CCNA Portfolio Analysis Summary

1) Realign CCNA to employer/job needs

Data sources:

- Job Role Analysis and Job Task Analysis processes conducted with SME groups
- Targeted survey of 300+ technical managers
- Focus groups consisting of hiring managers
- Annual surveys/interviews of certified base (>10k responses) and SMEs

Key findings: Network administrators need foundational IP (physical layer, switching and routing basics plus IP services) combined with a broad awareness of technologies and problem solving skills. New hires with these skills can be trained to support networking environment specific to that company/industry.

2) Right-sizing of CCNA blueprint

Revisions to CCNA R&S have created overload with topics that extend beyond entry/associate level job roles. Over time, many topics added and few removed

Rebalancing and streamline to align with employer needs including room for new topics and end-to-end networking awareness

Digital transformation of business is driving new networking technologies

Technologies powering **digital transformation**

Virtualization & Cloud

Enabling new business models and global scaling on demand

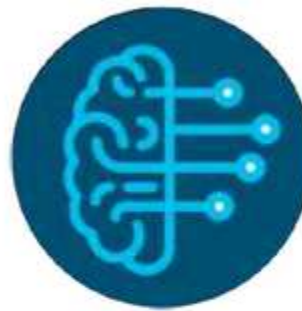### Automation

Supporting over 4 billion users plus 10 billion IoT devices

5G Mobility

Secure access to business critical applications and data

Analytics & AI

Distilling zetabytes (10^7) of data to find relevant insights

Technologies used in the New Network require new skillsets

Digital business and architectures rely on software defined networks

Programming skills becoming essential to network admins

Automation and virtualization now extend across all network domains

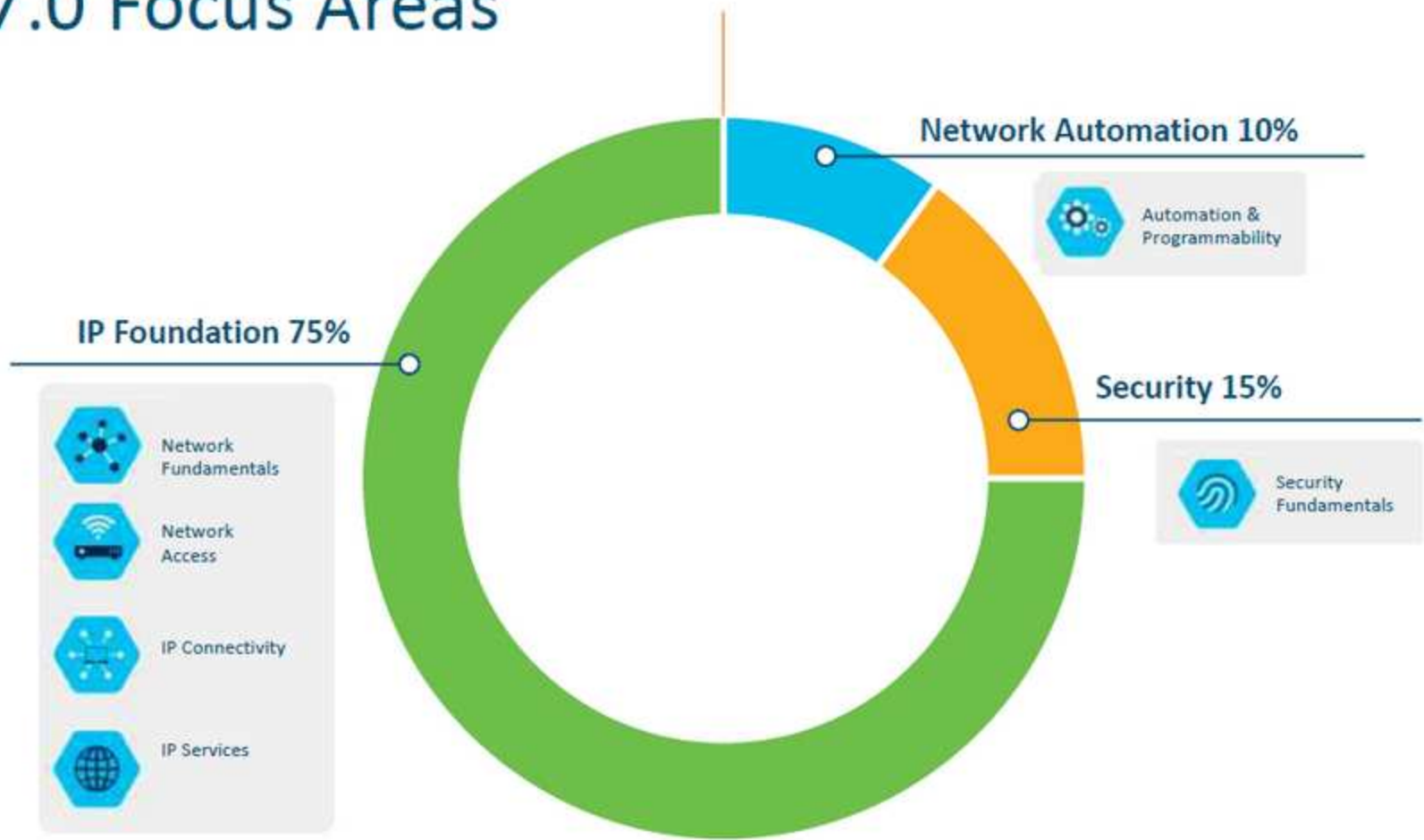Wireless technologies now prevalent in access networks

