Hyper V Failover Clustering

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Introduction

- Virtualization Virtualization is the process of creating a software-based (or virtual) representation of something rather than a physical one.
- Hyper V also known as virtual m/c monitor, is a virtualization platform of Microsoft, that allows multiple operating systems to run on a host computer at the same time.
- A failover cluster is a group of independent servers that are running Windows Server and working together to maintain availability of services and applications.

Objectives

- High availability of services and applications.
- When a failure occurs on one computer in a cluster, resources are redirected and the workload is redistributed to another computer in the cluster.

Requirement Specifications

Hardware Requirements:-

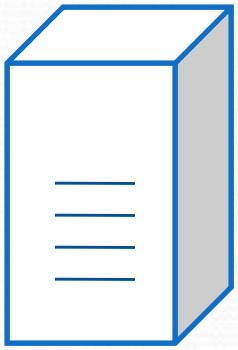
- 64bit Processor
- Virtualization Technology (VT) enabled.
- Ram : 2gb minimum
- Storage : 100 Gb minimum

Software Requirements:-

- Windows Server 2008 or higher
- StarWind Application

Environment

SAN : Storage Area Network

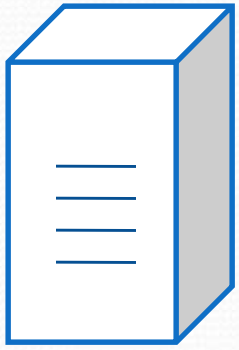


Active Directory Server

Host Name : DC

OS : Windows Server 2008

IP Address : 10.0.0.1



Hyper -V Server 1

Host Name : Client1

OS : Windows Server 2008

IP Address : 10.0.0.2

Domain : cse17.com

Virtual Machine: vm1

Hyper-V Server 2

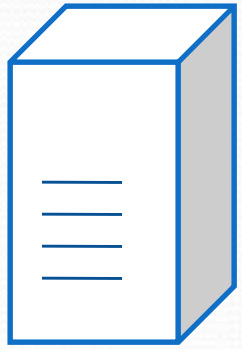
Host Name : Client2

OS : Windows Server 2008

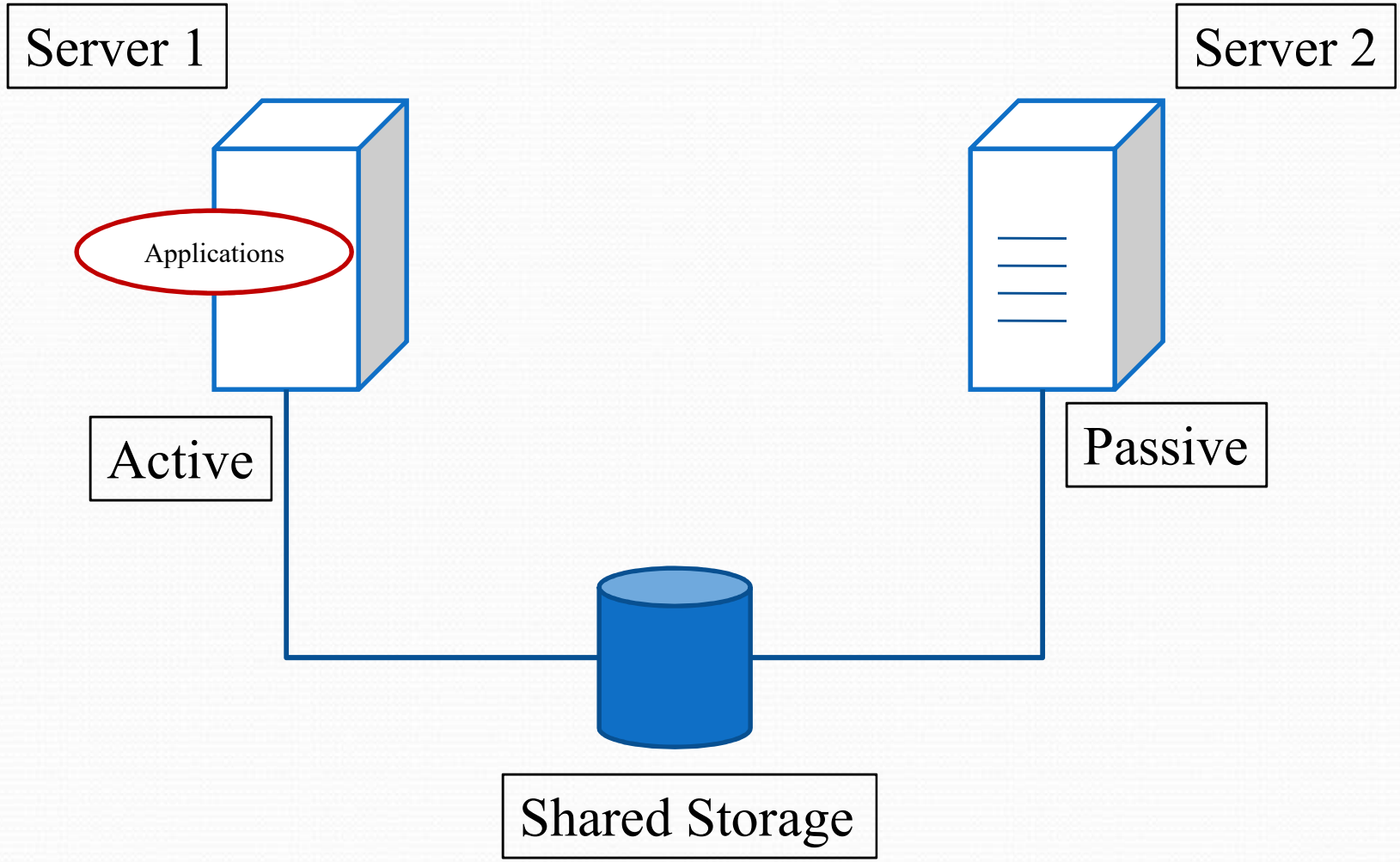
IP Address : 10.0.0.3

Domain : cse17.com

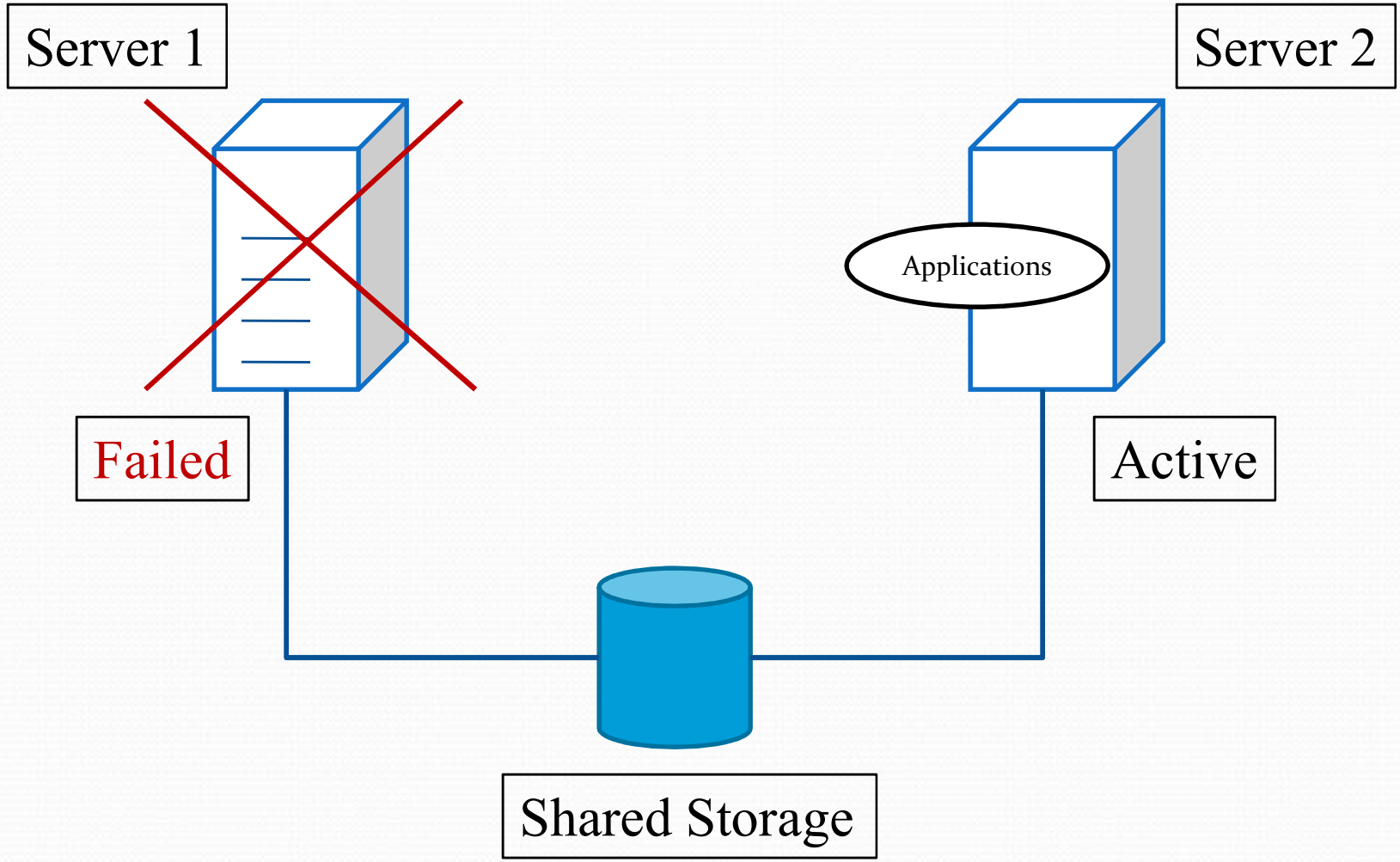
Virtual Machine: vm2



Before Failover



After Failover



ADVANTAGES

- Clustering servers is completely a scalable solution. You can add resources to the cluster afterwards.
- If a server in the cluster needs any maintenance, you can do it by stopping it while handing the load over to other servers.

DISADVANTAGES

- Cost is high
- Same image file on every machine

Bibliography

- https://technet.microsoft.com/failoverclustering/
- https://www.starwindsoftware.com/

THANK YOU