

# [Good planning for an application server migration essay example](https://assignbuster.com/good-planning-for-an-application-server-migration-essay-example/)

[Law](https://assignbuster.com/essay-subjects/law/), [Security](https://assignbuster.com/essay-subjects/law/security/)

## Introduction

Application migration requires preparation in both the location where the application will be migrated from and in the location they will be migrated to. The process of migration is an important one that needs to be managed with care so that data and important information will not be lost. This paper will focus on the migration of the application services from Wild Frontier domain to Foghorn Leghorn domain.

## Terminal services

Terminal services will allow users to access applications that are installed in remote desktops. They have tools which allow users to access this service. The remote services are normally installed on a terminal server. This service will also enable the remote users to access a full desktop for the remote server. This is possible from within a corporate network or from the internet. With the use of this service, the remote users will be able to access the services of the computer programs from their offices. This is an advantage to the IT staff in the original organization because they do not need to change any desktop or the servers in their locations. They will use this service to enable the users from the company that has been bought to access the servers in their company. Terminal services will be used to provide remote and application support for offices which are located in remote locations. This will be achieved with the use of remote desktop connection broker. This is a service which enables continuous access and connection to remote sessions so that there is a continuous sessions of connection. With this, users will be connected to the same remote desktop session host server (Kelbley, & Sterling, 2010).
Because there will be no change of staff working on the new company, this will be easier because there will be no change in the active directory of the remote users. The users will use their initial profiles without the need to change any of the features.

## Application pools

The application pools will help reduce the costs of the whole process. This is because there will be no need to install or purchase other applications for the remote users. The remote users will access the applications that are used in the organization. The use of Remote Desktop Services will enable the users to make use of applications which are installed in the company headquarters. They will be able to work as though they are using the application ion their own location. The Active Directory will remain the same because the remote users will not change. The users in the active directory will remain the same without any changes introduced to the system. This will reduce the costs that would have been used to set up the users in the active directory (Kelbley, & Sterling, 2010).

## Configuring AD group and NTFS permissions for optimal security

There is a way in which active directory and NTFS permissions can be configured so that there is optimal security in the system. One of the security configurations is the use of NTFS permissions. NTFS permissions can be configured to offer security to groups of resources and computers. There was the introduction of Kerberos; the security in the active directory was enabled. When a user logs into the active domain, there will be the creation of ticket-granting-ticker which will have the security identifiers which belongs to the user. The ticker also contains all the other groups that the user is a member. In this setup, the nested groups are also included. Using group permissions can bring the best security practices to the network. This is because there are implicit and explicit permissions. This is one of the strong features of active directory system. Both of these options are available and can be used in active directory and NTFS (Kelbley, & Sterling, 2010).

## Windows SharePoint Services

This is a service that is available in Windows Server information worker infrastructure. This is a service which enables team members to create websites that will be used for sharing information and for collaboration purposes. This is a service which can be used to enable sharing of information for the rest of the team members. This is an increased productivity for the team members. The team members can make use of this service to create websites so that they can share the important information with the rest of the team members. There is a need to ensure that there is no duplication. This is achieved by enabling synchronization of data and information in the websites. Before the websites are published, there will be the need to check for similar data in the pages that have been uploaded. Users will not be allowed to post similar information. The synchronization option will enable users to eradicate the possibility of uploading duplicate users (Sindoori, Pallavi, & Abinaya, 2013).

## High-availability technologies

These are the technologies that are used to provide the availability that is a requirement for applications which are running in virtual machines. This is independent of the operating and the applications that are running in that machine. There will be the need to ensure that some services are always available and their continuity is assured. The high-availability technologies enable the systems to have a cost-effective way of protecting failure of the operating systems and the hardware. With this technology, the planned outage time and the restart time will be eradicated. This will save the cost of the whole process and will enable applications to run effectively without the need to restart. They will be available for most of the time (Liu et al., 2009).

