

# BECOME A NETWORK ADMINISTRATOR

 **LIVE CLASSES**

## IN தமிழ்

Master The Art Of Networking

### BATCH 1

**INSTRUCTOR :-**  
SRIDHAR

**LIVE.NATIVEVA.COM**

**BATCH: JULY 1 - 30 ( 2025 )**

# Why Learn With Nativeva

- Expert Guidance: Learn from industry professionals with years of Networking experience.
- Live & Interactive Classes: Participate in real-time discussions, ask questions, and receive personalized feedback.
- Hands-on Projects: Work on industry-level projects to build your portfolio.
- Job-Ready Skills: Master industry tools like Cisco Packet Tracer, and more.
- Exclusive Community Access: Join a network of Administrator to collaborate and grow.

## LIVE CLASS SYLLABUS

### 1.NETWORK FUNDAMENTALS

#### 1.1 Explain the role and function of network components

- Routers
- Layer 2 and Layer 3 switches
- Next-generation firewalls and IPS
- Access points
- Controllers (Cisco DNA Center and WLC)
- Endpoints
- Servers
- PoE

#### 1.2 Describe characteristics of network topology architectures

- Two-tier
- Three-tier
- Spine-leaf
- WAN
- Small office/home office (SOHO)
- On-premise and cloud



### **1.3 Compare physical interface and cabling types**

- **Single-mode fiber, multimode fiber, copper**
- **Connections (Ethernet shared media and point-to-point)**

### **1.4 Identify interface and cable issues (collisions, errors, mismatch duplex, and/or speed)**

### **1.5 Compare TCP to UDP**

### **1.6 Configure and verify IPv4 addressing and subnetting**

### **1.7 Describe private IPv4 addressing**

### **1.8 Configure and verify IPv6 addressing and prefix**

### **1.9 Describe IPv6 address types**

- **Unicast (global, unique local, and link local)**
- **Anycast**
- **Multicast**
- **Modified EUI 64**

### **1.10 Verify IP parameters for Client OS (Windows, Mac OS, Linux)**

### **1.11 Describe wireless principles**

- **Nonoverlapping Wi-Fi channels**
- **SSID**
- **RF**
- **Encryption**

## **1.12 Explain virtualization fundamentals (server virtualization, containers, and VRFs)**

## **1.13 Describe switching concepts**

- **MAC learning and aging**
- **Frame switching**
- **Frame flooding**
- **MAC address table**

# **2.NETWORK ACCESS**

## **2.1 Configure and verify VLANs (normal range) spanning multiple switches**

- **Access ports (data and voice)**
- **Default VLAN**
- **InterVLAN connectivity**

## **2.2 Configure and verify interswitch connectivity**

- **Trunk ports**
- **802.1Q**
- **Native VLAN**

## **2.3 Configure and verify Layer 2 discovery protocols (Cisco Discovery Protocol and LLDP)**

## **2.4 Configure and verify (Layer 2/Layer 3) EtherChannel (LACP)**

## **2.5 Interpret basic operations of Rapid PVST+ Spanning Tree Protocol**

- Root port, root bridge (primary/secondary), and other port names
- Port states (forwarding/blocking)
- PortFast
- Root guard, loop guard, BPDU filter, and BPDU guard

## **2.6 Describe Cisco Wireless Architectures and AP modes**

## **2.7 Describe physical infrastructure connections of WLAN components (AP, WLC, access/trunk ports, and LAG)**

## **2.8 Describe network device management access (Telnet, SSH, HTTP, HTTPS, console, TACACS+/RADIUS, and cloud managed)**

## **2.9 Interpret the wireless LAN GUI configuration for client connectivity, such as WLAN creation, security settings, QoS profiles, and advanced settings**

# **3.IP CONNECTIVITY**

## **3.1 Interpret the components of routing table**

- Routing protocol code
- Prefix
- Network mask

- Next hop
- Administrative distance
- Metric
- Gateway of last resort

### 3.2 Determine how a router makes a forwarding decision by default

- Longest prefix match
- Administrative distance
- Routing protocol metric

### 3.3 Configure and verify IPv4 and IPv6 static routing

- Default route
- Network route
- Host route
- Floating static

### 3.4 Configure and verify single area OSPFv2

- Neighbor adjacencies
- Point-to-point
- Broadcast (DR/BDR selection)
- Router ID

### 3.5 Describe the purpose, functions, and concepts of first hop redundancy protocols

## **4. IP SERVICES**

**4.1 Configure and verify inside source NAT using static and pools**

**4.2 Configure and verify NTP operating in a client and server mode**

**4.3 Explain the role of DHCP and DNS within the network**

**4.4 Explain the function of SNMP in network operations**

**4.5 Describe the use of syslog features including facilities and level**

**4.6 Configure and verify DHCP client and relay**

**4.7 Explain the forwarding per-hop behavior (PHB) for QoS, such as classification, marking, queuing, congestion, policing, and shaping**

**4.8 Configure network devices for remote access using SSH**

**4.9 Describe the capabilities and functions of TFTP/FTP in the network**

## 5. SECURITY FUNDAMENDALS

**5.1 Define key security concepts (threats, vulnerabilities, exploits, and mitigation techniques)**

**5.3 Configure and verify device access control using local passwords**

**5.4 Describe security password policies elements, such as management, complexity, and password alternatives (multifactor authentication, certificates, and biometrics)**

**5.5. Describe IPsec remote access and site-to-site VPN**

**5.6 Configure and verify access control lists**

**5.7 Configure and verify Layer 2 security features (DHCP snooping, dynamic ARP inspection, and port security)**

**5.8 Compare authentication, authorization, and accounting concepts**

**5.9 Describe wireless security protocols (WPA, WPA2, and WPA3)**

**5.10 Configure and verify WLAN within the GUI using WPA2 PSK**



## KEY FEATURES OF NATIVEVA:

- Industry Expert
- 100% Practical
- Internship
- Real Time Projects
- EMI Option Available
- Ask-me-Anything Sessions
- Resume Building
- Career Guidance
- Job Placement Assistance
- LMS Access ( Lifetime Access )
- Physical Certificate

**DURATION : 1 MONTH**

**PRICE: 2,000**

SPLIT PAYMENT AVAILABLE

**INITIAL PAYMENT 500 ONLY**

**REGISTER NOW**



**+91 9361387478**