

**Case Type** – Massive Securities Fraud

**Environment** – Complex, Desktop, Raw Transaction Data, E-Mail

**Industry** – Financial Services

**Scenario:**

A massive stock fraud operation with offices on Wall Street and in Florida lied to its customers and fabricated and manipulated hundreds of securities. The enterprise was pursued by a few government agencies including the Securities & Exchange commission, the National Association of Securities Dealers Regulation, and the NY District Attorney's Office along with many individual investors representing millions of dollars of damages. Many of the principal individuals involved in criminal matters pled guilty. Many of the individual investors sued for money damages.

**Background Information:**

A group of plaintiff securities attorneys led the fight against the individuals and corporations involved in perpetrating the fraud. Together they represented individuals from all over the country, many who had lost their life's savings and their family's savings. The main evidence in these cases was the transaction activity in customer accounts over a certain period of time. That information was obtained from paper copies of customer statements, stock trade confirmations ("blue sheets") and other related documents. The task to reverse engineer the fraudulent practices and to calculate the correct damages was an enormous one. Teams of lawyers working for weeks with financial experts were still unable to make sense of the information they had so far obtained. One of the lead attorneys had known of GDF's successes in the past and called GDF in to help.

**GDF Involvement:**

GDF immediately dispatched a group of forensic technologists and GDF attorneys to aid in the planning of the data retrieval strategy. GDF was convinced that the data the attorneys required existed in electronic form in a stock trade database. Using its expertise in the securities field, GDF worked with the attorneys to ferret out what clearing firm among the parties involved in the matter would have actual control over the relevant data. GDF then worked closely with the teams of attorneys on the case to obtain, through legal pleadings and negotiations, the desired data, which in this case turned out to be stock transactions in a few hundred securities traded over the course of ten years. GDF worked with the clearing firm responsible for turning over the data and guided the output and receipt of the entire database of transactions over the ten year period. Because of the enormity of the data universe in this case, GDF created a plan to efficiently recreate the trading history in such a way that allowed the attorneys to "see" the activities of the fraudulent brokerage house as if they had been on site at the time the fraud was committed.

**GDF Findings:**

Once GDF obtained the data from the appropriate clearing firm, it set out to rebuild the data in a manner most easy to understand from a historical perspective in order to give the attorneys a heads up on the fraudulent activities that took place at the brokerage house. After weeks of recreating the data in a forensically sound manner in order to give the attorneys the chance to form their legal arguments and find fraud and damages, GDF realized that the data was not accurate - something was amiss. At that point GDF consulted with the attorneys and their industry experts to investigate why the data received from the clearing house did not match up to other independent information regarding the case. During those consultations, GDF technologists put the data through numerous experiments and double and triple checks and came to the conclusion that the data was inaccurate because of the way the clearing firm reported it, and delivered it. This information was relayed to the IT department at the clearing firm who reviewed GDF's conclusions and realized their mistake. The decompression algorithms used to output the data from the original trading records at the brokerage house were wrong. The clearing firm immediately corrected the problem and re-outputted the data. This time, GDF checked the data for accuracy and found that the data was unchanged from its original state. Now began the process of rebuilding the data to be used in a constructive manner by the attorneys.

**Outcome:**

Using limited technical documentation supplied by the clearing firm together with its strong knowledge of digital data, GDF recreated the entire application used to record stock trades for customers who were defrauded. All ten years of data was put together in such a manner so the attorneys and their experts could form their legal arguments to win the case. Over a period of more than one year, GDF was able to find and report over two hundred specific instances of stock fraud and over ten million dollars in otherwise unknown money damages.