



CCIE Security Version 5 Advanced Technologies Class



Extended Access-Lists

How are access-lists configured and enforced?
Are there any special considerations?

Extended Access-Lists

▶ Implementation steps

- Configure the access-list
- Apply the access-list
- Verify its functionality

▶ Considerations

- An empty ACL uses an implicit 'permit any any'
- When applied inbound, ensure to allow IPv4/IPv6 control-plane traffic

IPv6 Neighbor Discovery

- ▶ IPv6 used ICMPv6 packets for two main reasons
 - Neighbor discovery (what was ARP in IPv4)
 - Router discovery (IPv6 host auto-addressing via SLAAC)
- ▶ ICMPv6 ND packets
 - Neighbor discovery uses the NS and NA messages
 - Router Discovery use the RS and RA messages

IPv6 Neighbor Discovery

- ▶ Cisco claims that, when inbound IPv6 ACL is applied
 - ICMPv6 (NS,NA,RS,RA) messages are implicitly allowed, but don't rely on it



Knowledge is Power!