

## INDUSTRY

- Foreign Exchange Trading Services

## CHALLENGE

- Optimize their IT environment for improved security, reliability, scalability, and communication.

## SOLUTION

- Engage CDW to help design and implement multiple IT solutions.

## BENEFITS

- Improved security of online data
- Improved scalability and reliability through virtualization
- Converged IP network improves both internal and external communication
- Data compliance and backup confidence from TSM

“Everything is organized; everything is well put together and well thought out. I’m very happy with the work we’ve done with CDW and really, it’s because CDW provides an expert opinion that’s unbiased. And that’s important for us.”

Muhammand Rasoul  
Chief Operating Officer  
Global Forex Trading

# Consultation, Design, and Implementation of Multiple IT Solutions

## Global Forex Trading



### The Customer

Global Forex Trading (better known as GFT) is a world-leading provider of online foreign exchange trading services for individuals and institutions worldwide. GFT, located in Ada, Michigan and founded in 1997, has experienced rapid growth with an international workforce of more than 200 employees in six locations including their Ada, MI headquarters and offices in Chicago, New York, London, Tokyo, and Sydney. GFT has made the Deloitte Technology Fast 500 from 2005-2007, the Inc. 500 in 2006, and the Inc. 5000 in 2007, reflecting their rapid growth.

GFT serves tens of thousands of customers, almost exclusively online, in more than 120 countries. Through the company’s free trading software, DealBook 360, DealBook WEB, and DealBook Mobile, customers speculate on the exchange rate differences between two currencies. From just about anywhere in the world with Internet access - web based, wireless, or desktop - they can monitor, buy, and sell currencies with the goal of seeking profit.

### The Situation

GFT focuses on providing their customers an exceptional experience with a best-in-class online interface. In order to attract and keep customers, GFT needs to be more accessible, more reliable, and more secure than their competitors.

GFT processes millions of transactions a year. On their busiest days, GFT’s system may process 150 transactions per second. Being open from Sunday 5PM Eastern - Friday 5PM Eastern presents challenges. Customers rely on GFT being open and accessible - it’s this confidence and how easy it is to do business that keep GFT customers coming back. During business hours, GFT can’t have any downtime for clearing caches, patching applications or optimizing the system.

#### Technology

The CDW Berbee implemented solutions included:

- Security penetration tests
- Cisco CallManager
- Cisco MARS
- IBM Tivoli Storage Manager
- VMware

NOTE: CDW acquired Berbee Information Networks in 2006.



## ABOUT CDW

CDW has delivered technology solutions that drive bottom line results for our customers. Our entrepreneurial spirit and values guide us and we continue to set the standard for uncompromising customer support and technical leadership.

## WHY CDW

CDW is a proven partner for IT solutions, including unified communications, security, remote managed services, information worker solutions, and virtualization and optimization. CDW is a leading provider of technology for business and is among a handful of companies to achieve the highest level of partnership with our strategic partners.

## TALK WITH US

800.750.4239

[www.cdw.com](http://www.cdw.com)

Muhammad Rasoul, GFT's Chief Operating Office explained, "We are dealing with a very large number of transactions, almost 100% automated, and so technology is one of the most important things here and the stability of the technology. We can't have our system down when the markets are open, and for us, the markets are always open."

To optimize their IT environment, GFT engaged CDW for consulting, design, and implementation of multiple IT solutions. Specifically, GFT and CDW concentrated on key areas of:

- Security
- Optimizing the infrastructure for scalability and reliability through virtualization
- Implementing a converged IP network
- Backup and recovery with IBM's Tivoli Storage Manager (TSM)

CDW was brought in because of the expertise they could offer across the IT spectrum. Rasoul continued, "We certainly don't have a shortage of IT experts inside our organization. We're not unused to doing things ourselves. But what I like about CDW is that it is an independent organization I can go to, to get an unbiased opinion on what we should do and how we should do it."

## Security

Because almost all of GFT's business is conducted online, they must be diligent about identifying threats that would try and interrupt business. For Rasoul, the challenge has become apparent: "We attract a lot of attention online. Online trading, most of the time, if not 99.9%, is done through some type of online interface, so we've dealt with our share of cyber terrorism over the last 3 years."

With each transaction, customers need to know their information is secure. To maintain the highest confidence that information and systems are safe, GFT approached CDW for security consulting, including penetration tests, in order to spot weaknesses. Exercises like the penetration tests

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Eric Johns  
System Administrator  
Global Forex Trading

have proved so successful in strengthening GFT's security, they are now conducted quarterly.

For Eric Johns, System Administrator for GFT, the benefits are clear:

"CDW security assessments are both terrifying and great all at the same time, depending on how you look at it, because the people CDW brings to bear are so good at what they do, they expose a lot of things you wouldn't think about. And instead of leaving you hanging, they come back in and show you where to look to get things fixed and where the weaknesses are to help you get holes patched up."

