ParetoChart Control Reference

Rank categories by value, with a cumulative-percent line.

Reference **Controls** **Charts** ParetoChart

Available from FrameworX 10.1.6.

The ParetoChart shows the 80/20 view of downtime reasons, defect causes or top alarms. Columns are sorted by value, largest first, and a cumulative-percent line on a right 0-100 % axis shows how much of the total the first categories account for. A reference line marks the 80 % point.

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Requirements

This component is Portable. It runs both on Windows and on Web Pages hosted on any platform.

Clients: works in the Rich Client and in the web client (HTML5), with the same values and layout on both. Verified on FrameworX 10.1.6.

Configuration

1. Go to **Displays / Draw**.
2. In the Components Panel, select **Charts**, then choose **ParetoChart**.
3. Click or drag-and-drop the component into the drawing area.
4. Double-click the object to open the configuration window.

Data Binding

- **Tag mode** (default): fill the **DataItems** list. Each item has a **Label** and a **LinkedValue** (a number, a tag or an expression).
- **Table mode**: set **UseDataTable** to true and point **DataSourceLink** to a Dataset query or table (`@Dataset.Query.Name` / `@Dataset.Table.Name`) or a tag that holds a DataTable (`@Tag.Name`). **CategoryColumn** and **ValueColumn** name the columns.

Behavior

- Categories with the same name are summed. Negative or missing values count as 0. Ties keep the input order.
- With **TopCount** greater than 0, the categories beyond the top N are summed into one **OtherLabel** column, which is always drawn last. With more than 100 categories, the chart draws the top 99 plus Other.
- When the total is 0, the cumulative line is not drawn.
- At runtime, a click on a column writes the category name to the tag in **SelectedItemLink**. The tag is written only when its value changes.

Properties

Property	Description	Default
DataItems	Tag mode: the list of items (Label, LinkedValue).	(empty)
UseDataTable	Read the categories from a table instead of the DataItems list.	false
DataSourceLink	Table mode: the data source (Dataset query or table, or a DataTable tag).	(empty)
CategoryColumn	Table mode: column that holds the category name.	Category
ValueColumn	Table mode: column that holds the value.	Value
TopCount	Number of categories drawn before the Other column, 0 (all) to 99.	0
OtherLabel	Name of the column that sums the categories beyond TopCount.	Other
ReferencePercent	Position of the reference line on the right axis, 0 to 100.	80
ShowReferenceLine	Draw the reference line.	true
ShowMarkers	Draw markers on the cumulative line.	true
CumulativeStrokeThickness	Thickness of the cumulative line, 0 to 10; also sizes its markers.	2

ShowAxisLabels	Show the axis labels.	true
ShowCategoryLabels	Show the category names under the columns.	true
ShowGridLines	Show the grid lines.	true
LabelFontSize	Font size of the labels.	11
LabelFontFamily	Font family of the labels.	Verdana
SelectedItemLink	Optional tag that receives the clicked category name.	(empty)
Localize	Enable runtime text localization.	false

Colors follow the Display theme by default: each color property has a theme slot. Set an explicit color (#AARRGGBB) only to override the theme. Color properties: **ColumnFill** (theme accent), **CumulativeStroke** (theme amber), **ReferenceStroke**, **AxisStroke** and **LabelForeground**.

Example

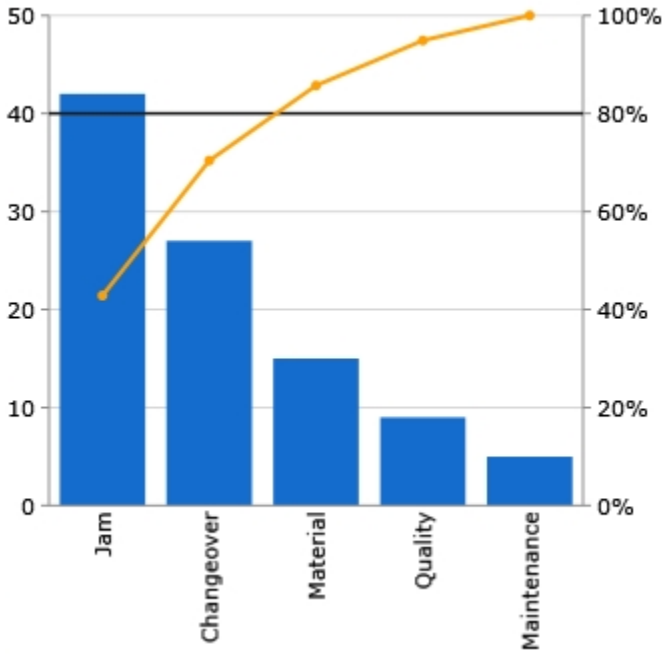
Downtime minutes by reason, in tag mode with five items:

Label	Value	Cumulative %
Jam	42	42.9
Changeover	27	70.4
Material	15	85.7
Quality	9	94.9
Maintenance	5	100

The chart sorts the columns from the largest to the smallest whatever the input order. The cumulative line crosses the 80 % reference line between Changeover and Material: those three reasons cause most of the downtime.

Runtime Execution

At runtime the ParetoChart re-sorts and redraws when the values change. The image shows the example above in the Rich Client; the web client draws the same chart.



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