



Excelssior Education Society's
K.C. College of Engineering and Management Studies and Research
Mith Bunder Road, Near Hume Pipe, Kopri, Thane (E)-400603

Name of the event: Guest Lecture on Latest Networking Technologies

Name of Speaker: Mr. Anand Mishra, Mr. Bhushan Yadav

Date: 06/03/2018

Latest networking Technology's
Anand Mishra



Guest Lecture Report

Topic: SDN –Software Defined Networks

Speaker:

1. Mr. Ananad Mishra, Net Magic Solutions, PVT Limited
2. Mr. Bhushan Kadam, IIT-Bombay, Smart Technology Lab

Date: 06/02/2018

Duration: 2Hrs (11:00am-1:00pm)

Software-defined networking (SDN), network functions virtualization (NFV), and massively distributed computing dominate the thinking of today's network engineers as they plan "next-generation" infrastructure.

But what's in the pipeline for next-generation networks?

Traditional networks use features such as MAC tables, the Rapid Spanning Tree Protocol (RSTP), and cast types for conveniences like "plug and play" functionality. However, these features also make traditional networking vulnerable to cybersecurity threats.

With software-defined networking (SDN) from SEL, all network flows and backup paths are specifically defined in the controller, so there is no need for MAC tables or RSTP. In addition, SDN uses traffic engineering to process forwarding behavior rather than relying on "cast types," which pose security risks. This processing eliminates common LAN security threats, including:

- MAC flooding, in which attackers overwhelm the switch with MAC addresses.
- MAC table poisoning, in which attackers convince the switch that they are a false MAC address.
- Address Resolution Protocol (ARP) spoofing, in which an attacker sends false ARP messages, causing traffic to be misdirected.
- Bridge Protocol Data Unit (BPDU) attacks, which disrupt the network's spanning-tree protocol.
- Flooding using multicast and broadcast Ethernet destinations.

SDN enables industry to customize their network. SDN enables industry to reduce OPEX and CAPE and to create new differentiating services. APIs will be used more often than the CLI in the future. Software-Defined Networking offers several benefits for businesses trying to move into a virtual environment. For carrier and service providers. Enterprise campuses experience network access control and network monitoring when using Software-Defined Networking policies.

Real time project making experienced was shared by Mr. Bhushan Kadam.

At Sensing Labs, he told students about specialize in smart sensor design and development as well as data management solutions, with a turn-key Sensor-to-Cloud solution that greatly simplifies construction of scalable IoT applications and reduces the cost of data acquisition for services requiring very long range and battery life in wireless sensors. Students were guided for the same and were encouraged to learn advancement in the field of Electronics Engineering. Overall session was interactive and helpful to the students for selecting their field.

No of students who attended the lecture was 34



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