



Components for Xcelsius

Micro Components

Inovista Micro Components for Xcelsius

Inovista provides a full range of spark lines, micro charts, icons, text and shape indicators that can be deployed to create dashboards and scorecards that are both responsive and dynamic.

The primary purpose of these visualizations is to be able to display as much meaningful information using the minimum screen real estate without baffling the end user.

In addition to the core micro components, Inovista supplies containers such as a data grid, a productivity tool that allows designers to create customized presentations using logical groups of data. The tree grid is a related component which presents the information in a hierarchical format allowing users to navigate the data in exactly the same way as in the Windows explorer.

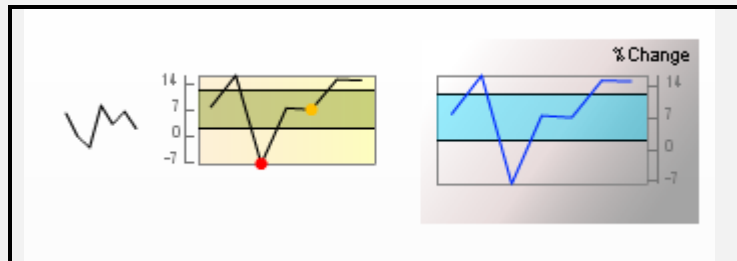
All the components are available as Xcelsius© add-ins and come with a very powerful range of property editors allowing:

- Extensive Look & Feel Editing including Colour Gradients
- Behavioural Effects
- Alerting
- Axes
- Legends
- User Click Management



Inovista MicroChartTables

Micro Line Charts

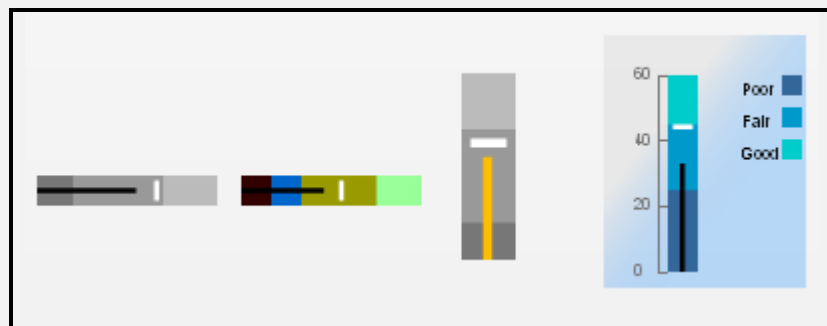


Micro Line Chart Examples

The Micro Line component presents data in a continuous format and is useful for identifying trends and other patterns in the information.

It can be shown as a basic spark line or in a more decorative way using the full range of Xcelsius property editing features.

Micro Bullet Graphs

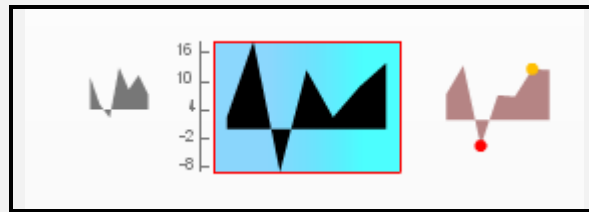


Bullet Graph Examples

The Bullet Graph is designed to display a key measure of actual achievement, a target and qualitative ranges to instantly show the status of the measure: for example, good, bad or fair.

Bullet graphs are especially useful in dashboards and scorecards as they are capable of providing succinct information in a very small screen space.

Micro Area Charts



Micro Area Chart Examples

Functionally, the area chart both in usage and in visualization capabilities provided in Xcelsius is very similar to the line chart. Rather than using a simple line, the area chart fills a 2D space below the data point (or above it in the case of negative values). This is particularly useful in presenting cumulated totals (numbers or percentages) over a period of time.

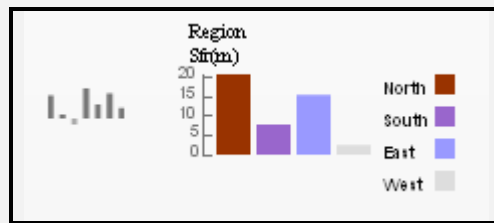
Micro Bar Charts



Micro Bar Chart Examples

The Inovista Micro Bar chart presents data values as horizontal bars. Bar charts are typically used to display discrete information. They are useful for showing measures that are associated with items in a category, such as regions or departments.

