

ITS Graphical Report Maker

Commercial Graphing Package Technical Proposal



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Revision History

Revision	Date	Author(s)	Section	Comments/Changes
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1. Introduction

The purpose of this document is to present technical information regarding an external commercial graphing package to be potentially used on the ITS Graphical Report Maker system. Currently available on the market as a baseline for development of the graphical applet for the system is a program named R-Chart. The intended audience for this document is the project requestor and the project manager.

2. Scope

This document is intended to supplement the "Project Planning and Strategy" document in terms of the Risk Management section. It discusses both economic and developmental reasons for the acquisition of such pieces of software.

3. Expectations and Impact

The developmental reasons for the purchase of the piece of software are listed as follows:

- 1. Immediate extensibility for different types of charts, including bar charts, pie charts, scatter plots, and the combination thereof.
- 2. Native exportation to .gif, .jpg, and .png image files.
- 3. JDBC Data Population for real-time updating.
- 4. Zoom and scroll functionality.
- 5. Editing of all labels and colors.
- 6. Logarithmic and standard scaling.
- 7. Fully tested for immediate distribution.

The purchase of the product will also allow for the development of the "Select and Zoom" functionality requested by the customer as the license allows for modification of the source.

The impact of the purchase is that for the amount of time that it takes the development team to create a program that meets the above requirements and specifications, a much cheaper solution is currently available. It is estimated that this team would require several hundred hours of coding time to complete the graphing package alone, which is much too costly—both in terms of the lost time as well as features that will need to be cut from the scope to complete the project.

4. Risks

One risk identified towards the acquisition of this software is that it does not meet the requirements of the customer as to features required. This will be mitigated by continued

investigation into other packages as well as creating a demo graph prototype for the customer to approve of or suggest changes to.

Another risk that is identified is if this package, or any package, cannot be obtained. A detailed mitigation plan will need to be constructed if this risk occurs as this will likely affect the timeline and scope of the project.

5. Resources

The cost of the product is \$65 US and includes the cost of the source code and the license to modify the source code as needed per the development project. Further information regarding licensing and cost may be found at: <u>http://www.java4less.com/reg_bmt.htm</u>.

6. Conclusions

The company that produces this software package has a website that details the specification for the R-Chart Product. That information may be obtained from http://www.java4less.com/charts_e.htm. In addition, the site also contains the Application Programming Interface (API) that will aid the developers in more effectively evaluating the system for use in the GRM.

It is the recommendation of this development team that for the small cost of this commercial graphing package, more time can be devoted to enhancing other features of the Graphical Report Maker system, and in the end, have a much higher quality product.