

## CCNP ROUTE TOPICS

### Network Principles

FIB

Unicast

EIGRP to OSPF Migration

Configure and verify RIPv2

Describe RIPv6

Split Horizon

Route poisoning

### EIGRP

Basic Configuration of EIGRP

Authentication

EIGRP under same Autonomous System Number

EIGRP Route Summarization

EIGRP Load Balancing

Calculating EIGRP METRIC

Manipulating EIGRP METRIC

EIGRP stubs

EIGRP Administrative Distance

Route map and filtering

Configuring Maximum number of Hops in EIGRP

## **FRAME-RELAY & PPP**

Authentication (PAP, CHAP)

PPPoE (client side only)

Point -to- multipoint SUB-Interface

Point -to-point SUB-Interface

Frame Relay Mappings

## **OSPF Part-1**

Wildcard mask of ACL and OSPF single area & understanding wildcard mask

OSPF Router-ID

DR,BDR and Drother

OSPF STATES

OSPF Multiple Areas

Virtual Links

## **OSPF Part -2**

Authentication

Redistribution of OSPF

Summarization in OSPF

STUB Area

Totally STUB Area

NOT-SO-STUBBY Area

## **OSPF Part -3**

OSPF Filtration

OSPF Filtration using prefix-List

OSPF for IPv6

Configuring OSPF Dead-Interval

Configuring OSPF Hello-Interval

Ignoring Type-6 LSAs

Redirecting Traffic

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## **VPN Technologies**

Configure and verify GRE

DMVPN

Easy Virtual Networking (EVN)

## **BGP Part-1**

Configuring EBGP  
Configuring IBGP  
Route-Reflector  
BGP Peer-Group

## **BGP Part-2**

BGP Issues  
  
Redistribution  
  
Route summarization  
  
BGP Attributes

## **BGP Part-3**

Authentication  
Conditional Routing  
BGP Route-Filtration  
Local-AS

## **BGP Part-4**

BGP Confederation  
  
Limiting the number of AS in the AS-PATH Attribute  
  
Configuring Administrative Distance  
  
BGP Timers

## **Infrastructure Security & Services**

AAA using local database

AAA with TACACS+ and RADIUS

Password encryption

IPv4 access control lists (standard, extended, time-based)

SNMP V2 & V3

verify logging – Timestamps

Network Time Protocol

IPv4 and IPv6 DHCP

Network Address Translation (NAT)

SLA architecture

Configure and verify tracking objects (for example, interfaces, IP SLA results)

Configure and verify Cisco NetFlow