

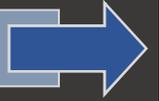


EXCEL YOUR CORE WITH VDI

The benefits of running Keystone by Corelation on a Virtual Desktop Infrastructure (VDI) and partnering with Pure IT Credit Union Services for Infrastructure Guidance and Support

February 5, 2018





Executive Summary

This is an exciting time for credit unions. Technology advancements are enabling credit unions to deliver upon their commitment to members for great service, modern conveniences, and security, that rival any services from large financial institutions. The ability to compete with the “big fish,” without compromising their home-town feel, yields great sustainability for credit unions to continue making a difference in the communities they serve.

While technology comes in all shapes and sizes, there are a few IT solutions every credit union should consider, especially when converting to a new core system. One of the most impactful is the use of a virtual desktop infrastructure (VDI).

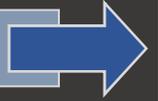
Over the past ten years, VDI has gained more popularity and has paved the way for new technology innovations in every industry. Today, VMware, Citrix and Microsoft all offer their own VDI platforms. When a credit union is using one of these platforms to support their systems and applications, such as the Keystone core by Corelation, they are amazed at all the possibilities. Here are a few ways VDI is dramatically changing the credit union industry by excelling core services and other systems:

1. **Core Conversions** – Reduces the amount of resources, time, and stress during a core conversion. Launch a new core testing environment seamlessly using the same hardware and peripherals you currently use. Allows staff to easily toggle between the old core system and Keystone to train and practice transactions.
2. **Mobility** – Using your new or existing instance of Keystone to safely and securely open accounts, take loan applications, and process transactions... *in person* and onsite at *any location*, such as select employee group offices, community centers, retirement homes, PTA meetings, local schools, conventions, or any other local events.
3. **IT Efficiency** - Enables the IT department to efficiently process patch updates, install new software, troubleshoot issues, and respond to service tickets within minutes, instead of hours or days. Spinning up a new desktop or allocating additional memory or storage happens with the click of a button.
4. **Security** – Encrypts and protects the credit union’s data and member information in compliance with NCUA and Regulatory Requirements. Disaster Recovery, Business Continuity, and managing remote users is easy and secure.

This document will expand upon the above listed benefits. However, this is not a complete list of the possibilities of VDI application for credit unions. The VDI platform is customizable and can meet the needs of a credit union of any size.

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Core Conversions

With technology constantly changing and the expectation for businesses and service providers to keep up, it is no surprise when a credit union makes the decision to convert to a new core system, in hopes to provide their staff and members with a more efficient and modern experience. While many credit unions across the country transition to a new core each year, it is an undertaking that a single credit union very rarely goes through. And because the core system impacts almost every credit union employee and member, changing to a new core presents challenges, complications, and stressors that can be significantly impactful to business and service. Two of the most common challenges are presented below:

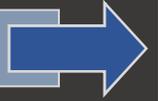
Training on the new core, while still helping members.

Many times, credits unions discover their staff is presented with the dilemma: Do I help the next member or go train?

While the training department and managers have the best intentions to enforce a strict training schedule, the nature of the service-focused staff usually results in the member taking priority. This is a very common problem that occurs, but the price will be paid if the credit union has moved to the new core and the staff are not comfortable or confident using the system.

However, with the use of VDI, training in the branches is seamless. The staff can easily toggle between the old core and the new core using their existing computer and peripherals to practice transactions between members, without logging off or restarting the computer. This especially comes in handy when a teller posts a transaction that is uncommon or difficult in the current system. As soon as they finish helping the member, they can immediately recreate the transaction in the testing environment (new core) instead of waiting for the next training session to practice it. And if someone gets “stuck” on a transaction, the training department or IT help desk can access the screen they are on in either environment, and they can walk through the transaction together. In most cases, assistance does not need to be dispatched to the physical location, the employee can be instructed remotely, anytime as needed. The trainer can remote into the staff’s system to show them how to process the new transaction: how they did it in the past, and how to do it in the new core. They have access to both, side by side. And this feature is built in, at no additional cost.

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The IT and training departments struggle responding to issues after the conversion has taken place.

It is very common to have an influx of help desk tickets related to a core conversion once the new core is live. There is no way to guarantee a completely smooth core conversion without any complications. Credit unions that are well prepared and trained have an upper hand, but chances are, when the switch is flipped, additional assistance or remediation from the support departments will be required: a scanner won't scan, a printer won't print, or a transaction won't post. With the demands of the core conversion coupled with the routine needs of the IT group, it's no wonder when bandwidth becomes an issue. Some credit unions staff up during this period to allow for support to be onsite at the branches, or create a triage procedure to help decide which location requires immediate assistance. However, not all credit unions have a fully dedicated IT department or training staff to go to each location that is needing assistance. Some have locations that are remote and spend more time getting to the branch than fixing the issue.