To further strengthen its security defenses, GFT worked with CDW to install and configure Cisco MARS (Security Monitoring, Analysis, and Response System) for monitoring the security of network systems and host applications.



CDW will also be providing remote monitoring for the system, something that allows GFT to dedicate internal IT resources to more strategically aimed projects that grow GFT's business.

## Scalability and Reliability through Virtualization

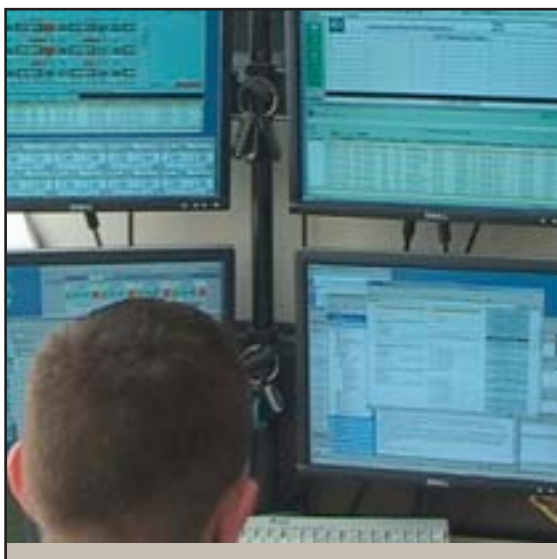
GFT had reached end-of-life on their web server farm and wanted to put in a system that would increase uptime, increase reliability and increase redundancy. "Making sure those sites stay up is critical to our customer's confidence in what we can do for them," clarified Johns.

Johns and his team reviewed the different technology available and became excited about VMware technology and what virtualization could offer.

CDW was asked to help size the environment, advise on hardware and software decisions, and lead the implementation and testing of the new virtualized environment.

The new VMware based server virtualization environment now allows GFT's IT team to route web servers from one physical server to another to do routine maintenance, trouble shoot, or repair an outage and get the server backup online in a matter of minutes. And this is done with no downtime and no noticeable effect on end- users.

An additional benefit GFT has experienced since virtualizing is in the procurement of new server hardware. "It was a struggle to get new hardware, but since going virtual, now the IT guys manage it and when they need a new server, they can quickly push a new image out," explained Jeremy Whalen, GFT's Manager of IT Infrastructure.



## Implementation of a Converged IP Network

Having locations across the globe presented challenges in how GFT communicated both between branches and with their customers. Expensive international phone rates and complicated foreign phone numbering schemes made connecting with the right person difficult. To solve these issues, GFT chose to implement a converged IP network, presenting another problem – how to best roll out IP systems to each office location in a cost effective and timely manner. Whalen explains, "A big challenge we have is that most of our remote offices are small, so we can't afford to have a lot of infrastructure there. So by moving to a converged system, we don't have to push out servers, we don't have to push out voice mail servers, all we have to push out are routers, switches and phones."

CDW was able to help design and implement a converged IP network using Cisco CallManager technology. All of GFT's offices are now connected via a MPLS which CDW was able to provide and configure all necessary routers and switches. The IP network handles active directory, the majority of email communication, and voice and video across the GFT organization.

GFT's converged IP network allows for the routing of all calls seamlessly from one office to another, regardless of geography, with minimal hold times, and no dialing of foreign numbers. The system has been critical in improving the customer experience and making internal communication more efficient.

"CDW brings to the plate a lot of specific expertise. We're generalists, we deal with all kinds of problems, so being able to put in a phone system as big as we put in, you need some expertise and that's what CDW brought to the table."

Eric Johns  
System Administrator  
Global Forex Trading

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## Backup and Compliance Using IBM's Tivoli Storage Manager

As GFT continues to grow, more of its business falls under strict compliance and regulations, especially as to how electronic data and communication are stored. GFT chose IBM's Tivoli Storage manager as the crux of their backup solution. The TSM system backs up mission critical applications like the mail server, data base server, and the core of the active directory network so that vital systems are disaster resistant. CDW aided in the design and implementation of the TSM system, educating GFT in best practices for sustaining the environment and handing off the system to GFT in a state where it was easily maintained.

An essential requirement to GFT's TSM solution was being able to run the backup processes for their global offices remotely, allowing GFT to maintain control over the data from their corporate headquarters. The end result gives GFT confidence that mission critical systems and files can be rebuilt or restored quickly as well as providing compliance for industry regulations.

## A Partnership for Success

Since rolling out the different IT solutions with GFT, CDW is now helping the company evaluate future strategies for data storage and security. An important factor to the success of the CDW and GFT partnership has been the knowledge transfer that CDW specialists are able to provide GFT's IT team. Johns sums up CDW's role as:

"CDW brings to the plate a lot of specific expertise. We're generalists, we deal with all kinds of problems, so being able to put in a phone system as big as we put in, you need some expertise and that's what CDW brought to the table."

