

IT - Industrie Zertifikate und ihre Bedeutung



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Generelle Problematik im IT Bereich

Rasante
Technologie-
fortschritte
(Generierung von
neuem Wissen)

Halbwärtszeit des
Wissens

Formales
Bildungssystem
mit langen
Zyklen



Erfordernisse für die Ausbildung

- Vermittlung von Grundlagen und Konzepten
- Kenntnis der aktuellen Technologien

... und danach

Weiterbildung, Weiterbildung, Weiterbildung ,

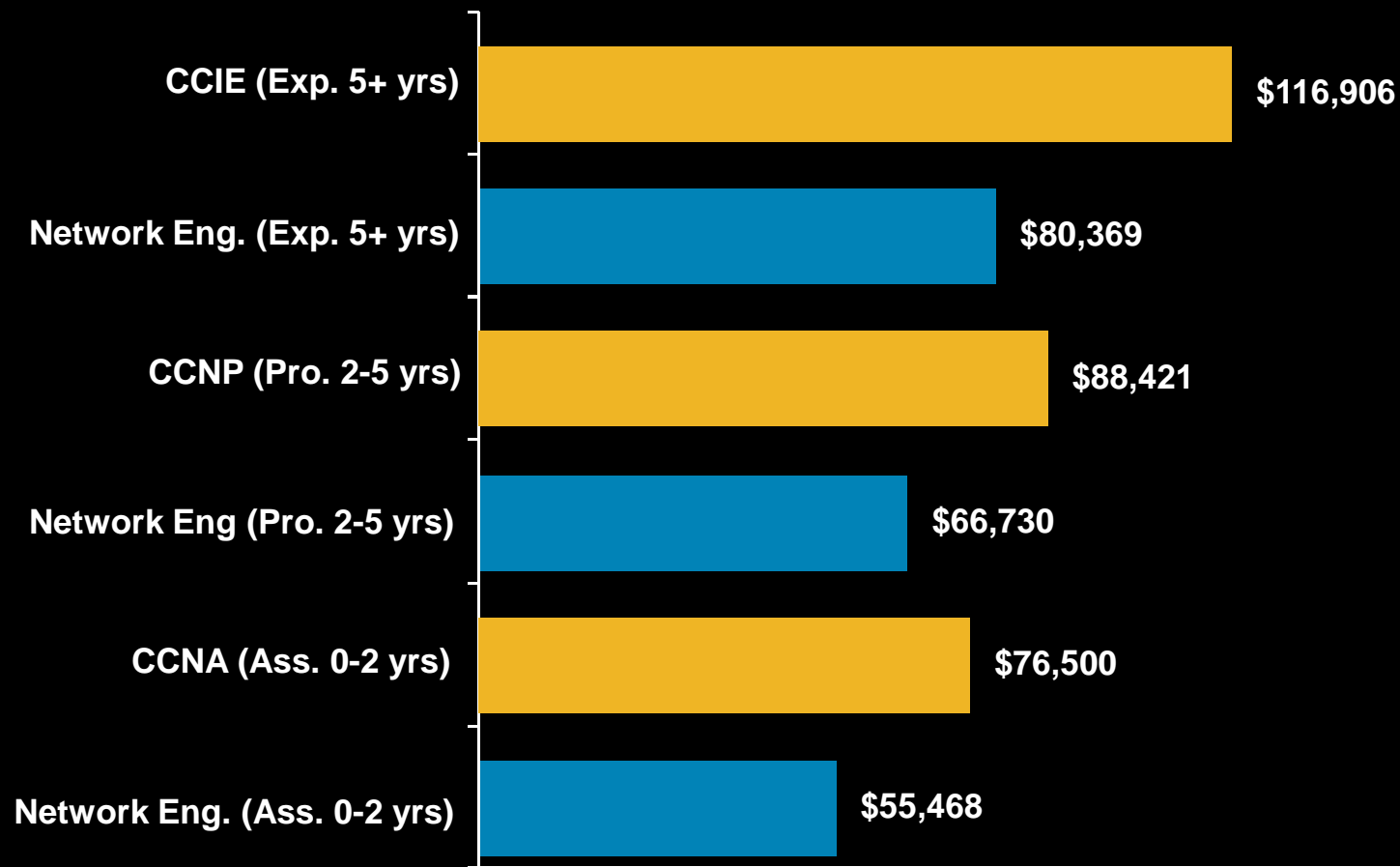
Zertifikate sind bedeutend:



- Vermitteln Kenntnisse über aktuelle, marktrelevante Technologien
- Life long learning (Rezertifizierung)
- Internationaler Standard
- Vorteile bei Bewerbung und Gehalt



Salary Over The Years



Sources: Certification Magazine, December 2006 Salary Survey
TCPMag.com Internetworking Salary Survey 2006-2007