This is another example how of a VDI can assist credit unions of all sizes. Tickets are responded to and resolved faster because the support groups (IT and training) have the ability to access the exact instance that is being sent to the branch from the server. They can view the desktop, troubleshoot, deploy, reset, reinstate, rollover, install, etc. all from one location. The use of VDI streamlines the ability to provide support, and it significantly reduces the amount of time spent on each request.

During the testing phase of the conversion, the new core can be installed alongside the old core. This allows for full testing and integration to be completed prior to cutting-over to the new core. The IT department can install the new core system, set up all the configurations, test peripherals (printers, scanners, etc.), and deploy, all prior to the conversion date.

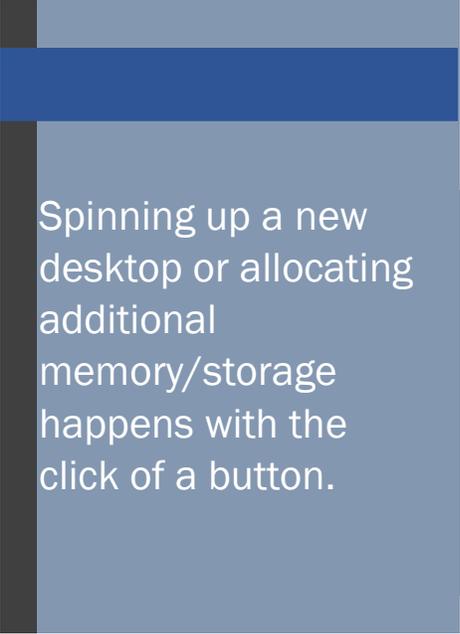
IT Efficiency

IT Efficiency is a great concern for credit unions, no matter the size. A proper balance of staff and resources is required to properly support the organization and serve members, while maintaining appropriate diligence and cost controls. Software installs, patch management, security updates...the regular upkeep and maintenance for most IT infrastructures can be time consuming and costly, but with VDI, you can reallocate your IT resources more strategically. Spinning up a new application or desktop or allocating additional memory/storage happens with the click of a button. Patch updates or security installations do not have to be done on each device. You can deploy one roll out that will be implemented on every desktop or device, taking the human-error element out of the equation. You can easily replace a computer in the branch within minutes by just plugging it in. In addition, the lifecycle of new or existing hardware is increased, since the VDI replaces the role of the hardware. A typical 3-year lifespan can be extended to 6 or 7 years, and in some cases longer. This reduces the costs of hardware significantly for credit unions.

Security and Business Recovery

There are many threats to the security of credit union data and member information. Credit unions must approach security pragmatically and have recovery measures in place to mitigate the impact to staff, members, and business, while adhering to the governing rules and regulations.

VDIs not only meet the requirements imposed on credit unions, but make maintaining a secure environment easy and efficient. Information is encrypted from end to end, keyboard to server. There is security built into the whole path of the information flow. Data is never stored on the local machine or device. It is all stored in the server. Why is that important? Imagine a computer or tablet is stolen from a



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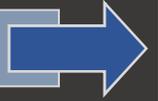
desk in a branch. Normally, that would be a huge security breach, as the device has access to critical data and member information. But with a VDI, the computer is simply a display device. No information is stored on the computer; it is stored in the server completely independent of the device. This is also useful if a computer gets damaged. The user can log in from any other device that has internet access and pick up exactly where they left off with minimal interruption and complete security.

In another scenario, a supervisor downloads a virus and the environment is exposed to ransomware. Hundreds of files are encrypted and held for ransom, the affected user count is growing, and multiple machines are corrupted. In a normal environment, this could take weeks to recover from, however in a virtual desktop environment, all affected machines can be reset to the state they were in prior to the attack, simultaneously and within minutes.

Lastly, in the event of disaster, business can resume as soon as an internet connection is secured. An underwriter can work from home, or coffee shop 50 miles away, to approve and process personal loans, mortgage loans, or indirect loans taking place at a car dealership. The call center can continue taking calls, processing transactions, and resetting passwords from any location that has WIFI. The IT department can respond to tickets, troubleshoot, and resolve issues even if they cannot get to the office from a laptop or tablet.

Mobility

One of the greatest assets a credit union has is its people. The personalized service and home-town feel is what members love and have come to expect. Credit unions strive to have a presence in their communities at local events, community centers, job sites, college campuses, and more. In the past, they have had limited access to tools for conducting business outside of the branches. They could take a



paper application, get a phone number for a later call back, or reach out to the branch to look up something on the system. All in all, the interactions were mostly passing out flyers, collecting phone numbers and paper applications, and hoping to hear back from people they talked to. Wouldn't it be a game changer to have the ability to help a member anywhere, as if you were at your desk? Open an account, look up rates, check the status of a deposit, get a balance, transfer money, set up online banking, order a debit card, process a fraud claim, reset a password, get a loan decision... almost every transaction, service, or inquiry can be performed as if the employee was in the branch.

