

VIRTUAL DESKTOP INFRASTRUCTURE: PLENTY OF POTENTIAL, BUT DO THE HOMEWORK BEFORE DIVING IN

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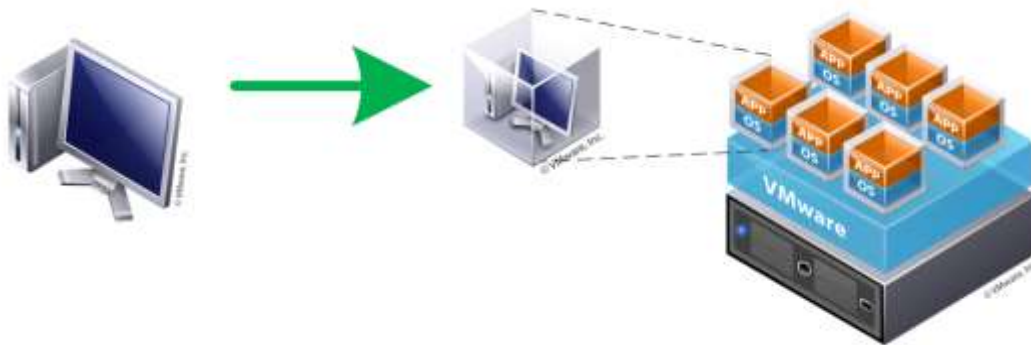


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Virtual desktop infrastructure (VDI) is emerging as an industry-driving technology—a first step in moving workers and clients to a secured, platform-independent cloud environment. Before deploying this technology, however, it is important to consider the necessary administrative changes—not the least of which is the financial impact.

WHAT DOES VDI LOOK LIKE?

Workstations have been the workhorses of industry for the better part of the information age that has grown up around business. Each worker has had his or her own workstation, his or her own private set of resources, and segmentation from the rest of the environment. At a basic level, VDI breaks down those boundaries for the good of the business.



Servers sitting in the datacenter are designed to handle larger workloads, so why wouldn't we want to use that class of machine for the daily workloads that drive the business forward? Virtual desktops are the answer to that question; all of the inefficiency that resides on individual workstations is consolidated and spread across more robust server resources. By sharing these resources, we can turn 100 workstations that average 5-percent utilization into one server averaging 75-percent utilization.

As a consequence, each new desktop must be tightly controlled and standardized. This is good for the helpdesk and administration because it reduces administrative overhead and, in a typical deployment, reduces helpdesk calls by around 50 percent. But these linked resources can increase risk, which is why a typical VDI deployment must include a strong and reliable change management process as well.



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AN INDUSTRY-CHANGING EXPERIENCE

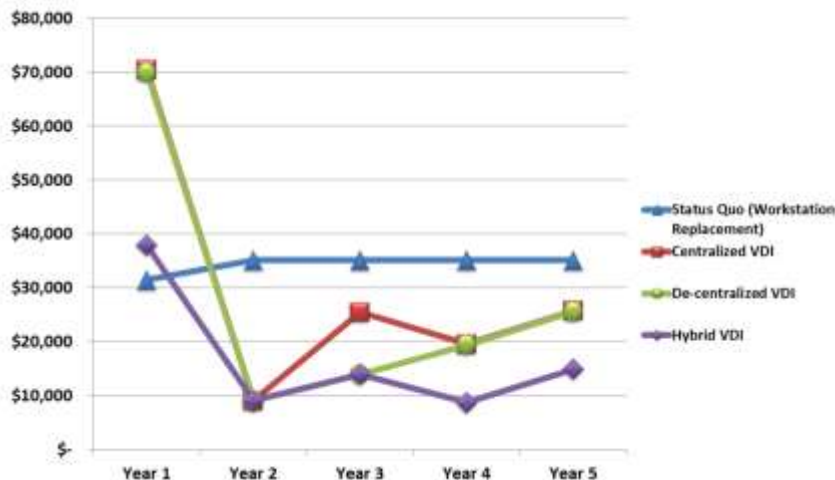
For a long time the banking industry has operated on aging infrastructure. Typically slower to adopt newer technologies than companies in other industries, banks face huge integration and administration obstacles as aging systems and software force them to adopt these newer environments. First Federal Bank recognized this trend and, with the assistance of West Monroe Partners, developed and executed a series of transformational projects that not only updated the bank’s entire infrastructure but also deployed several new technologies, including a full multi-site VDI model.

First Federal Bank began looking into virtual desktops as a way to minimize the impact of help desk calls on an already overworked issue-management system. Months of queued-up tickets accumulated and the business was looking for a solution that would allow it to continue to grow while simultaneously reducing the number of tickets generated. With West Monroe Partners’ analysis, the organization predicted that it could reduce overall helpdesk calls by up to 50 percent with the deployment of VDI—and there was significant potential return on investment in terms of hardware refresh and workload.

