AT&T Visualization of Massive Data Sets (VMDS)

AT&T Visualization of Massive Data Sets is a powerful system that provides a visual display of massive network data sets. It enables managers to understand networks from a customer or service perspective, at a higher level than network element management. At AT&T, we know first-hand that VMDS is very effective, because our network managers use it to monitor hundreds of millions of call records daily. Besides monitoring, VMDS allows network managers to isolate anomalies by interacting with 3D maps and simple graphs, and thereby reroute traffic to ensure seamless network performance for customers.

This visualization technique is very flexible and can be used to analyze any network data that involves transactions, map locations, and relationships between discrete entities. Researchers have applied the VMDS technology to frame relay and ATM networks and are currently finding new applications such as to the Internet, where geographic locations are less important or are not even known.

VMDS also allows people at multiple sites to view the same data and to work collaboratively to solve issues over the web.

Sample Applications:

- Service Industries VMDS can help companies in the service industry, including transportation, retain, finance, insurance and travel, better meet their customer needs with the help of graphical displays to monitor their data.

- Virtual Operations Center: Create a Virtual Operations Center by using VMDS to connect workers and customers via a web browser. Technicians out in the field can help diagnose and address problems without needing to reside at the operations center.
What’s Unique About AT&T Visualization of Massive Data Sets?

- Scales to handle half a billion records loaded into one viewer
- Offers interactive 3D maps – a vast improvement over static 2D maps – to understand complicated data
- Integrates visual data mining and on-line network management, by providing an integrated view of network configurations, performance, events and customer data
- Date-independent architecture provides the visualization of non-telecom transaction data, including credit cards, insurance claims, etc.
- Runs on full-scale databases using stream data queries to access data quickly
- Compatible with multiple hardware and software environments, server runs on any UNIX variant, the client runs on any Java supported platform
- Employee high-quality, interactive 3D graphics that scale up to mega-pixel power-wall displays
- Provides a collaborative Virtual Operations Center via VMDS, the web client
- Allows for the comparison and animation of historical data

For additional information, please contact us via e-mail at attip@att.com.