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## A Survey on Storage Area Network

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**Abstract** —A storage area network (SAN) is any superior network whose primary purpose is to change storage devices to speak with laptop systems and with one another. It doesn't say that SANs solely purpose is communication between computers and storage. Several organizations operate dead viable SANs that carry occasional body and alternative application traffic. It doesn't say that a SAN uses Fibre Channel or local area network or the other specific interconnect technology. A growing range of network technologies have subject area and physical properties that create them appropriate to be used in SANs. It doesn't say what quite storage devices ar interconnected. Disk and tape drives, RAID subsystems, robotic libraries, and file servers ar all being employed profitably in SAN environments nowadays. One in every of the exciting aspects of SAN technology is that it's encouraging the event of recent types of storage devices that offer new edges to users. A number of these can without doubt fail within the market, however those who succeed can create lasting enhancements within the method digital data is hold on and processed. The wonder of SANs is that they connect tons of storage devices to lot of servers and place within the administrator hands the selection of that server gets to access that storage devices.

### I. INTRODUCTION

Computing relies on info. Info is that the underlying resource on that all computing processes square measure based; it's a corporation quality. Info is holding on storage media and is accessed by applications that square measure running on a server. Often, the data may be a distinctive company quality. Info is formed and purchased each second of each day. Info is that the currency of business. to confirm that any business delivers the expected results, they need to have access to correct info, and right away. The management and protection of business info is significant for the supply of business processes. This chapter introduces the construct of a network, storage, and therefore the cargo hold network (SAN), that is thought to be the last word response to any or all of those desires.

A SAN moves storage resources off the common user network and reorganizes them into a freelance, superior network. This enables every server to access shared storage as if it were a drive directly connected to the server. Once a number desires to access a memory device on the SAN, it sends out a block-based access request for the memory device.

A storage-area network is usually assembled victimization 3 principle components: cabling, host bus adapters (HBAs) and switches. Every switch and storage system on the SAN should be interconnected and therefore the physical interconnections should support information measure levels that may adequately handle peak information activities.

#### **II. LITERATURE SURVEY**

#### Paper Name: OpenFlow SDN testbed for storage area network

Authors: O. Sadov, V. Grudinin, A. Shevel

**Description:** The testbed to work out the effectiveness of AN approach to create network storage mistreatment Software-Defined networks (SDN) OpenFlow. It's assumed that main protocol to SAN is iSCSI over native space network. Prototyping tools for managing network resources and knowledge flows on the idea of SDN and testing environments supported Free and Open supply package. We have a tendency to describe experiments with numerous modifications of OpenFlow controller Nox and started out the specifics for the employment of assorted package and hardware OpenFlow switches. The most tests goals square measure knowledge Center SAN specific: implementation of QoS ways consequently switch specifics, topology dynamical, mensuration of transmission parameters, simulating of huge quantity of requesting hosts (up to a hundred thousands hosts).

#### Paper Name: Streaming Video with StorageArea Networks

#### Authors: Greg Reitman

**Description:** A new set of variables and business problems area unit rising that impact the whole video distribution chain for production homes, content aggregators, broadcasters, and repair suppliers. As a result, trade players should adapt their IT infrastructures for brand spanking new challenges love the transitionfrom analog-to-digital formats (including HDTV), new codecs, implementing media plus management systems, digital rights management, information processing and ATM video transmission, and transitioning from tape to SAN-based disk architectures. This paper can examine the

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video provide chain management advancement method within the media and broadcast environments and also the impact of desegregation enclosure networks for streaming video.

#### Paper name: Reliability Modeling of Mesh Storage Area Networks for Internet of Things

Authors: Liudong Xing, Massarrah Tannous, Vinod M. Vokkarane, Honggang Wang,

**Description:** The failure behavior of a mesh SAN is shapely employing a dynamic fault tree (DFT) within the case of excellent links, or a network graph within the case of imperfect links. Supported the made DFT or network graph model, dependableness of the mesh SAN is evaluated employing a binary call diagram based mostly technique. Results obtained from the case study will offer insights into the behavior of general mesh SAN systems, providing tips within the reliable style and operation of SANs.

#### **III.CONCLUSION AND FUTURE SCOPE**

Today the second wave of virtualization is taking what has been the cacophony of networked storage and orchestrating it into the symphony of the SAN, making associate degree unexampled revolution for the management and management of digital knowledge storage and delivering the promise of the SAN.

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