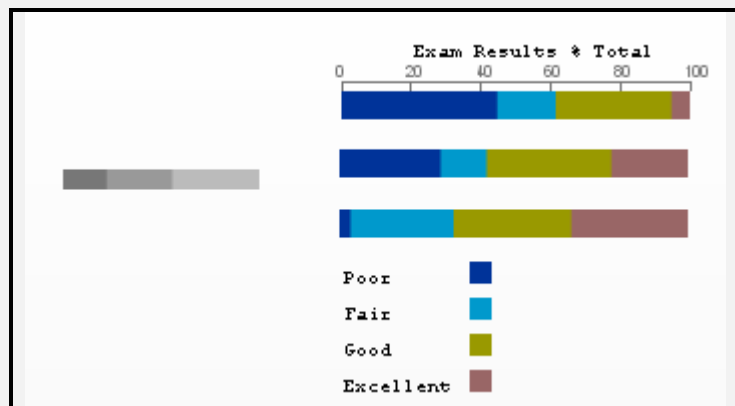
Micro Column Charts



Micro Column Chart Examples

The Inovista Micro Column chart is exactly the same as the Bar chart, only it presents data values as vertical rather than horizontal bars.

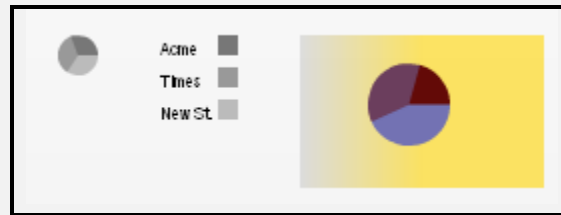
Micro 100 Bar Charts



Micro 100 Bar Chart Examples

The 100 bar charts are very similar to stacked bar charts in that they present data as a percentage of the total. Examples would include market share details and exam results.

Micro Pie Charts



Micro Pie Chart Examples

Pie Charts offer another means of presenting data items as a percentage of the total.

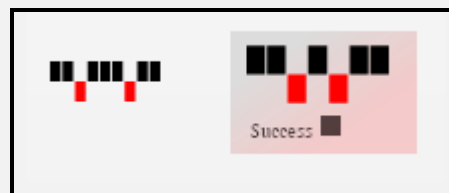
Micro Plot Charts



Micro Plot Chart Examples

The Micro Plot chart provides an ideal means of presenting correlation between 2 different data sets. As with the other charts, a large range of editing capability is provided in Xcelsius.

Micro Win Lose Charts

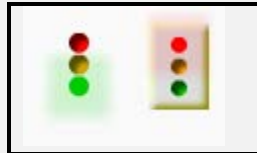


Micro Win Lose Chart Examples

The Win Lose charts present a description of the data as a binary type. In other words, data items are either a success or a failure with no further details shown. Once a

definition of success has been defined, the Win Lose chart is an excellent way of visualizing a winning or losing trend.

Micro Traffic Light



Micro Traffic Light Examples

The Micro Traffic Light presents a quick overview of the status of a data set. Traditionally, a red light presents a critical status, yellow a warning and green a success.

Behavioural effects such as a flashing red light can be defined in Xcelsius.

Micro Shape Indicators



Micro Shape Indicator Examples

Micro Shape components provide at a glance indication or performance, status or trend. Based on the underlying data, the designer can define the shape or icon and the colour or transparency that is presented to the user. Objects such as multiple stars can be used as raters.

Incorporated into Chart Tables and Tree Grids, shape indicators are particularly useful, drawing the attention of the user to potential or actual problems.

The type of shapes available includes circles, triangles, diamonds, asteriks, stars and performance icons.

Text Indicators



Text Indicator Examples

The Inovista Text Indicators work in a similar fashion to the Micro Shapes in that the colour of textual or numeric data is adjusted depending on the value of the underlying target data.