WHAT WOULD IT COST?

For any business, the driving question is always, what does it cost? For this reason, First Federal Bank and West Monroe Partners performed a financial analysis, including calculating total cost of ownership (TCO), on the project design prior to deployment in order to validate the project’s value to the business. The project team considered several models, but despite a higher initial capital expense, over time the project became less costly than maintaining status quo, as illustrated in the graph below.

Moreover, the scalability of this VDI solution is strong; the larger the deployment, the greater the savings in operating costs. There does not appear to be a minimum size at which the deployment becomes less cost effective. Even so, it is always prudent to perform a full financial analysis prior to deployment in order to validate the costs savings, as each business will have its own unique requirements.



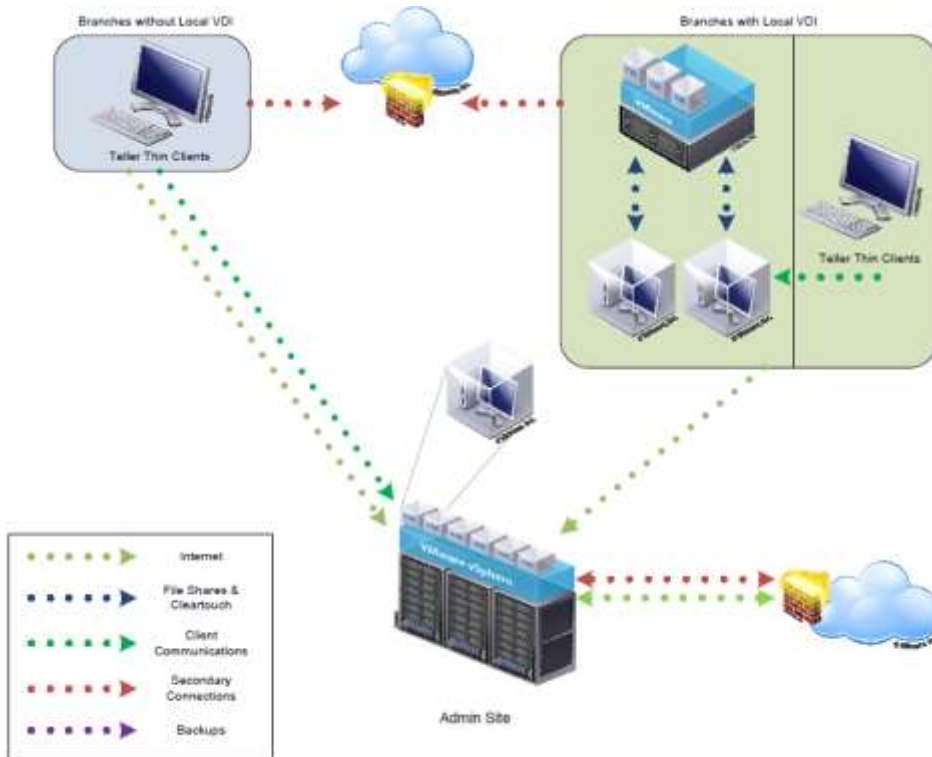


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HOW WOULD YOU DO SOMETHING LIKE THIS?

First Federal Bank and West Monroe Partners designed a standard desktop image based upon business requirements gathered during the project’s design phase. The project team tested this image and piloted it in the production environment using industry-compliant security parameters already established as part of preparations for the full deployment. The bank then deployed the VDI across nine branches and removed legacy physical workstations at each branch. As part of the project, the project team analyzed the networks linking these sites to the primary datacenter and established redundant paths with automated failover to prevent a loss of connectivity from paralyzing a branch. Sites that were not stable enough to connect to the datacenter received their own virtual servers to host their own smaller clusters locally. The project team also configured these sites to serve as temporary disaster recovery sites in the case of primary datacenter failure.

The following diagram details the elements at each location and indicates how the information flows between sites.





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MAKE IT INVISIBLE.

Finally, First Federal Bank removed the old workstations at each branch and replaced them with thin clients, which have a longer lifecycle than the desktop PCs they were replacing. The project team migrated information on each of the old computers to the datacenter and into the relevant user's profile and then presented it back to users through the thin client for a virtually unchanged experience.

DID IT WORK?

The bank deployed the virtual desktops across the organization to more than 100 users at 10 different locations, all from a central location. By the end of the project, the helpdesk queue was up to date, and the bank's IT team was able to respond to new tickets daily.

The bank realized unforeseen benefits when it decided to open another branch. The total time and cost required to construct and deploy the IT infrastructure to this new location was less than half of what it would have taken with the old conventional model.

CONCLUSION

This case study demonstrates the potential advantages of virtual desktop infrastructure. But it also shows the importance of addressing the administrative side of the project up-front, including financial analysis, standardization principles, disaster recovery, and change management.