In addition to external mobility, VDI will allow for internal mobility as well. A Member Service Representative could seamlessly transition from the teller line to the new accounts desk to help a member. A floating teller can move from branch to branch using a local device. And a director or supervisor could easily visit different branches and pick up where they left off using a laptop, tablet, or computer in each branch.

Case Study – Lone Star Credit Union

Lone Star Credit Union was originally chartered in 1967 for the employees of Lone Star Gas as Lone Star Gas Employees Federal Credit Union. In the 1970's they became Enserch Credit Union when Lone Star Gas was acquired by Enserch. Upon the acquisition of Enserch by TXU in 1996 they became an independent institution. In 2000 they became Lone Star Credit Union, a state chartered community credit union serving Dallas and surrounding counties.

Lone Star Credit Union's 11,000 members have certain expectations today from their financial institution. With a core system that was developed in the 70's, the connections for newer services were not even dreamt of yet. Besides the issues of connecting to other applications, the current system was very inefficient. With a deposit receipt taking 45 seconds to print and loan documents taking upwards of 45 minutes to prepare, the membership was not being serviced efficiently. That led the Credit Union to move to a new core processing system, Keystone by Corelation. According to Lone Star's COO/CIO Becky Reed, "We wanted to offer our members flexibility. With our existing core system, we could only offer what the system was able to do. Today's members expect us to be able to cater to their needs and create products and services that are not cookie cutter."

Lone Star Credit Union is endeavoring to be a viable financial provider for their community, but old technology and systems were keeping them from meeting their members needs and wants. They needed

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Becky Reed, COO/CIO Lone Star Credit Union

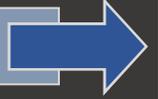


to move to a new core financial system that would allow them to connect to the new options that their members expected such as mobile banking, chip cards, and contactless payments. However, their infrastructure was not ready to support neither the new core nor the infrastructure surrounding it. “Now our credit union has a flexible, scalable solution that is as capable, or more capable, than what is in place at financial institutions much larger. It will meet our needs well into the future without incurring additional expenses,” according to Reed, COO/CIO. Pure IT Credit Union Services was able to assess the current environment, provide remediation steps, design several options for a new infrastructure, deploy that infrastructure choice, and provide full managed services to keep it running at peak efficiency. Now Lone Star Credit Union is not only able to meet the current demands of its members, but it is poised for a new vision of the future that was never before open to them.

Not only did the Pure IT team provide options and an architecture for the future, but they provided remediation and implementation services to ensure that Lone Star was successful. Remediation of many outstanding issues that were ongoing within their current environment (upgrades for services like Exchange, migration of SQL databases, and a network redesign) were necessary so that they could prepare for a migration to the new environment from legacy hardware and operating systems while keeping the daily efforts of the business running. “During our conversion, we only had to set up one standard desktop instead of 44 new ones, which we were able to deploy all at one time,” says Reed. “IT can manage everything, servers as well as desktops, from a single console. This is much more efficient than having to physically touch each machine.”

Conclusion

The benefits of deploying a virtual desktop infrastructure (VDI) are significant to the success and sustainability of credit unions. Virtual environments provide efficiencies, save time and money, and enable a modern experience for employees and members, comparable to the big banks and financial institutions. It allows you to easily maintain and access your core system and other applications needed to serve members. VDI provides mobility, security, and fast recovery from disasters, theft, or damage.



About Corelation

Based in San Diego, CA, Corelation is the innovative core processor for today's credit union. This solution is a member-centric system that empowers credit unions to offer the best member service possible, enhancing their value for member attraction and retention. In terms of industry experience, Corelation's staff has dedicated their careers to creating core systems and providing unparalleled client service. For more information, visit www.corelationinc.com.



About Pure IT Credit Union Services

Pure IT Credit Union Services provides groundbreaking IT consulting, assessments, and managed services for credit unions looking to leverage technology as a solution and gain a competitive edge. Comprised of a team of experienced architects and consultants, Pure IT is a trusted partner that provides clear documentation and strategy roadmaps to better position credit unions to service their members. Our approach has proven to transform traditional IT Cost Centers into strategic enablers that are ready for change, growth, and sustainability.

For more information about Pure IT, please visit our website at PureITCUSO.com or contact us directly at (281)-251-9700 or info@pureitcuso.com. We would love the opportunity to talk about strategies, projects, infrastructure, and other technology available to credit unions of all sizes.