Micro Chart Table

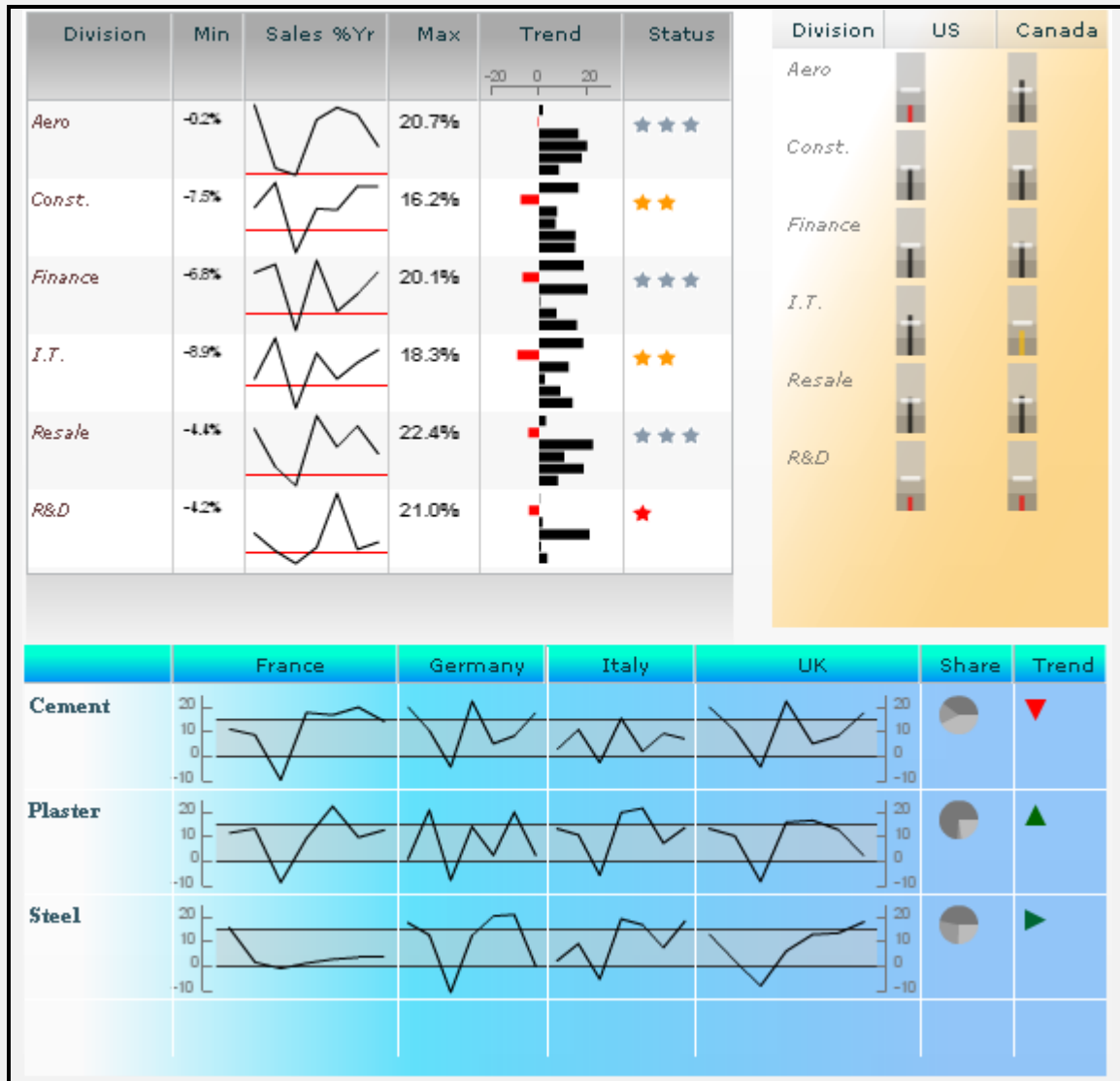
The Micro Chart Table is a container type component that can be deployed as a standalone dashboard or scorecard. It contains columns of spark lines, micro charts, shapes, icons or text.

As large numbers of sub components can be presented within the table, the Chart Table acts as productivity tool allowing the designer to manage these components in columnar groupings.

In Xcelsius, a very large range of property editors are available to customize the look and feel and behaviour of the component:

- Centrally manage all the data sources for each of the columns including target data used by the components contained in the Chart Table for alerting.
- Extract the axis from a component in the column and place it in the header
- Extract a legend from a component in the column and place it in the chart table footer.
- Define gradient backgrounds for the whole component
- Define gradient backgrounds for rows in the component
- Define transparencies for the chart and separate transparencies for the items it contains
- Edit column header text, background, size and transparency
- Create Opening behavioural effects
- Define component activity when a user clicks a cell
- Edit border, gridline, alternating row options
- Restrict the ability to sort, resize or move columns
- And many, many more options

It is also possible to access the property editors for the components that are contained in the Chart Table. This means, for example, alerts and behaviour such as a flashing line can be set for the charts in a specific column.