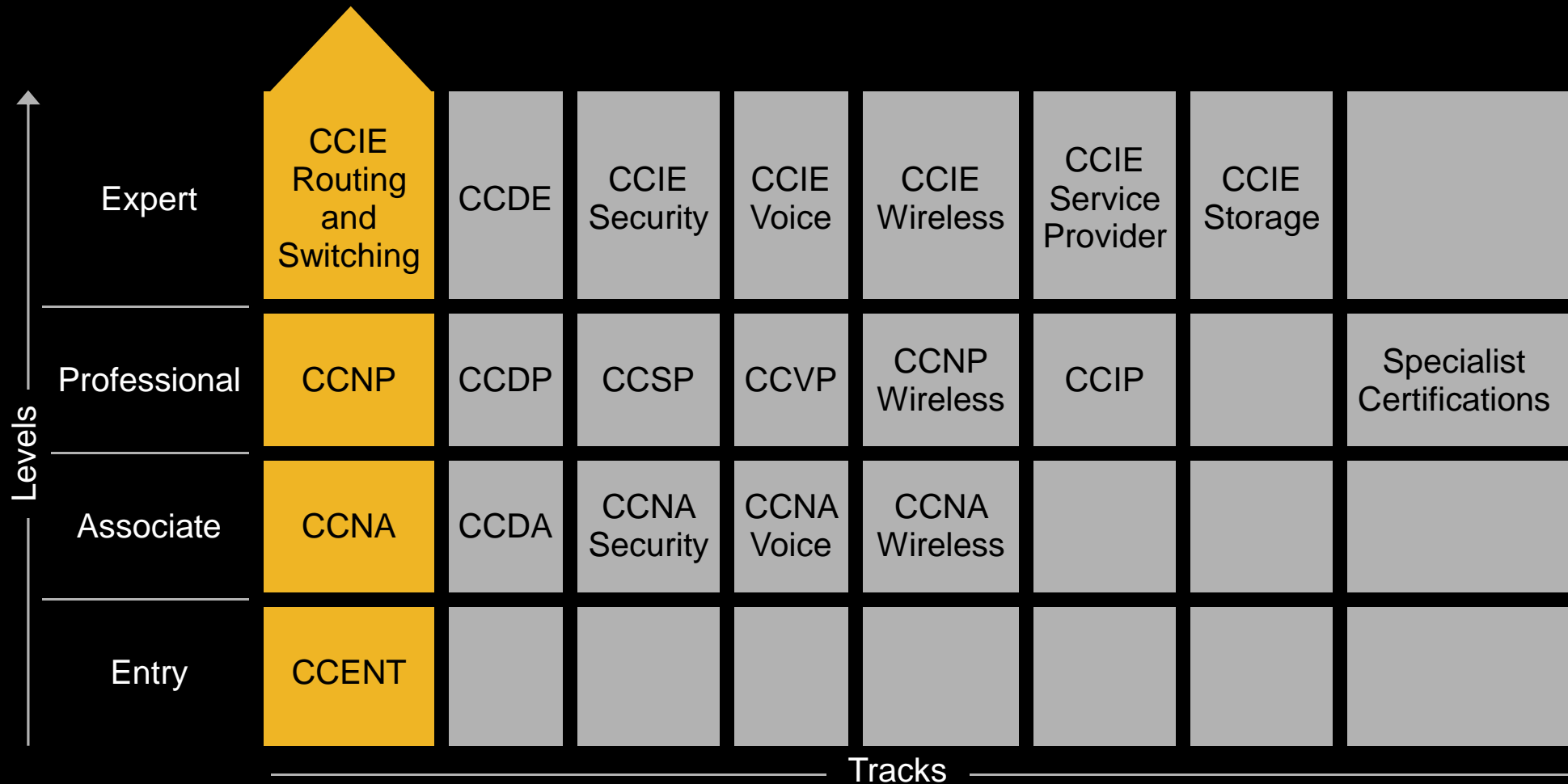


Cisco Zertifikate

Levels ↑	Expert	CCIE Routing and Switching	CCDE	CCIE Security	CCIE Voice	CCIE Wireless	CCIE Service Provider	CCIE Storage	
	Professional	CCNP	CCDP	CCSP	CCVP	CCNP Wireless	CCIP		Specialist Certifications
	Associate	CCNA	CCDA	CCNA Security	CCNA Voice	CCNA Wireless			
	Entry	CCENT							
Tracks									



