Current optical networking technology has enabled a novel approach to both computation and visualization. A short overview on the OptIPuter NSF-project is presented. In this project, a distributed virtual computer is constructed, whereby the traditional computer bus is replaced by transatlantic optical network connections. The presentation will address in detail how SARA has built a 100Mpixel graphics device in Amsterdam, to drive a 100Mpixel display device in California. Sample use of this technology for the visualization of high resolution data is discussed.