

RIIS iBloc Dashboard

Can iBlocs save time on simulations?

Abstract: This whitepaper describes the RIIS Dashboard and RIIS Dashboard iBlocs developed to support rapid dashboard visualization and prototyping.

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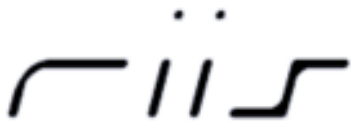


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Can iBlocs save time on simulations?

With the release of iRise 8.5 and the iBloc API, new and potentially limitless functionality was added to the studio to empower modelers. New functionality can be added to the studio by leveraging jQuery and the iBloc API to create custom screen behaviors and new functionality. But what does that mean to the overall lifecycle of modeling a simulation? Is it just geeky-hype, or can iBlocs truly save time (and cut cost)?



Figure 1. Switch View simulation with data and charts



Figure 2. iBloc simulation with functional charts

The Challenge

RIIS has developed and implemented numerous call center, customer portal, and dashboard applications over the past 5 years. During that time, we've seen a variety of different approaches for documenting, and communicating requirements and behavior from Use Cases, screen shots and wire frames. In each case, some aspect of the requirements were not

Upon completing those steps, the modeler would then create a series of switch views in the studio, oftentimes passing data via the clipboard to drive both the report result and the displayed graph. This led to longer modeling cycles, and resulted in a slower simulation due to the increased size and data flow required. The image below shows only a portion of the switch view actions needed to meet the requirements and it is only one of many screens with similar reports and functionality in the prototype.

The Introduction of iBlocs

From the iRise website "iBlocs™, now available with iRise 8.5, are powerful, functionally rich, reusable UI components and behaviors that enabling the creation of visualizations ten times faster than before. Using iBlocs, complex UI behaviors and business logic can now be visualized in seconds and makes iRise accessible to a wide range of user skill sets.

iBlocs enable visualization authors to intuitively assemble in seconds visualizations that contain complex behaviors. For the novice user, it offers a path to rapid learning and the capability to build visualizations quickly and simply. For the more seasoned user, it enables reusable components that enforce best practices.

iRise 8.5 also offers an iBloc™ Application Programming Interface (API) that enables the quick creation of iBlocs from thousands of pre-built components freely available on the Internet. iRise also has made available an initial set of iBlocs that are freely downloadable from a marketplace and can be added to visualizations in seconds."

RIIS has taken full advantage of the new functionality by participating in the beta development cycle with iRise as well as leveraging this new feature to solve existing challenges.

The Objective

The objective of the iBlocs RIIS created was to minimize the modeling time required to prototype dashboards. Drawing on past experiences and leveraging our approach on dashboards and data presentation, a set of gauges and charts were identified as potential candidates to develop into iBlocs.

After reviewing the candidates for usability and suitability, the following were selected for development:

- RIIS Flot Line Chart (capable of both line and bar charts)
- RIIS Flot Gauge
- RIIS Pie Charts
- Google Charts



Figure 4. RIIS Flot Line Chart



Figure 5. RIIS Flot Gauge



Figure 6. RIIS Pie Chart

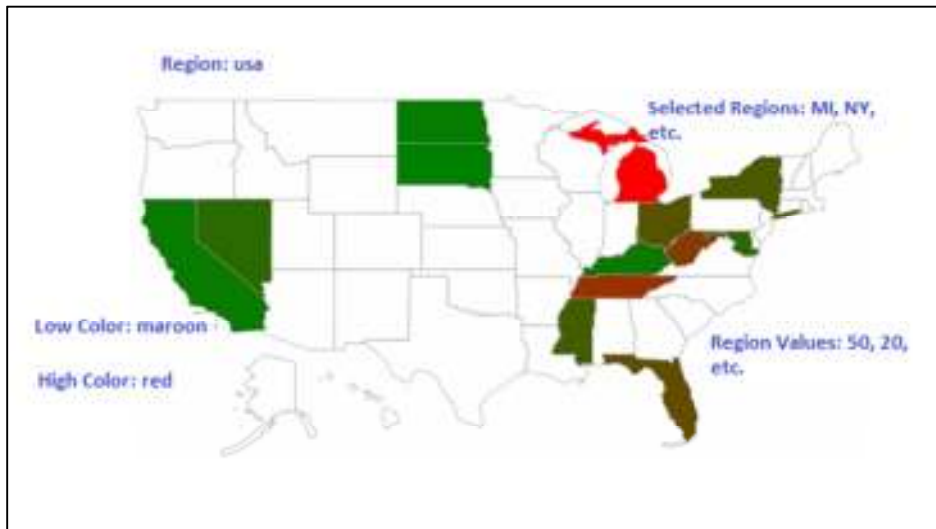


Figure 7. RIIS Google Charts

These and other RIIS iBlocs are available at <http://www.riis.com/riishelpfiles.html>

The Solution

After the development of the iBlocs was complete, it was time to model the solution to see if the objective had been met. Would the new iBlocs truly reduce the time required to prototype a working dashboard with multiple data sets and improve the performance issues experienced with larger, switch-view based simulations?

RIIS used each of the new iBlocs (and the Line and Bar charting capability of the RIIS Flot Line Chart) along with the iRise developed horizontal slider to create the prototype.

The dashboard uses the slider functionality to change the time zone the dashboard reports are for (Entire US, Eastern, Central, Mountain and Pacific).



