



AYD

Ağ Yöneticileri Derneği



Siber Güvenlik Eğitimi

Ağ Güvenlik Cihazları

Siber Güvenlik Üzerine Kariyer

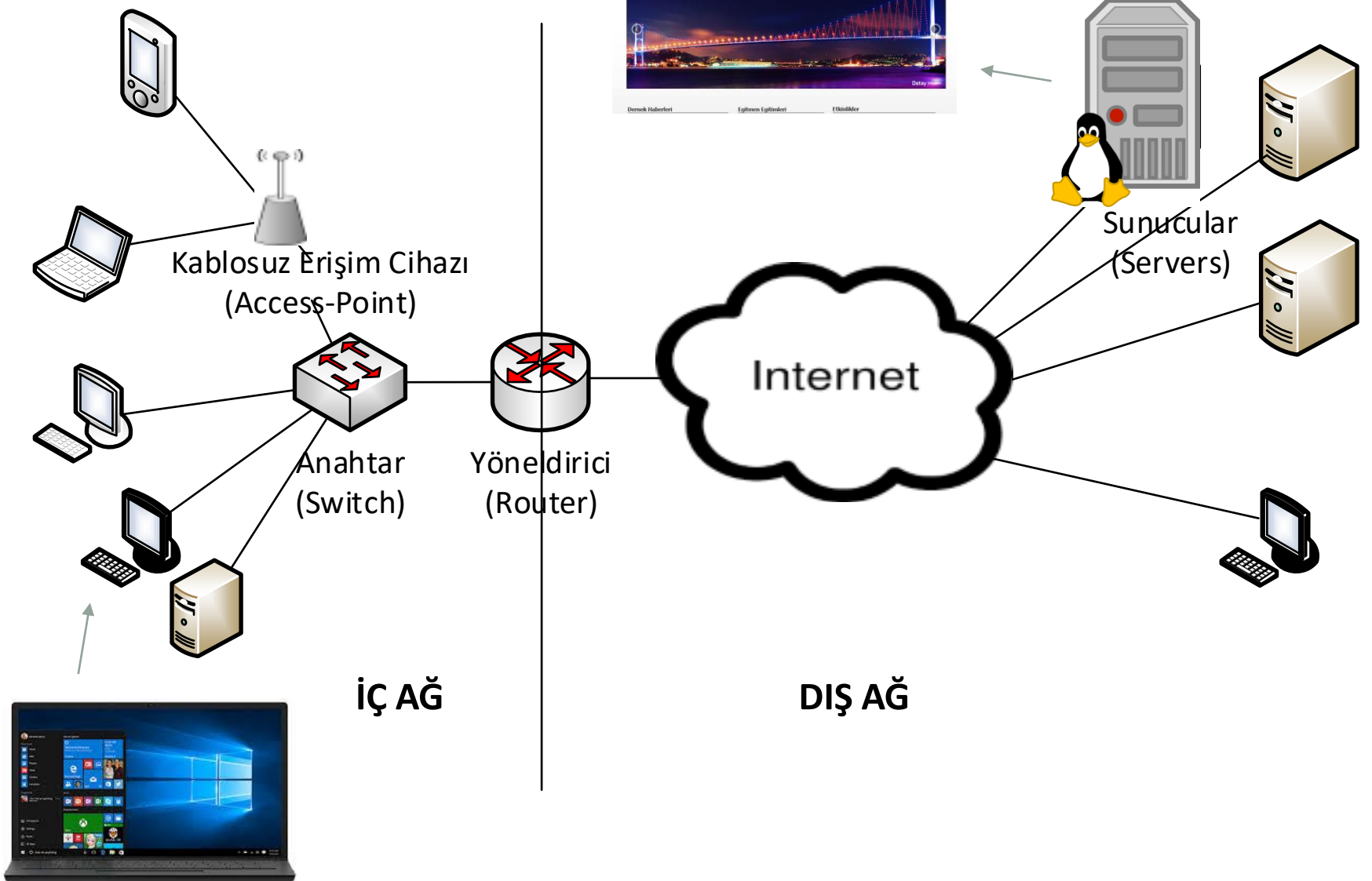
Gokhan AKIN - CCIE# 38647