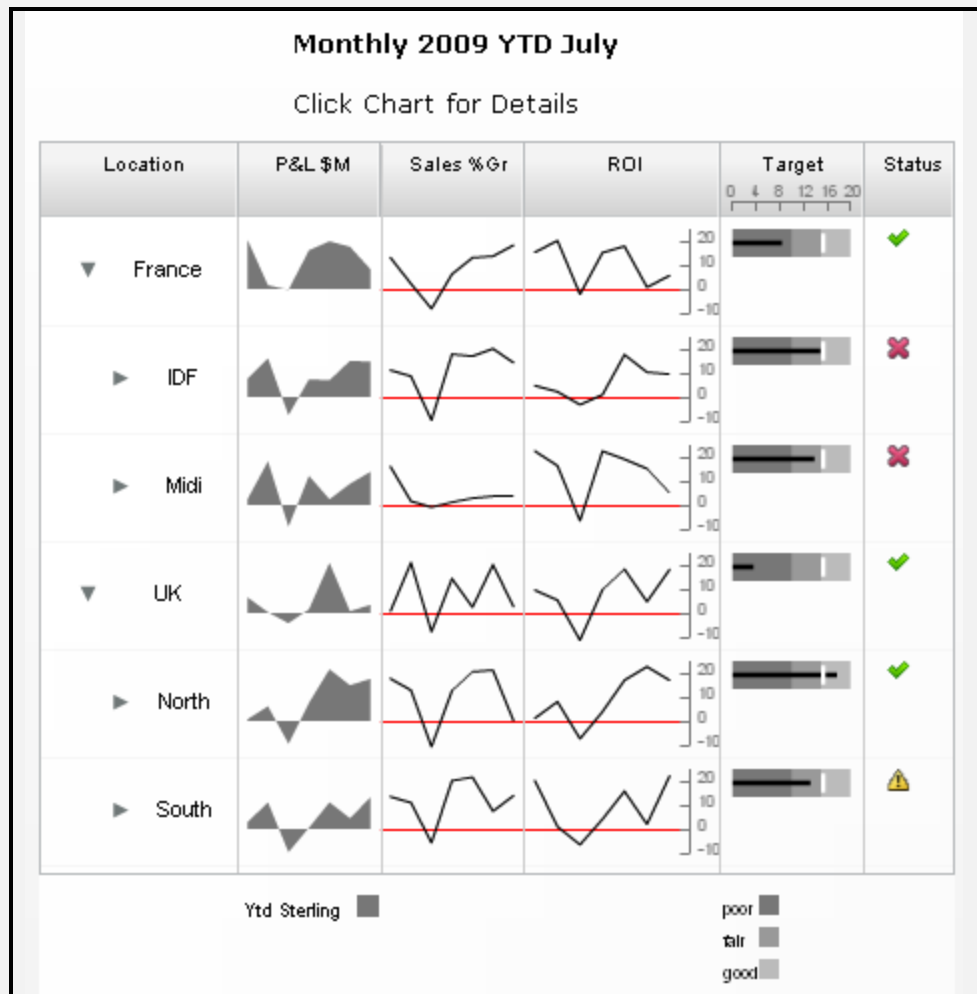


Example Chart Tables

Micro Tree Grid

The Micro Tree Grid is an extension of the Chart Table component and includes a hierarchal tree structure that permits a user to move up and down the hierarchy by clicking on the icon next to the node descriptor just as would be done in the Windows Explorer.

In addition to all the editing capability that is provided with the Chart Table, features of the tree such as the icons shown and node text styles can be customized.