Figure 8. iRise Horizontal Slider

The Line Chart was utilized for Call Volume metrics. It uses 5 different data sets within a single data sheet to report the 5 different TimeZone volumes.

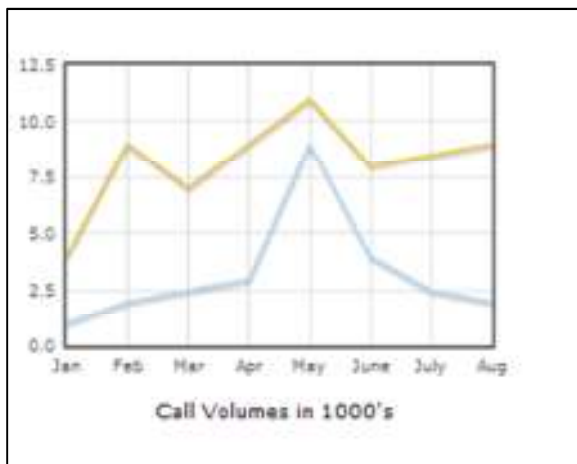


Figure 9. RIIS Flot Line Chart displaying Call Volumes

Pie Charts were used for Call Duration and Case Status metrics, using the same approach as the Line Chart for data presentation.

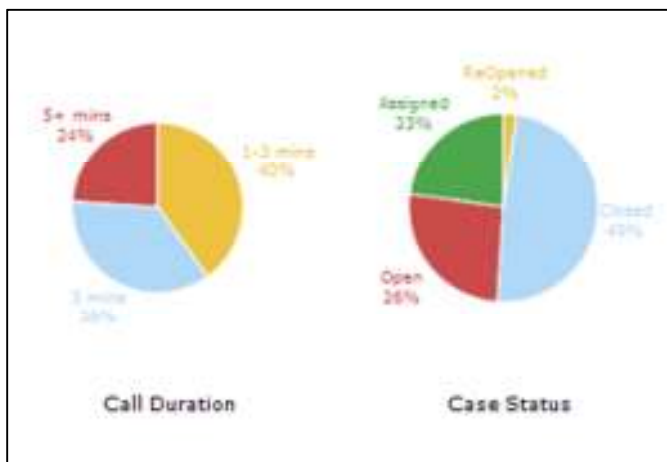


Figure 10. RIIS Flot Pie Charts displaying Call Duration and Case Status

The Gauge is the only iBloc used in the dashboard that doesn't utilize a data sheet, instead using the object palette in the studio as its data source.

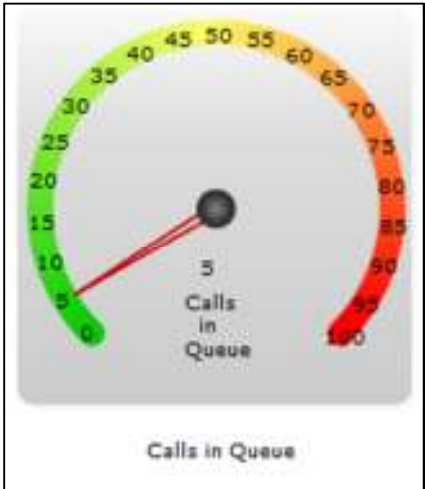


Figure 11. RIIS Flot Gauge displaying Calls in Queue

The Bar chart functionality was used for the Calls by Region. It uses 5 different data sets within a single data sheet to report the 5 different Regions calls.

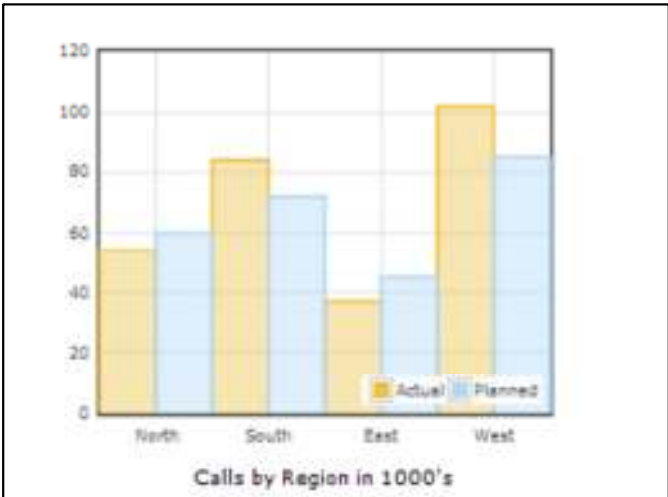


Figure 12. RIIS Flot Line Chart in Bar Chart mode displaying Calls by Region

The final result was a functional dashboard displaying multiple data sets based on the user selection of the slider.



Figure 13. RIIS Dashboard

Conclusion

The use of the custom iBlocs drastically reduced the modeling required to produce the dashboard. The time to assemble and configure the dashboard was measured in hours compared to the days of work required for each screen using the switch view method.

The introduction of the iBloc API has opened nearly limitless functionality within the iRise studio including dynamic graphs, custom screen controls and external data sources.

If you are interested in learning more about iBlocs, Visualization, and how RIIS has leveraged it to increase velocity and reduce cost by delivering faster, please [contact us](#) today, or visit us on the web at <http://www.riis.com>.