Ağ Yöneticileri Derneği

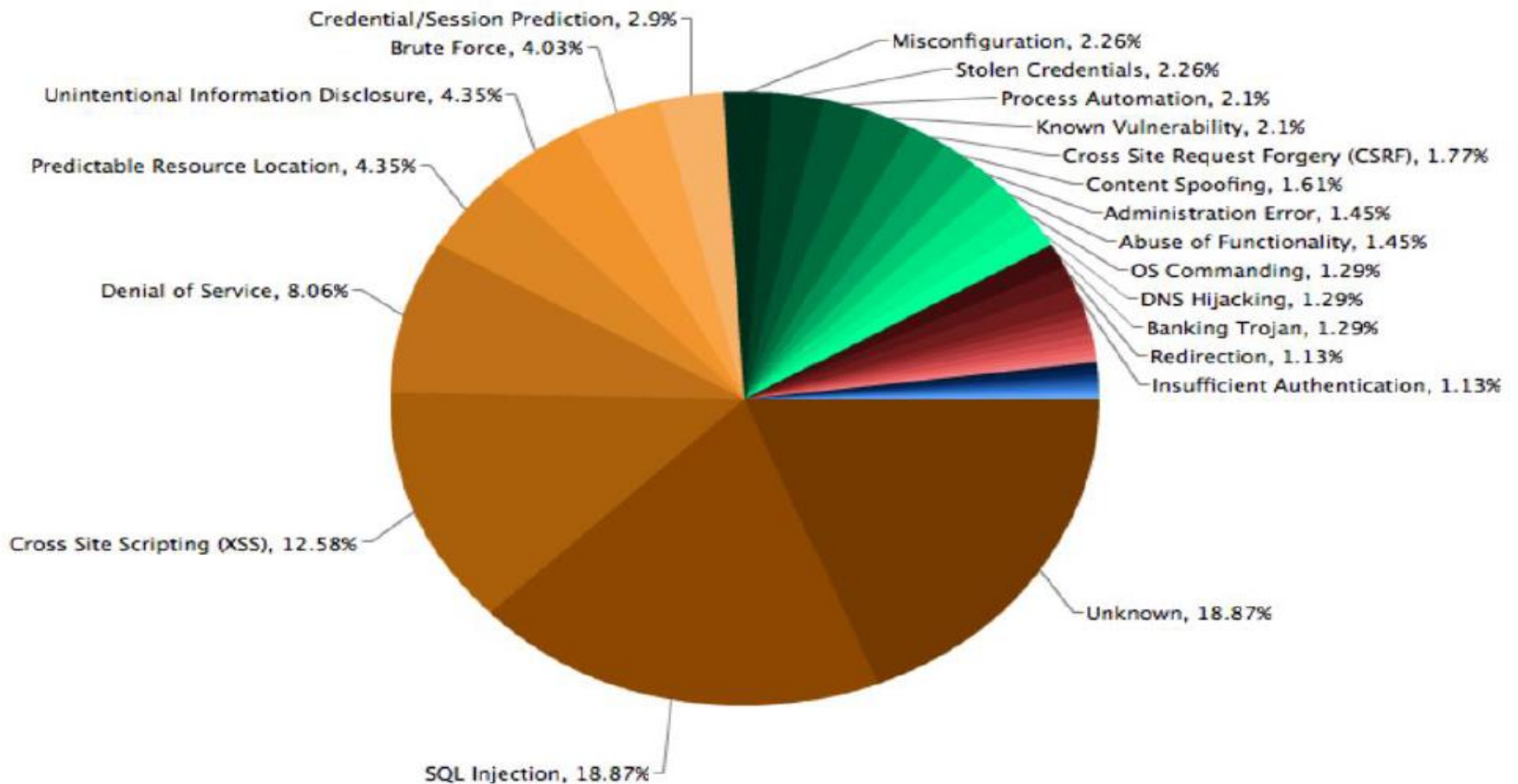

CISCO

Networking
Academy

Tipik Bir Ağ



Web Hacking Tehditleri



SQL Injection

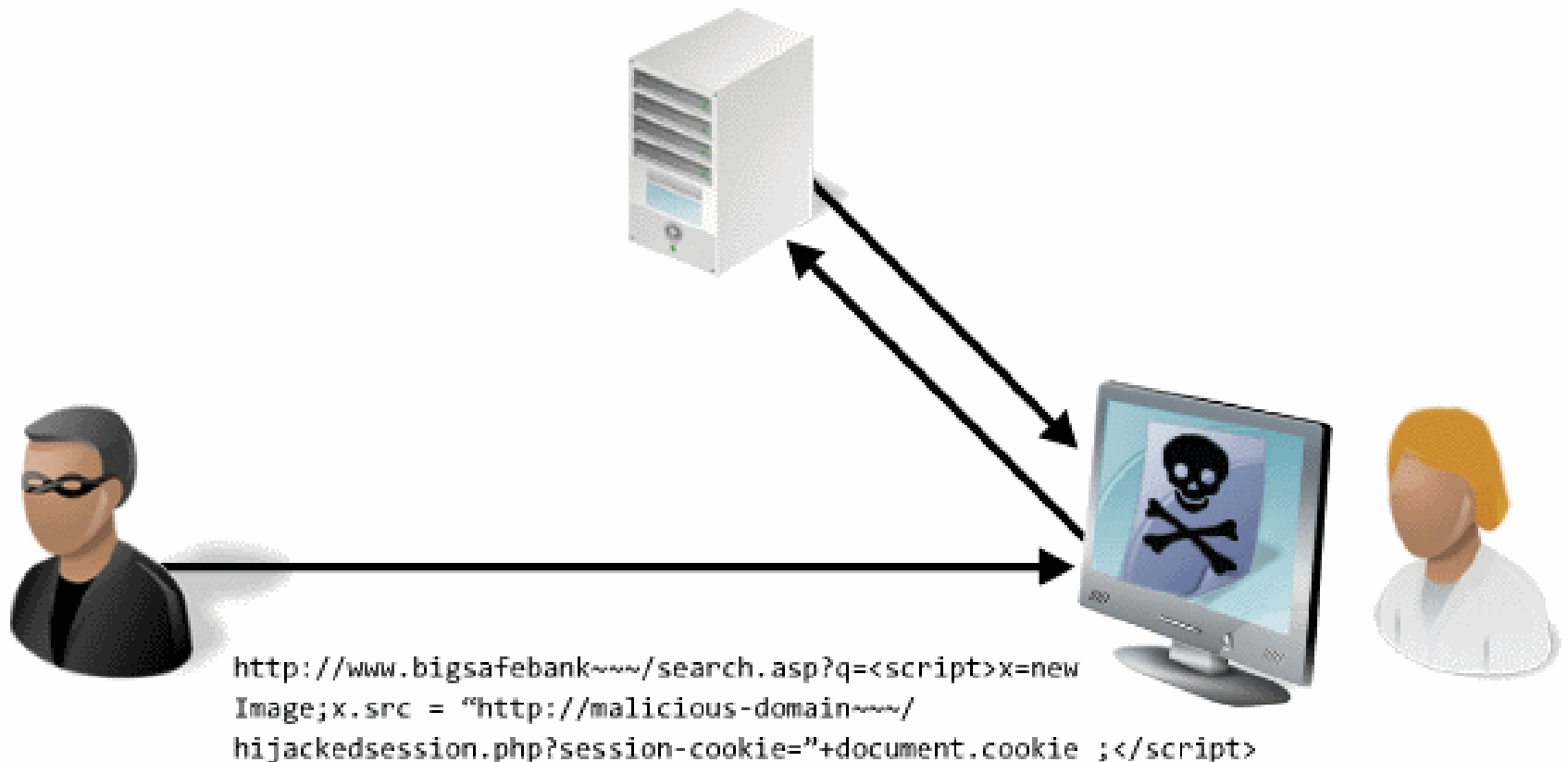
Login Information

Login ID :

Password :

Login successful

XSS Cross Site Scripting



XSS Atağı Detayları:

<http://www.danscourses.com/Network-Penetration-Testing/xss-with-a-vulnerable-webapp.html>

