

## Software Defined Networks

For the past 20 years, networking has not been able to quickly respond to changing business demands. Software-Defined Networking (SDN) promises to change that. SDN empowers the business to control network behavior by emphasizing the software application instead of the network infrastructure. In this interactive course, you will learn what SDN is and how it is rapidly changing the future of networking.

### Course Outline

- SDN and its impact in the industry
  - Business and technical challenges that SDN solves
  - How SDN enhances cloud computing
  - How SDN impacts your organization, your team, and you
1. **Network Complexity and the Need for SDN**
    - What Is a Network?
    - Growing Network Complexity
    - Technical Challenges of Complex Networks
    - Looking for a Solution
  2. **SDN: A New Solution**
    - What is SDN?
    - The Planes
    - SDN Controllers
    - Communication Flows
  3. **Network Functions Virtualization (NFV)**
    - NFV
    - Overlays
    - Exercise: SDN Controllers vs. Network Functions Virtualization
  4. **Deeper Dive into SDN**
    - Imperative vs. Declarative SDN
    - NFV Overlay Network Technologies
    - Southbound Interfaces
    - Northbound Interfaces



- Open-Source SDN Projects

## 5. **The SDN Landscape**

- Categorizing SDN Solutions
- Identifying Providers

## 6. **Business Processes and SDN**

- DevOps
- Change Management
- Six Sigma
- Scrum
- Agile

## 7. **Business and Technical Challenges Solved by SDN**

- Use Case: Global Knowledge Labs
- Your Challenges
- Other Business and Technical Challenges

## 8. **Cloud Computing and SDN**

- What is Cloud Computing?
- What is Cloud Networking?
- How Does SDN Enhance the Cloud?

## 9. **SDN Impact on Applications**

- Today vs. Tomorrow
- Network Visibility and Control
- Application Examples

## 10. **Your Role in SDN**

- Adopting SDN: Pros and Cons
- IT Managers
- Application Administrators
- Security Administrators
- Server Virtualization and Cloud Administrators
- Network Administrators

## 11. **Exercise: Identifying SDN Solutions to Business/Technical Challenges**



**Duration:** The duration of this workshop will be two consecutive days, with eight hour session each day in a total of sixteen hours properly divided into theory and hands on sessions

**Fees:** Rs 1200/- per head inclusive of all taxes.

