JChart Software Description Document

# Purpose

This document shall serve as guidance for create and maintenance of the JChart library and application.

# Definitions

* Chart – the collection of items drawn that include axes, gridlines, the legend, titles, labels, and plots.
* Series – an array of single data points.
* Dataset – an array of series, each with the same number of data points associated with a resource.
* Plot Data – a set of data points. May or may not be created by two series.

# Requirements

1. In the main interface, the user shall be able to:
   1. drag-n-drop files of different types (that conform to a standard interface) for plotting. The control key shall signify that the file is to be added if held down during a drag-n-drop operation.
   2. navigate through the list of series within a dataset with next/previous buttons.
   3. navigate to the next/previous dataset series if at the end/beginning of a dataset.
   4. remove data by
      1. selecting with right-click drag, then delete.
      2. going to the data table, selecting the points, then delete.
   5. edit data in the tables.
   6. reorder plots.
   7. save:
      1. entire or select dataset data.
      2. an image of the chart in PNG format.
      3. an image of the chart in SVG format.
      4. an image of the chart in JPEG format.
      5. the chart configuration.
      6. the entire chart (configuration and data).
   8. apply a function to each point in a series.
2. In the data table interface, the user shall be able to:
   1. show
      1. all points.
      2. visible points only.
      3. hidden points only.
   2. remove points (See 1.d.ii).
   3. edit data (See 1.e).
   4. add/insert data?
3. The library shall:

# Use Cases

# User Interface

* Navigation Pane
* Chart Tab
* Data Tab
* Properties Dialog

# Library Widgets

* JChartFrameView
* JChartView
* ChartView