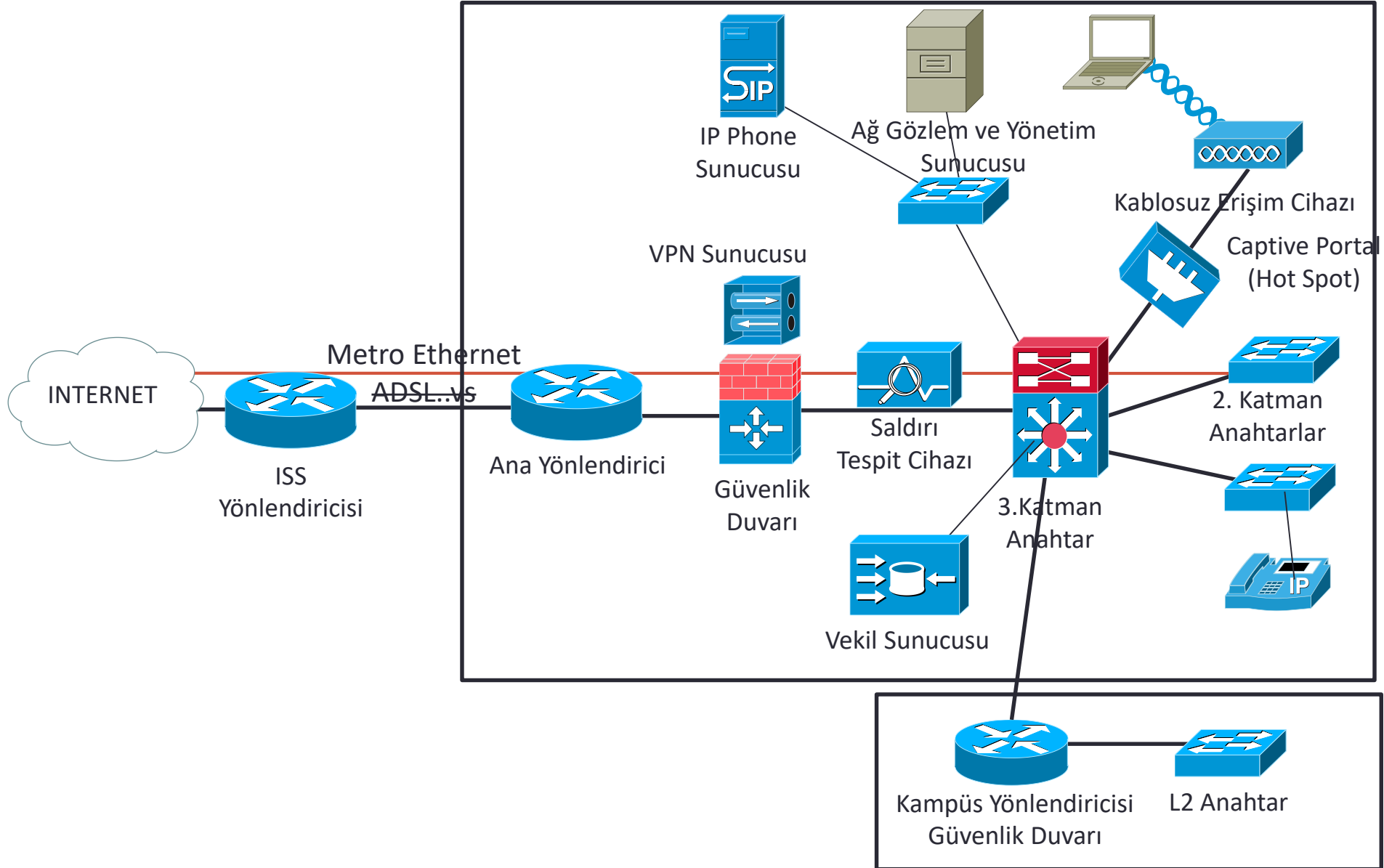
SQL Injection Detayları:

http://www.w3schools.com/sql/sql_injection.asp

Türkçe SQL injection videosu

<https://www.youtube.com/watch?v=Jh-JXE9sQj8>

TİPİK BİR AĞ TOPOLOJİSİ

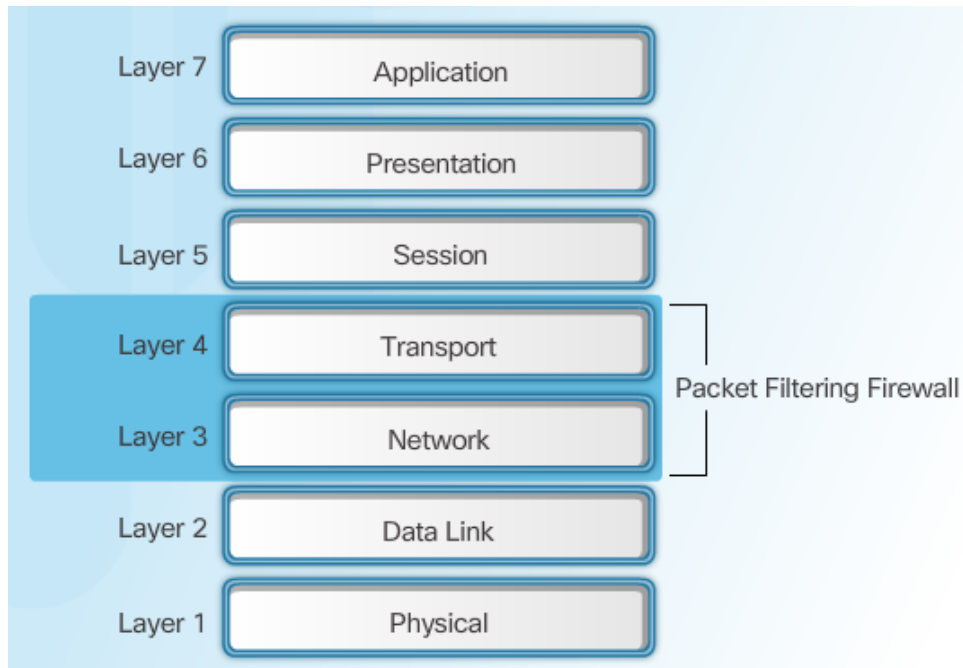


Topic 4.2.2: Firewall Tipleri

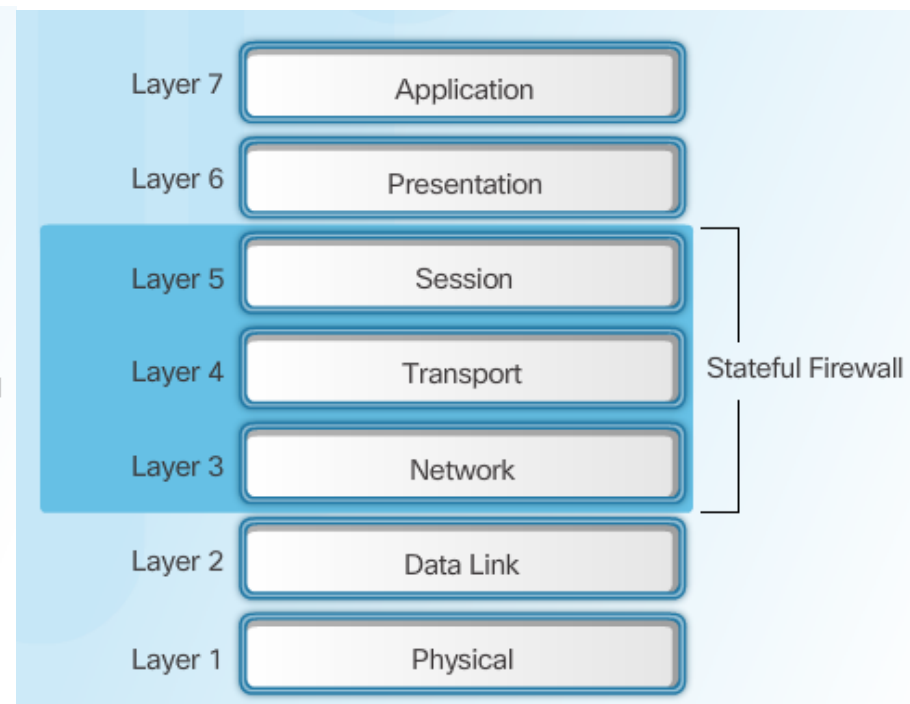


Farklı Firewall Tipleri

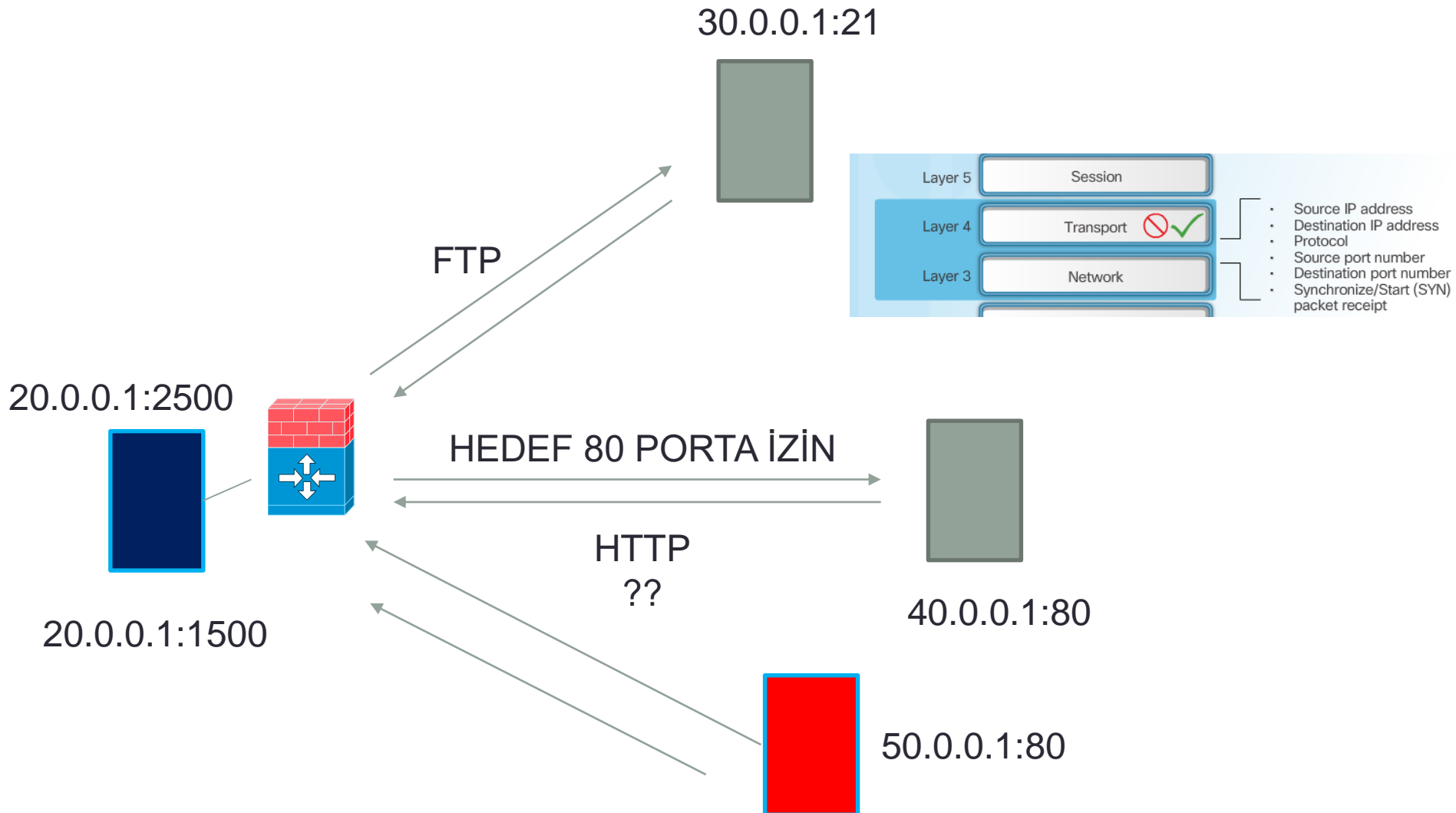
Packet Filtering Firewall



Stateful Firewall

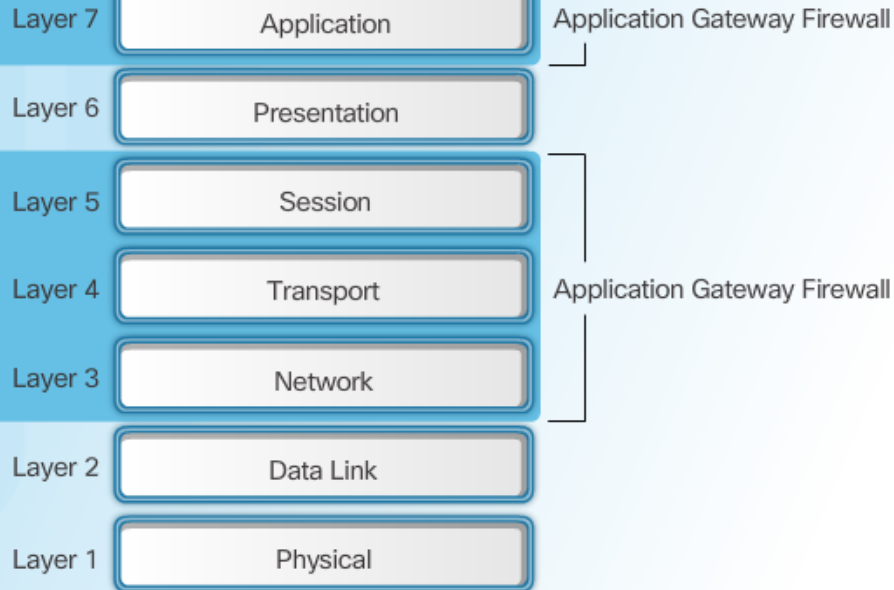


