



Guest Lecture on “Storage Area Network”

Department of Information Science & Engineering

An Autonomous Institute

Affiliated to Visvesvaraya Technological University, Belagavi

Approved By AICTE, New Delhi

Recognized by UGC with 2(f) & 12(B) status

Accredited by NBA and NAAC

A Report on The Guest Lecture on “Storage Area Network”

Date of the Event	25.11.2023
Title of the Event	Guest Lecture on ‘Storage Area Network’
Organized by	Dept. of Information Science and Engineering, CSE Data Science, MVJCE, Bangalore

1.Session Summary:

Date : 25th November 2023

Time: 10.30 am -12.30 pm

Venue: At Dr. M V Jairaman Auditorium

Inauguration at 10:30 A.M followed by

- Welcome speech (by Shreya Tendon)
- Inaugural Talk

Resource Person:

- Prabhu Barrow Selvaraj, Storage Trainer Bangalore CSC for Hetwel Enterprise

Target Participants:

- **Students** (Participated: 400)
- **Faculty**

2. Lecture Summary:

The guest speaker, in his special address, provided a clear understanding of SAN and its varieties. He also explained the issues related to NAS, techniques to resolve them, and the role of SAN in addressing these issues. The students gained substantial knowledge about the topic during the session.

In his session, he emphasized the key concepts of Storage Area Networks. He explained different types of SAN, including Fibre Channel Protocol (FCP), Internet Small Computer System Interface (iSCSI), Fibre Channel over Ethernet (FCoE), and Non-Volatile Memory Express over Fibre Channel (FC-NVMe).

He covered following points in his lecture.

- Difference between SAN and NAS
- The protocols used by SAN and NAS
- How do organisations use SANs

3.Photo Gallery:



Fig 1: Presentation by Chief Guest

1. **Fibre Channel Protocol (FCP)** – Widely adopted, FCP uses the fibre channel network to send SCSI commands. It provides high-speed delivery of raw block data with no losses between computer storage and servers.
2. **Internet Small Computer System Interface (iSCSI)** – Used by approximately 10% of enterprises, iSCSI is more cost-effective than FCP. It maps block-oriented storage data using SCSI commands within an Ethernet frame and utilizes a standard TCP/IP Ethernet network for transport.
3. **Fibre Channel over Ethernet (FCoE)** – FCoE essentially places the FCP on a new physical link – an Ethernet link. Because of that simple switch, a SAN can use less hardware and cabling, with easier installation and management than traditional protocols. It is a standards-based protocol that also eliminates the need to run separate LAN and SAN networks.
4. **Non-Volatile Memory Express Over Fibre Channel (FC-NVMe)** – FC-NVMe is an interface protocol for accessing flash storage via a PCI Express (PCIe) bus. FC-NVMe offers vast performance improvements over traditional all-flash architectures (AHCI).
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Fig 2: Audience



Fig 3: Q&A session

4. Outcome of the Event:

During the brainstorm sessions of this Lecture, Students gained knowledge in Storage Area Networks concepts which assist in decision making and justifying the several technical models. They gained awareness on various application areas of this technology such as Databases and Database management systems, Server virtualization, Business applications and Virtual desktop infrastructure.