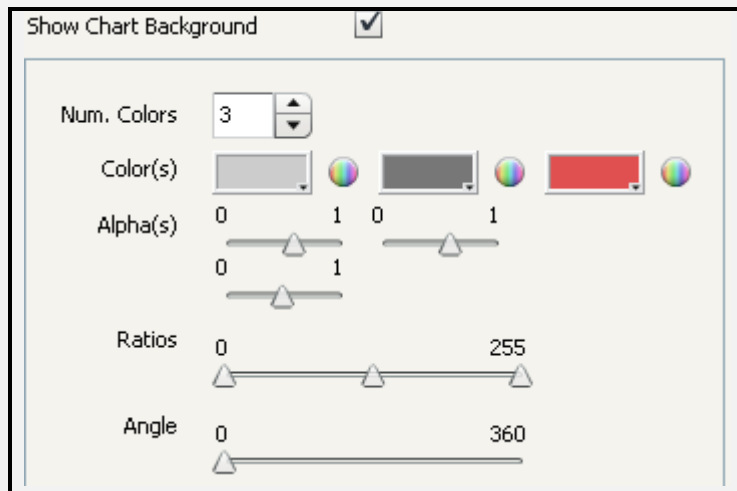


An Example Micro Tree Grid

Micro Chart Xcelsius Property Editors

In addition to the standard property editors that are in common usage throughout Xcelsius; for example, the textual editors that allow a user to define font and font families, the Micro Chart components are delivered with a variety of specialist component editors. The following examples work with all Inovista components where relevant.

Colour Gradient Editors



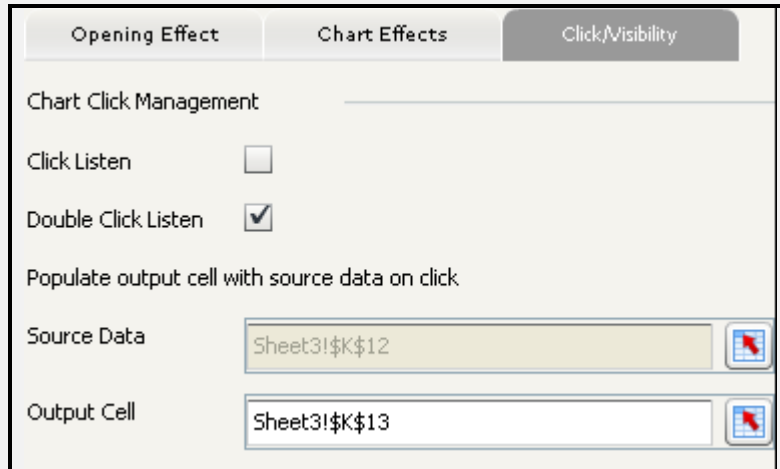
The Inovista Gradient Editor in Xcelsius

Powerful gradient colour editors are used throughout the Inovista product range. They give the ability to create a background or foreground gradient of up to 6 colours. Property slider controls allow the designer to edit the transparency or alpha and the break point or ratio of each colour in the range. The direction of the gradient can be defined using the 'Angle' slider.



A Sample Gradient

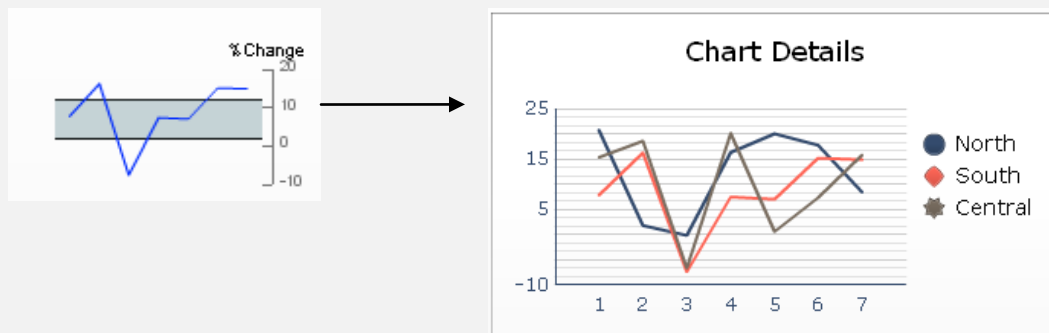
Click Listeners



The Click Listener Editor

All the Inovista Micro Chart components including the Chart Table and Tree Grid offer the capability of reacting to a user click or double click. Using the Click Listener editor, a designer can demand that the component place a value in a spreadsheet cell when a component is clicked or double clicked. The data placed in the cell can then be used to pass data to other Xcelsius components. This data can be used to make the Inovista Micro Chart visible or invisible. It can also be used by other Xcelsius components to change their data source and visibility thus giving the impression of a drill down effect.