Packet Filtering Firewall Benefits & Limitations

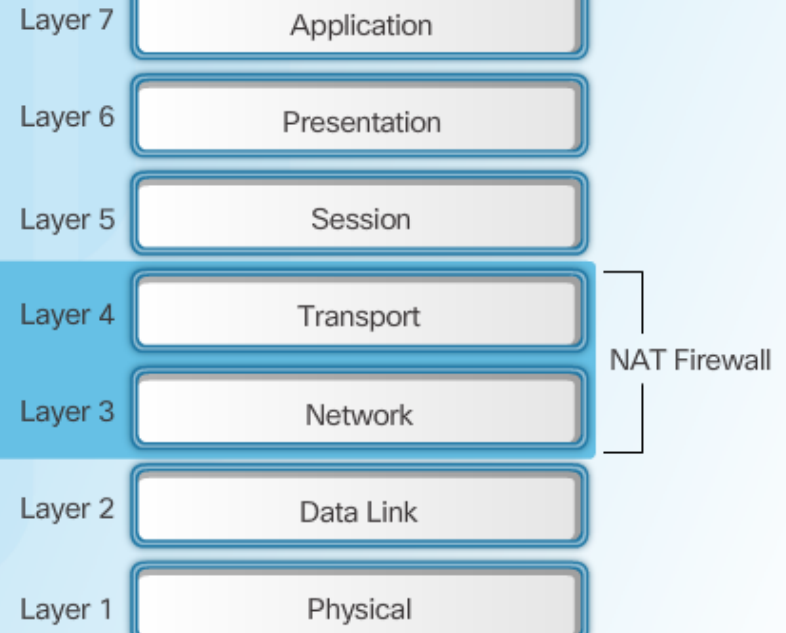


Farklı Firewall Tipleri

Application Gateway Firewall

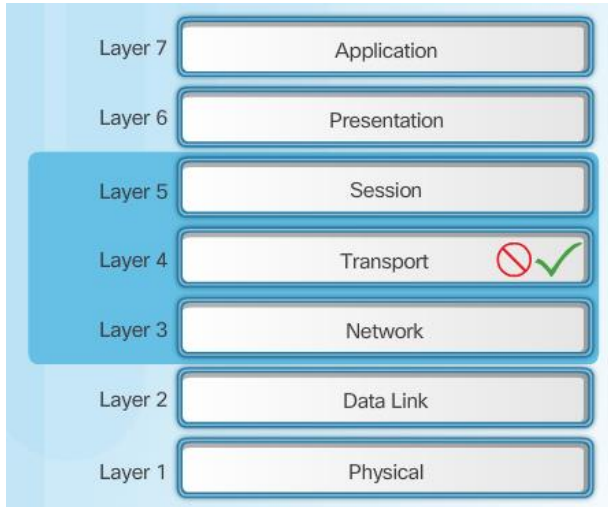


NAT Firewall

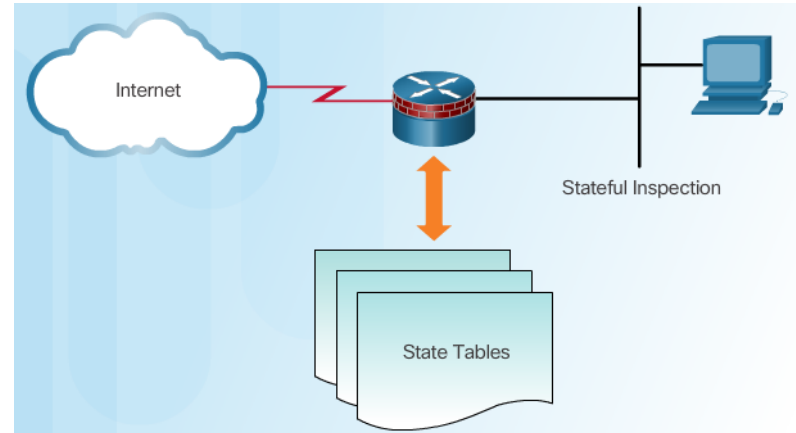


Stateful Firewalls

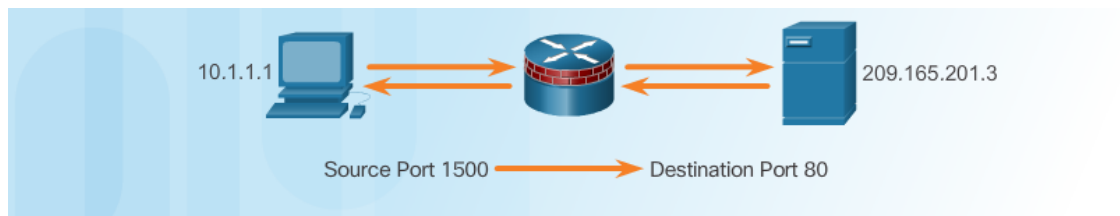
Stateful Firewalls



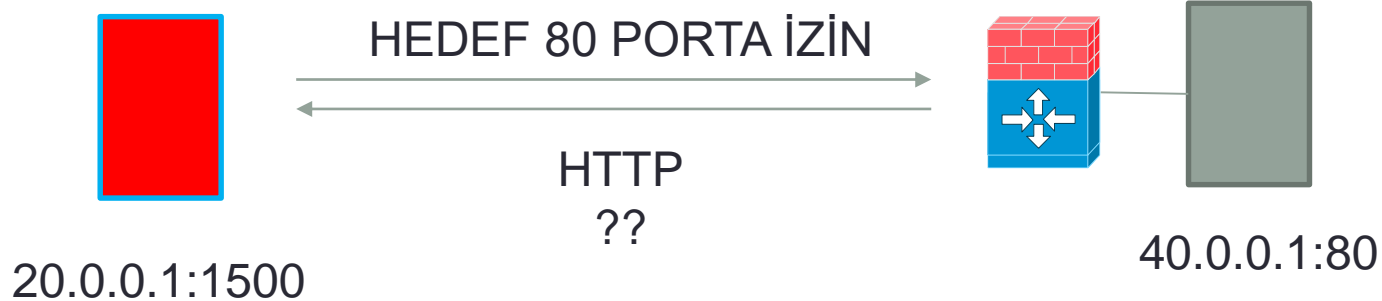