## Taking advantage of licensing

In traditional installation of applications, licensing is an important economical factor that needs to be taken into consideration. With the setup that is proposed, the use of licenses will be eradicated because of the fact that licenses can be purchased for only one application. The remote users will make use of the one application by use of Remote Desktop Services. They will access the application from one server. This will eradicate the need to install many applications in the many remote host computers. With this technology and server capability, I will take advantage of licensing by having one license that will be used by many host computers. Only one license will be purchased but will be used by many host computers. The licensing advantages that come with the new setup are an important opportunity that will eradicate the cost. This will be an opportunity where applications can be installed on the server space and accessed from remote sites (Hester, & Henley, 2010). With this, as many applications will be installed in the windows server so that they can be accessed from the remote hosts. There will be no need to install each of the application in the individual computers as they will be accessible in the remote machines. This is a cheaper way in which one application will be installed in the server and accessed from the server by the host computers. This is like the setup of cloud computing. In cloud computing, one application will be installed in the cloud and accessed from the cloud by the client computers. This should be the case with this case where the application that can be accessed by remote users in remote locations be installed in the windows server (Fukushima et al., 2013).

## Plan to provide slowdown

The plan that I would recommend for the network is to have a pool of servers that will take the requests one at a time. This will ensure that the requests are undertaken in a timely manner. The requests will be handled by different servers. If there will be a failure in one server or network path, this will affect the running of the services. I will install machines that will be able to run without any effect on the network. The machines that provide critical services will be added to the IP address pool that has Network Load Balancing capabilities. The machines will have their private IPs, and the public IP address that is shared by all the machines in the given cluster. I will then set up an algorithm that will determine which machine will be allowed to serve the requests that come to the network. The algorithm will also allow the servers to share the information with another for easy synchronization. One of the services that will be managed from the pool of computer is the domain users. This will enable the users to access the services from the network without any issue or technical problems encountered.
I will also ensure that there is single-affinity in the cluster so that the requests that are from critical applications will be responded to by one server. This will allow the services which are critical to be served with top priority. There will also be the need to have single-affinity for SSL services so that there will not be any renegotiations with the way they are handled in the network. All other connections will be routed to other hosts and will enable balancing to be undertaken effectively.
After this has been put in place, there will be the installation of high-availability services in the Windows Servers. This will enable the applications to be highly available with small outages.

## Management of printers

The printer requirements will be another aspect that will need to be taken into account. The considerations that will be taken with printers are to have the IP addresses for the network printers included to the cluster that is required for continuous operations. The printers will be in the cluster with high-affinity so that they will be handled by one server. This will ensure that printer settings will be maintained by one server. This plan will ensure that the printers are always available and operational. This is an important setting that is effective and the printers will be continuously present. The network printers that will be included in the cluster will have to be included in the network. There will be the use of high availability services to ensure that the printer services are highly available in the network.

## References

Fukushima, Y., Murase, T., Yokohira, T., & Suda, T. (2013, March). Optimization of Server Locations in Server Migration Service. In ICNS 2013, The Ninth International Conference on Networking and Services (pp. 200-206).
Hester, M., & Henley, C. (2010). Microsoft Windows Server 2008 R2 Administration Instant Reference. Wiley. com.
Kelbley, J., & Sterling, M. (2010). Windows Server 2008 R2 Hyper-V: Insiders Guide to Microsoft's Hypervisor. Wiley. com.
Liu, L., Wang, H., Liu, X., Jin, X., He, W. B., Wang, Q. B., & Chen, Y. (2009, June). GreenCloud: a new architecture for green data center. In Proceedings of the 6th international conference industry session on Autonomic computing and communications industry session (pp. 29-38). ACM.
Sindoori, R., Pallavi, V. P., & Abinaya, P. (2013). An Overview of Disaster Recovery in Virtualization Technology. Journal of Artificial Intelligence, 6, 60-67.