Click Micro Chart to Open Detailed Chart

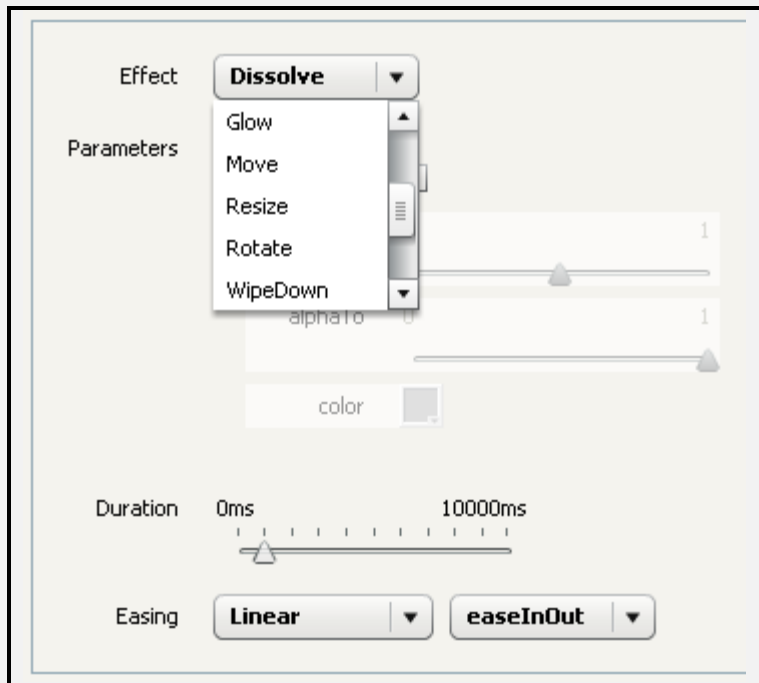


Effect Editors

It is also possible to add effects to most Inovista components. This can be used, for example, to create a zoom effect on a Data Table when it is opened. Twelve different effects are available including Blur, Fade, Dissolve, Glow, Move, Resize, Rotate, Wipe Up, Wipe Down, Wipe Left, Wipe Right and Zoom.

Depending on the effect selected, the relevant option parameters for that effect are available. For example, in the case of a Zoom, the percentage size of ‘zoom from’ and ‘zoom to’ can be defined.

The full range of easing objects and methods can also be selected.



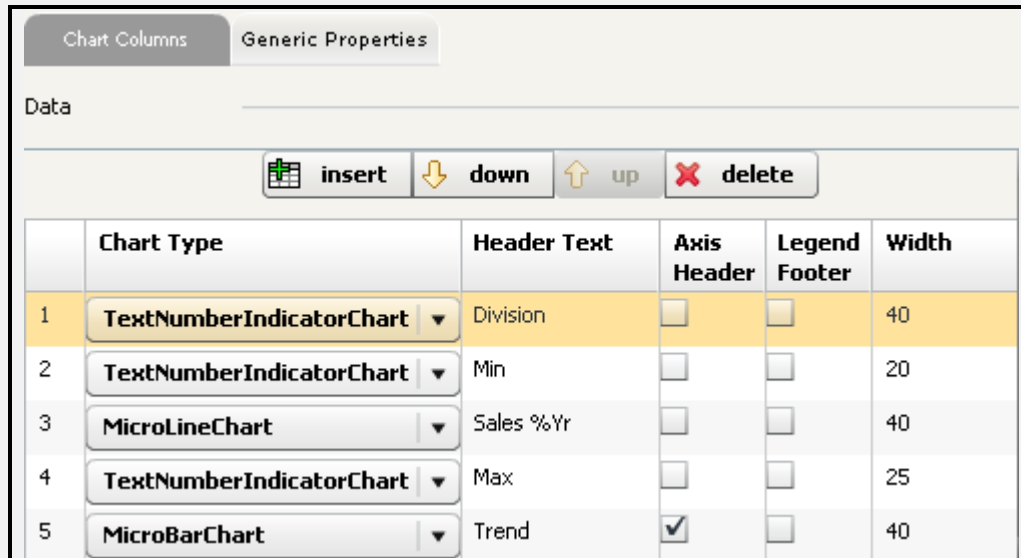
The Effect Editor

Data and Tree Grid Creators

The Chart Table and Tree Grid are both complex components that can contain many sub-components (100's of charts and indicators may be included in their structure). It is,

therefore, important to provide tools that enhance the productivity of the designer when manipulating these items.

