Virtualisation Report

Summary

AGL realty is a large-scale company. The company works on real estate business. Their main focus on the real estate market and understanding the customer needs. At the present state, AGL realty runs under a data centre that holds following server’s specification:

* Two directory domains controllers’ server used for authentication and authorisation. It uses Windows Server 2008 R2 with specification 2x Xeon 3.6 GHz, 8GB RAM, 140 GB HDD.
* Three SQL Server 2003 database servers used for database operations. It operates in Windows Server 2003 with specification 2x Xeon 2.8GHz, 4GB RAM, 250GB RAID-5 array.
* Exchange 2007 email server on Windows Server 2008 R2 having specification of 2x Xeon 3.6 GHz, 8GB RAM, 250GB Raid-1 array.
* Four Windows Server 2003 File and Print Servers having specification of 2x Xeon 2.8 GHz, 4GB RAM, 250GB RAID-1 array.
* SharePoint 2007 Server on Windows Server 2008 R2 with specification of 2 x Xeon 3.6GHZ, 16GB RAM, 250GB RAID-1 array.
* For Customer Relationship Management, it has RENet Client Property and CRM Management application server on Windows Server 2008 R2 having specification of 2 x Xeon 3.6GHZ, 8GB RAM, 250GB RAID-1 array.
* Two Red Hat Enterprise 5 Linux servers running Apache and TomCat with specification of 2 x Xeon 2.8GHZ, 16GB RAM, 140GB HDD.

Since this data centre is not enough for the company as they are rapidly increasing the business and needed to connect with more customer to fulfilling their needs. So, they decided to remove all the outdated system and use the virtual platform instead. The following report will demonstrate the understanding of the virtual operation and suggesting the favourable ideas to establish a best workable virtual data centre.

1. Explain the role that Virtualisation plays in the current data centre environment.
2. How will virtualisation assist ACL Realty to improve operations in their Data Centre? Provide supporting references for your report

Answer:

Virtualisation is the ability to make any physical platform into a virtual machine (Portnoy, 2012). Virtualisation in digital technology means to abstract the physical components into logical components. According to (Douglis, et al., 2013), people are using virtualisation since half a century before. In 1970s, IBM created a Computer Program which led them to VM/ 370. These systems led each end user to run as an isolated system but within all in onetime shared environment. This technique has brought a significant change in how we establish a general computing environment. With its additional features like snapshots, cloning, virtual storage, etc. virtualisation plays a vital role in present world data centre. As mentioned by (Wallen, 2013), virtualisation helps to easily test the environment without any conflict. As the service can be isolated until the system is running fully. In case of AGL Realty, the servers may need to be tested once in a while, so the system can be isolated from the users without disturbing them using core data centre while the environment is under trial phases. Another beneficial improvement of virtualising AGL Realty is faster redeployment. As the company holds huge amount data in the first place, redeploying all those data information in virtual data centre can be done within small amount of time. Also, it is easier to fully back up the virtual servers. As data centre and all the vital information of the company need to be kept safe. Therefore, virtualising will help to improve AGL Realty operations in their Data Centre.