

Re-inventing and Re-implementing the Wheel. Visualization Component Reuse in a Large Enterprise

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Abstract

Most information practitioners will have implemented an interactive bar chart at some point in their career. In a large enterprise like IBM, we have hundreds of bar chart implementations available, across a number of different platforms. This represents a lot of duplicated work, and a potential maintenance nightmare. Ensuring correct and consistent design across the enterprise becomes much harder as a result. Adding to this problem is that our customers sometimes require new visualization types to be added to our products, or want to existing types tweaked to suit their needs.

In this talk I will talk about some of the practical problems we face in this area. I will also present an IBM rendering and mapping framework that represents a solution to some of these problems. By abstracting two key phases of the traditional information visualization pipeline, we can flexibly insert new mappings into products and facilitate deployment of previously created visualizations across different target platforms. I will outline some of the high level design constraints and present samples where possible.

Biography: Frank van Ham obtained his CS and PhD in Computer Science from the University of Eindhoven, specializing in graph visualization. After his doctorate studies, he joined IBM Research where he was one of the co-creators of the Many Eyes visualization service. Since 2009, Frank is part of IBM's Software division where he helps integrate core infor-



mation visualization functionality into IBM's software products. He is a current associate editor for IEEE Transactions on Visualization and Computer Graphics (IEEE TVCG) and the 2012 chair of the IEEE Information Visualization conference. Frank's current research interest revolve around visualization frameworks, collaborative visualization, network visualization and general user interface design.