In Xcelsius, a grid type editor is available to help in adding, defining, moving and deleting chart or indicator columns. The grid editor also helps in setting column titles, axes in the column header and legends for the table footer.



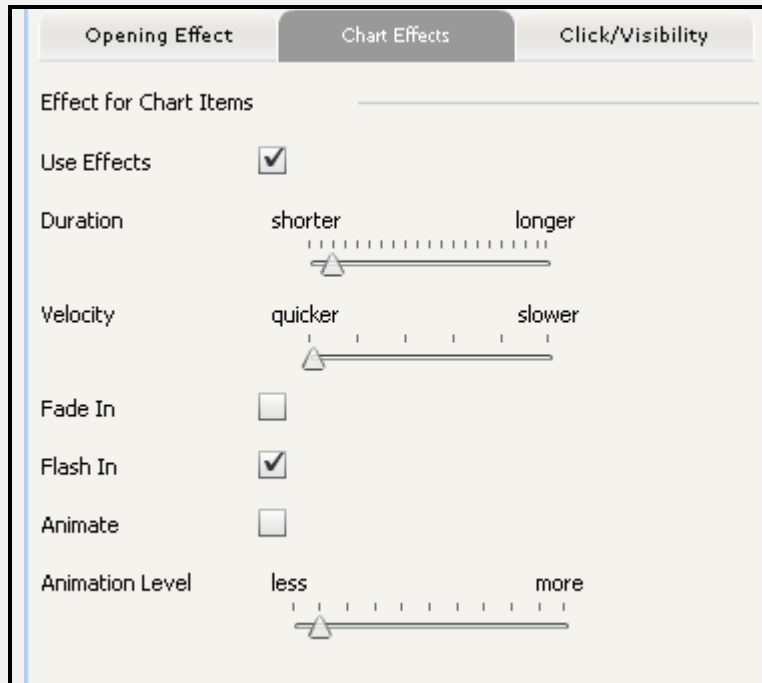
The Chart Table Editor

Chart Effect Behaviour

To enhance the look and feel of a chart component, or to direct the user’s attention to a specific data issue, most Micro Charts have the ability to present behavioural effects. For example, the line in the line charts can be made to fade in, flash or animate.

These behaviours are defined in the Chart Effect editor. In addition to defining the effects, the duration and velocity of the effect can be set so that the effect appearance lasts longer or animates more quickly.

Within Chart Tables or Tree Grids, it is possible to define different behaviour for the charts in each individual column.



The Chart Effects Editor

Alert Editors

Most Micro Charts come with the ability to present alerts that highlight a problem or some other issue. In the case of some charts or indicators, alerting is not relevant. For example, by definition, an alert icon already provides alerting.

Each different Micro Chart component will have slightly different alerting capabilities so the property editor will also vary slightly from component to component. In general, however, options allow:

- Alerts Based on Percentage or Value
- 'Higher' or 'Lower is Good' Selections
- Manual or Spreadsheet Target Data
- Colour Definitions for the Alert Types
- Warning and Critical Alerts

In order to emphasise the alerted data, behavioural effects can also be added to alerts. The options available are very similar to those in the 'Chart Effects Editor' above. Flash in and Animate effects can be added to the alerted data item, be it a line, bar or circle.

The duration and velocity of the effect is definable in the editor.

Define Alert | **Alert Effects**

Define Alerts

Use Alerts

Target Value(s)

Circle Radius

Higher is Good

Use Percentages

Range Source Data: Using Data Entry

Range Data

	From	To	
1	Minimum	50	<input type="color" value="#ff0000"/>
2	50	70	<input type="color" value="#ffcc00"/>
3	70	Maximum	<input type="color" value="#00cc00"/>

Define Alert | **Alert Effects**

Duration

Velocity

Flash In

Animate

Animation Level

The Alert Editors

More Information

For more information about all Inovista products, please go to:

www.inovista.com

Check in the Samples and Tutorial tabs for examples and videos that can be downloaded.

To ask a question about this document or any Inovista product , please contact Inovista with either of the following email addresses:

support@inovista.com

info@inovista.com

System Requirements for Installation

Xcelsius 2008 Service Pack 1 or later

Flash Player 9 or greater

At least 2 Gigabytes of RAM is recommended