Network device management moving from CLI to API

Expanding security threats require new analytics and corresponding skills

Employers expect foundational IP skills and breadth of knowledge from network admins

CCNA 7.0 Focus Areas

Network Automation 10%

Automation & Programmability

IP Foundation 75%

Network Fundamentals

Network Access

IP Connectivity

IP Services

Security 15%

Security Fundamentals

CCNA 7.0 Instructional Content

CCNA 6.0 — 280 Hours

CCNA 7.0 — ~200 Hours

Opportunity to accelerate path to job readiness!

New CCNA 7.0 Course Evolution

| CCNA v7 Course #1	CCNA v7 Course #2	CCNA v7 Course #3
Based on CCNA 6.0 Intro to Networking (ITN)	Blend of CCNA 6.0 … ✓ Routing and Switching Essentials (RSE) ✓ Scaling Networks (ScaN) ✓ + New topics*	Blend of CCNA 6.0 … ✓ Routing and Switching Essentials (RSE) ✓ Scaling Networks (ScaN) ✓ Connecting Networks (CN) ✓ + New topics**
Minor updates and refinements	*Addition of WLAN and Security topics	**Addition of Automation, Programmability, VPN, and Security topics

CCNA 7.0 Course Outlines

CCNA v7 Course #1	CCNA v7 Course #2	CCNA v7 Course #3
Networking Today	Basic Device Configuration	Single-Area OSPFv2 Concepts
Basic Switch and End Device Configuration	Switching Concepts	Single-Area OSPFv2 Configuration
Protocol Models	VLANs	WAN Concepts
Physical Layer	Inter-VLAN Routing	Network Security Concepts
Number Systems	STP	ACL Concepts
Data Link Layer	Etherchannel	ACLs for IPv4 Configuration
Ethernet Switching	DHCPv4	NAT for IPv4
Network Layer	SLAAC and DHCPv6 Concepts	VPN and IPsec Concepts
Address Resolution	FHRP Concepts	QoS Concepts
Basic Router Configuration	LAN Security Concepts	Network Management
IPv4 Addressing	Switch Security Configuration	Network Design
IPv6 Addressing	WLAN Concepts	Network Troubleshooting
ICMP	WLAN Configuration	Network Virtualization
Transport Layer	Routing Concepts	Network Automation
Application Layer	IP Static Routing	
Network Security Fundamentals	Troubleshoot Static and Default Routes	
Build a Small Network		

■ New/significantly changed content

Download Draft Scope and Sequence

CCNA 7.0 Recommended Lab Bundle
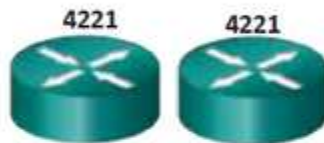
(2) 4221 - Configure and verify static routing and OSPFv2 single area
*3-router configurations for OSPF presented in PT

(2) 2960 Switches - Configure and verify EtherChannel, VLANs, etc.
*3-switch configurations for RSTP or EtherChannel presented in PT

(1) Server

(1) Generic Wireless Router - Create a wireless LAN
* WLC GUI configuration in PT and Interactive Activity

Various types of wireless and wired end devices