

BEHIND THE CASE STUDY SERIES



Corporate One Federal Credit Union – Banking on Windows Security



Corporate One Federal Credit Union provides wholesale financial services to more than 760 credit unions in the United States. A mid-size organization with approximately 70 servers, Corporate One needed to replace its 50 Windows NT® Server-based machines because of discontinued support. The organization considered both Microsoft Windows Server® 2003 and Linux as alternatives, and decided to test Linux as a replacement for its four Windows NT-based domain controllers. However, after the nine-month effort failed due to security problems, Corporate One deployed a domain based on Windows Server 2003 and the Active Directory® directory service in just three days. Today, Corporate One is enjoying high network security and reliability from its new domain controllers and plans to migrate all its remaining Windows NT-based servers to Windows Server 2003.

Quick Facts

Customer Name: Corporate One Federal Credit Union

Industry: Banking Industry

Size: Large, 500 employees

Country: United States

Website:
<http://www.corporateone.coop/>

Corporate One Federal Credit Union Case Studies:

[Read](#) Credit Union Chooses Windows for Stronger Support and Security than Linux Provides

[Read](#) The Difference is in the Guarantee – CIO Interview with Kurt Lykins

Software and Services

- Microsoft Active Directory
- Microsoft SQL Server 2000
- Microsoft Windows Server 2003 Standard Edition

Why go behind the case study? Case studies are beneficial for technical decision makers because they can see a real example of a business problem being solved through the application of Microsoft technology. The story behind the scenes, however, provides detail into the decision making processes and IT best practices that ultimately led to the resolution of the business problem through the application of technology. Join us as we go Behind the Case Study at Corporate One Federal Credit Union.



Corporate One is one of the largest and most progressive credit unions in the United States. It currently has more than US\$4.2 billion in assets under management. Because Corporate One is in the highly regulated financial industry, each technology decision must be approached with a high degree of care, in measured steps. Corporate One recently decided to implement Microsoft Windows Server 2003 over a solution based on Linux and Samba because of network security considerations. The decision was motivated by unresolved security concerns with Samba that IBM and the Samba communities were unable to fix.

Moving to Windows Server 2003 resulted in lower total cost of ownership, easier network management, and a secure network infrastructure. We talked with Kurt Lykins, the Chief Technology Officer at Corporate One, and Chad Sturgill, a Corporate One Network Engineer, to learn more about what went into their choice of Windows over Linux.

Measured Responses to a Fluid Software Industry

The software industry moves at a rapid pace to integrate and develop new technologies. Corporations are not always able to integrate new technology as quickly, since they need time to analyze the impact of new software rollouts on their infrastructures. Making wrong choices can lead to a variety of undesirable consequences. Chad noted, "In a highly regulated environment, where as a wholesale financial institution we find ourselves, our security policies are going to be reviewed by an auditor at some point. Those security polices help protect member data, among many other things. Having half-done software that is running in a production environment as your primary identity management center is not an acceptable place to be. I would go so far as to say that it is probably in violation of the Graham-Leach-Bliley Act and potentially others. People count on those

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Chad Sturgill, Network Engineer, Corporate One

controls being there.”

The Search for a Solution

Corporate One began its search for a network security solution by looking at a variety of alternatives, initially focusing on a Samba implementation. The company believed at the time that it did not need the additional features that came with Active Directory on Microsoft Windows. Corporate One’s mindset back then was explained by Chad, “Instead of jumping into Active Directory and having full blown directory services, we were comfortable with what we had. Going with Samba seemed like a logical option, without considering some of the security implications that came up later.”

Corporate One's partner in this project was initially IBM. After nine months of active engagement with IBM, however, concerns arose about the viability of the decision to go with Samba. As Chad put it, “The show stopper was security. During the attempt to implement Samba, we were unable to implement key security lockout and account expiration policies. We needed to enforce these policies, and hence the inability to do so was a showstopper in the end.”

Chad described the issue further, “The final straw was that accounts would not lock out after repeated attempts to log in with a bad password. We knew that the policies had been set according to Samba’s documentation, and this was confirmed in communications with IBM and the author of Samba, Andrew Tridgel.”

IBM proposed a solution that CorporateOne was not comfortable with, as Chad explains, “IBM representatives said they understood the issue and how important it was, and that they would make a concerted effort to have those pieces fixed. But eventually they said, 'We'll commit to having this issue fixed, but because it is an open source community, we cannot guarantee that this is going to be part of any standard release platform.' I said that was an unacceptable place to be, as that would make Corporate One a community of one supporting this version of Samba. At that point, IBM's entire argument was that this change is important enough that the user community would likely bring it into a standard release eventually. This final response made it clear that there is

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nobody in charge. In essence, there isn't anyone who makes a commitment to having something accepted into a standard release of Samba and getting it supported."

We talked with Chad about his thoughts on whether IBM could have anticipated this type of problem arising before getting months into the effort. He replied, "My perception from the start was that a whole bunch of really smart people are getting together and working on Samba, so it would have what we needed in large part. It was troubling that when IBM became aware that we were having these issues, they did not know whether or not our scenario was supposed to work. That changed my outlook quite a bit. If you do not have a single entity responsible for making the decisions about what they are going to commit to, that is a big problem."

