charts can also store an entire chart range and parse it when asked. This is helpful, for example, when the number of series in a chart won't be determined until runtime.
- **Data Labels:** Several label types can be combined together so more than one value for each point can be displayed.



Legend Item Formatting



Samples of 3D charts



Example of Multi-Level Axis Labels

Examples of Combined Data Label Types