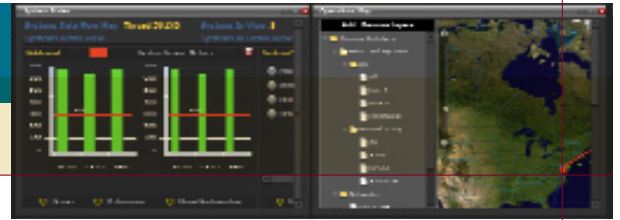




## Intelligent Information Integration



Nearly all organizations struggle to some degree with information silos, multiple data owners, and disparate applications and data formats. However, within the high-pressure, world of the U.S. Government's intelligence community, these challenges can be significantly more complex, and the stakes considerably more critical. That's why, in November 2008, Edge Technologies was asked to join a team of IT experts working with the U.S. intelligence community to develop and deploy web-based visualizations to help streamline information access, analysis and decision-making.

Providing staffing, engineering and technology services, Edge's preliminary work focused on the development of visualizations in the form of multiple data rendering and interaction widgets. These widgets provided multiple perspectives over a given data set to allow users to choose how they view data, as well as view-space and navigation configuration flexibility. The initial project employed a permissibility model to provide real-time, meaningful, quick-glance and high-density information access regarding the health of critical IT infrastructure system services and processes.

The Edge solution is completely platform and data-agnostic. If it can be measured or quantified, Edge can integrate and visualize the information. Quickly recognizing the potential of Edge visualization technology within the broader intelligence field, the client tasked the Edge team with other contracts within the larger initiative.

Prior to the design and deployment of Edge visualization technology, analysts and decision makers were often forced to make multiple inter-departmental and inter-agency requests for information and wait for responses. Final decision making processes typically involved manual reviews, comparisons and compilations of hard copy spreadsheets and reports. Other technology firms had attempted to provide visualization solutions. However, after multiple contracts resulted in time-consuming data integration efforts yielding inflexible and difficult to understand visualizations, the prime contractor turned to the visualization experts at Edge.

As team members and team leads on the new visualization effort, Edge personnel developed a visualization framework and next generation widgets to include the geospatial view. The Edge solution dramatically reduced development time (and costs) and quickly provided a system that seamlessly collects and consolidates information from a variety of tools and applications, aggregates the information and presents it to the user through a highly customizable screen.

### **Edge Brings Data Visualization to Intelligence Agency Desktops**

Information has always been the cornerstone of the intelligence business. However, in the 21st century, intelligence requires the integration of information, technology and human insight. Rather than too little information, today decision-making is delayed by either too much irrelevant data or a lack of access to the right data.

Timely decision-making requires the ability to quickly collect information from disparate resources, sort and present it to the right people in a concise, visual manner. And in today's IT-reliant world, technology is both a weapon and a risk.

Using technology to identify, track and analyze emerging threats, particularly threats against technology itself, requires an in-depth knowledge of IT, and the creative innovation to make it easy for people to use and understand. This is what Edge Technologies does.



# Clever Widgets, Intelligent Solutions

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Visualizing quantitative information requires a left brain/right brain approach; a rare combination of technological expertise, creativity and an understanding of how humans think. Data visualization is not new. Classic examples such as the creation of the Periodic Table by Dmitri Mendeleev in 1869 and Florence Nightingale's 1858 Coxcomb diagrams led to new levels of understanding in science and medicine. Using advanced technology, Edge's data visualization experts today can transform an organization's existing data resources into user customizable graphical displays with drill-down capabilities.

A hallmark of Edge Technologies' approach is to begin with the end in mind. Prior to starting on the project, Edge interviewed key analysts and decision makers to determine user wishes, challenges and concerns. Beyond technological considerations such as implementation, integration and ongoing management, Edge worked to understand how individuals work, what information is most useful and how decisions are made.

Leveraging its expertise in data integration with its use of leading-edge technologies, Edge was able to significantly accelerate the visualization process. Due to the team's extensive work within the intelligence community, there was virtually no learning curve. And its comprehensive knowledge of data access and security significantly reduced the time and risk often associated with the integration of data from disparate sources, while providing the security and content management functions needed to control data, views and access into the system.

## Results

The Edge visualization solution provides the intelligence agency instant, role-based access to information presented in a user-customizable format. It enables the client to design, construct and deploy real-time, custom, operational and analytic visualizations, as well as create ad hoc reports using their existing data sets, web applications, and internet services – without incurring significant software development cost. Perhaps best of all, the Edge solution is repeatable and easy to configure, allowing technical administrators to quickly construct virtually any relevant visualization needed to meet business and mission goals.

The results are dramatic. Development time is significantly reduced, cumbersome manual collating and collection processes are eliminated, the chance for human error is minimized, and security is enhanced. The Edge solution provides analytic and development staff the ability to create meaningful, relevant and interactive custom visualizations and displays... effectively and efficiently.

The end result is intelligence defined: an increased capacity for learning, reasoning, understanding; an aptitude for grasping truths, relationships, facts, meanings, to make better decisions faster.

## About Edge

Edge Technologies specializes in managing the way people view, share, engage, and secure information. Businesses and government agencies rely on Edge COTS and custom solutions to align their content with their mission.

Edge Technologies is focused on core practices in Data Visualization, Information Integration, and Flex Consulting. Edge products and services empower your internal staff to accelerate the accomplishment of mission objectives, and to achieve a greater return on IT investment.

Since 1993, Edge has been providing leading-edge products and services to many of the world's most sophisticated network infrastructures. In fact, Edge's core management and technical team developed such groundbreaking solutions and products as N-Vision™, enPortal™, and AppBoard™.



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