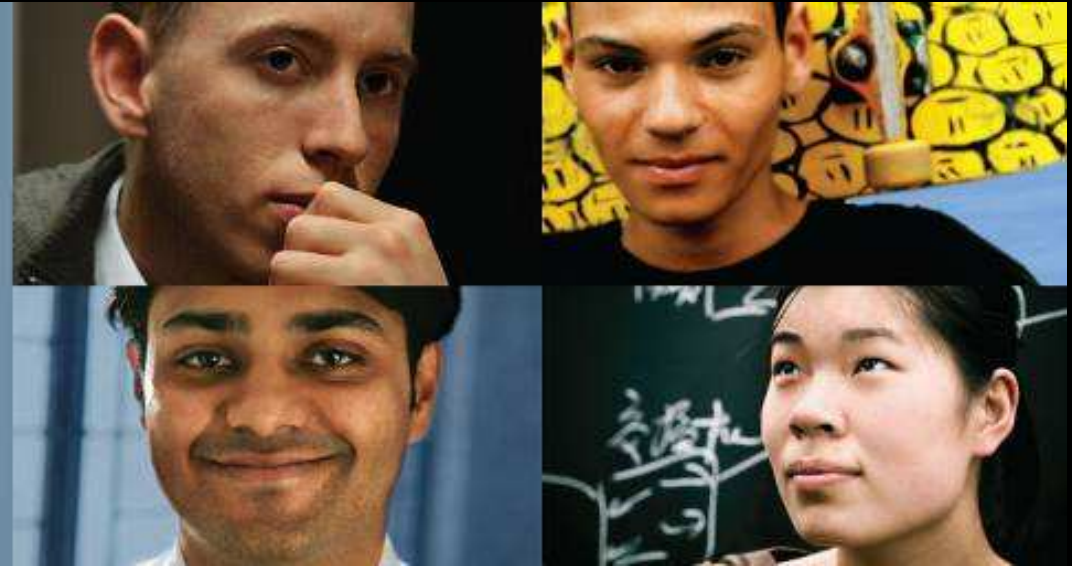
Cisco Zertifikate



Most Popular Path



Cisco Networking Academy Program



Cisco | Networking Academy®
Mind Wide Open™



Umsetzung in Public Private Partnership

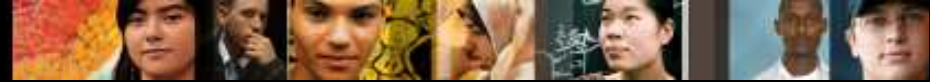


Cisco bietet:

- Curriculum
- Multiplikatoren Training
- Equipment
- eLearning Plattform
- Virtual Community

Bildungspartner bieten:

- Raum
- Dozenten
- Lernende
- Lehrplan Anpassung
- Integration



Cisco Networking Academy in Österreich

- Memorandum of Understanding mit dem BMUKK (2009 erneuert)
- Ca. 100 Academies an Schulen, Fachhochschulen und in der Erwachsenenbildung
- Ca. 7000 Studierende jährlich
- Weltweit über 750.000 Studierende



Die Kurse - Beispiel

file:///C:/CISCO_CCNA/Exploration1_English/theme/cheetah.html?cid=0600000000&l=en&l2=none&chapter=10

1 Living in a Network-Centric World
1.3 The Network as a Platform
1.3.2 The Elements of a Network

CCNA Exploration
Network Fundamentals

1 2 3 4 5

We close this section with an example to tie together how the elements of networks - devices, media, and services - are connected by rules to deliver a message. People often only picture networks in the abstract sense. We create and send a text message and it almost immediately shows up on the destination device. Although we know that between our sending device and the receiving device there is a network over which our message travels, we rarely think about all the parts and pieces that make up that infrastructure.

The Messages

In the first step of its journey from the computer to its destination, our instant message gets converted into a format that can be transmitted on the network. All types of messages must be converted to **bits, binary** coded digital signals, before being sent to their destinations. This is true no matter what the original message format was: text, video, voice, or computer data. Once our instant message is converted to bits, it is ready to be sent onto the network for delivery.

The Devices

To begin to understand the robustness and complexity of the interconnected networks that make up the Internet, it is necessary to start with the basics. Take the example of sending the text message using an instant messaging program on a computer. When we think of using network services, we usually think of using a computer to access them. But, a computer is only one type of device that can send and receive messages over a network. Many other types of devices can also be connected to the network to participate in network services. Among these devices are telephones, cameras, music systems, printers and game consoles.

In addition to the computer, there are numerous other components that make it possible for our instant message to be directed across the miles of wires, underground cables, airwaves and satellite stations that might exist between the [source](#) and destination devices. One of the critical components in any size network

Sending an Instant Message

The destination device reads the bits and converts them back to the human readable message.

1 2 3 4 5 6 7

Click to see the steps.