Choosing Windows and Microsoft

At the point where Corporate One's IT organization realized that IBM and Samba were not going to be able to meet its needs, the company turned to Microsoft. Kurt stated, "We put all of our effort into rolling out Samba. When the implementation stalled, we found ourselves under the gun. When we finally decided that we could not continue with Samba, we needed some manpower and some help from people who could come in, understand our environment quickly, and help provide some manpower. That is where Microsoft really stepped up to the plate."

Chad summarized the value that Microsoft provided, saying, "It went very well because we had a partner that owned the product," he said. "Microsoft knows the product and was able to come in and show us exactly what we needed to do to mold the product to fit into our environment."

Linux Platform Comparisons

Since Corporate One takes a measured approach to technology rollouts, we asked people at the company what they have learned from the experience of attempting to roll out Samba and eventually rolling out Windows.

In terms of security differences, Kurt said, "Everything has vulnerabilities. Microsoft to me has been the most transparent and has a more predictable cycle of applying security fixes than any

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other software provider out there. Just trying to understand, for example, whether an Oracle patch will affect us or not is very time consuming.” Kurt also states that Microsoft has a wide range of local resources who can help during a rollout of new technology. “Resource availability is something that Microsoft has going for it. We designed a share branching system for the entire country of Bolivia. For that implementation, we relied on Microsoft because we knew it would have resources in Bolivia who would be Microsoft certified and who could support it locally.”

Corporate One also noticed a variety of network management advantages after the rollout of Windows Server 2003. Chad had the following observations: “I like the administrator pack and the various tools that we can put on workstations for those who have administrator rights. The MMC was a great invention by Microsoft. They also make everything work in a similar fashion, so that people quickly get accustomed to using a tool they have limited initial familiarity with, like DNS.”

Chad also praises this unity of interface and management tools, as well as its benefits when bringing up new administrators: “It is an easy transition for an admin that is coming up through the ranks to understand how to use one tool as opposed to another, because the way they function is similar in nature. I like everything to be similar when working with tools.”

Chad felt that other platforms lack this type of uniformity. “In working with other platforms, where one company acquires another, you end up with this big conglomerate of applications that are supposed to be one product. But, from one admin tool to the next, they are completely different, and it takes extensive training to understand how to operate those systems.”

Managing Costs

Corporate One also has had some experience working through the argument that Linux is simply “free.” As Chad stated, “From the business unit’s perspective, when you go in and you talk about using a Linux distribution, the immediate reaction is often, ‘Wow, good—now I don’t have to budget for anything in the future.’ The problem with that is they are only getting that from the trade magazines, which say it’s free to deploy. It’s hard to reset people’s expectations and make them understand that it is going to cost

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Corporate One feels that costs are easier to predict with a Windows rollout. As Chad puts it, “We have rolled out some projects and operating systems outside of Windows, where we expected the cost to be X. Then we found out that the numbers are off, or worse yet, we found out that we had severely underestimated the amount of overhead, time, or training—so the final number is much different. I am much more confident in the numbers that we give back to our business units if it is a Windows-based implementation. I have a higher confidence level in estimating costs for Windows-based deployments, especially after being burned by estimating in other areas.”

Continuing Benefits of the Windows Platform

Corporate One has seen a variety of benefits from rolling out Active Directory on Windows. As Chad put it, “We have found a lot of uses for Active Directory services that we just did not anticipate having a need for, such as Group Policy management and the added benefits of being able to segregate different users into their own Organizational Unit for management purposes.”

Corporate One has also found additional benefits in the areas of Clustering and File/Print services. In terms of Clustering, Chad said, “There wasn’t a lot of training or anything involved in setting up Clustering Services. It was new to us, but we got through it fairly quickly. It was a positive experience.”

With File/Print services, Chad simply feels that, “Windows has always offered a great file and print solution.”

Conclusion

Corporate One was able to leverage numerous advantages of the Windows platform as part of its rollout of Windows Server. These advantages ranged from ease of management and security configuration to overall speed of deployment. Corporate One continues to see strong benefit in rolling out the Windows platform moving forward. As Chad stated, “Microsoft has been making forward progress every year in delivering a more stable and secure platform, and the experience has been a positive one.”

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Chad Sturgill, Network Engineer, Corporate One

About Kurt Lykins

Kurt joined Corporate One in 1993 and was promoted to management in 1997.

Kurt has designed, programmed and supported various types of servers and network systems. In his current role, he manages and directs Corporate One's information technology department and provides corporate technical management for all systems projects. With more than 15 years of computer network and programming experience, his expertise has made him a sought-after speaker at many credit union forums.

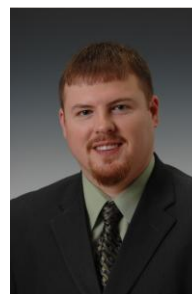
He is a graduate of Ohio University and holds degrees in MIS, accounting and business pre-law.

About Chad Sturgill

Chad Sturgill began his career with Corporate One in 2000 as a systems administrator. In 2003, he was promoted to a Senior Systems Administrator and was promoted again in 2005 to Network Engineer.

Prior to joining Corporate One, Sturgill worked as a Networking Systems Specialist at J.T. Schneider/Infinitek. He also has worked as a Physical Layer Installer/Service Technician for Netwave Corporation.

Sturgill is a Certified Information Systems Security Professional (CISSP).



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