1.3.2.5

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Looking up



Packet Tracer: Simulation, Visualization, Collaboration

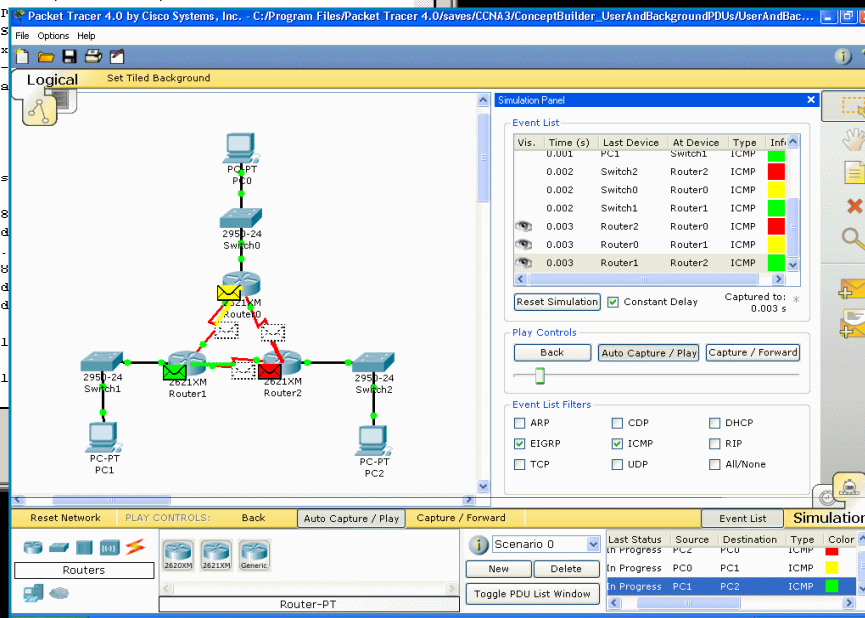
```

SiteD
Physical Config CLI
IOS Command Line Interface
SiteD>ena
SiteD#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF
        NL - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2, E1 - OSPF external type 1, E2 - OSPF external type 2
        I - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, S - summary, N - not advertised, * - candidate default, U - per-user static route
        P - periodic downloaded static route

Gateway of last resort is not set

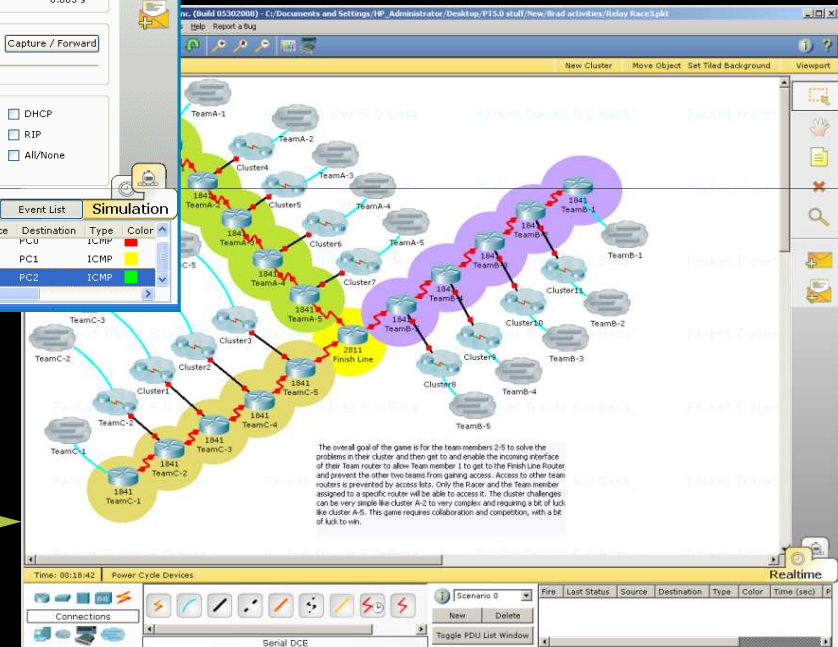
192.168.0.0/24 is variably subnetted, 7 subnets, 0 masks
C       192.168.0.0/25 is directly connected, 128 interfaces
C       192.168.0.128/27 [110/129] via 192.168.0.1, 0:00:00, Ethernet0/0
C       192.168.0.160/27 is directly connected, 128 interfaces
O       192.168.0.192/27 [110/65] via 192.168.0.1, 0:00:00, Ethernet0/0
U       192.168.0.224/30 [110/128] via 192.168.0.1, 0:00:00, Ethernet0/0
C       192.168.0.228/30 is directly connected, 128 interfaces
C       192.168.0.232/30 is directly connected, 128 interfaces
SiteD#
00:00:45: %OSPF-5-ADJCHG: Process 1, Mbr 192.168.0.1, Nbr 192.168.0.232, State CHANGING to FULL, Exchange Done
00:00:55: %OSPF-5-ADJCHG: Process 1, Mbr 192.168.0.1, Nbr 192.168.0.232, State FULL, Exchange Done
    
```

simulate IOS commands



visualize network traffic

collaborate on multiuser activities





Vielen Dank für Ihre Aufmerksamkeit

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