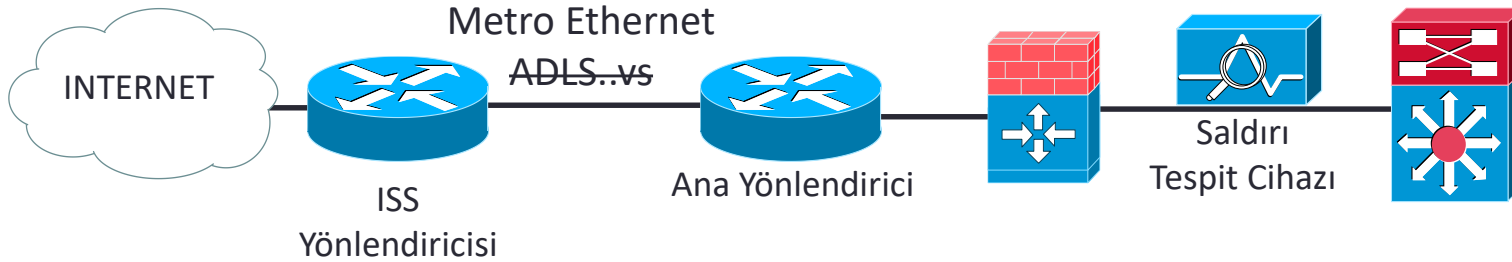
State Tables



Stateful Firewall Operation



Saldırı Tespit ve Önleme Cihazları



Next Generation Firewalls / UTM



- Granular identification, visibility, and control of behaviors within applications
- Restricting web and web application use based on the reputation of the site
- Proactive protection against Internet threats
- Enforcement of policies based on the user, device, role, application type, and threat profile
- Performance of NAT, VPN, and SPI
- Use of an IPS

Classic (traditional) firewalls

- packet filtering /stateful inspection
- network address translation (NAT)
- URL blocking
- virtual private networks (VPNs)

NGFW:

(ek özellikler)

- intrusion prevention
- SSL and SSH inspection
- deep-packet inspection
- malware detection
- **application awareness**
- QoS/bandwidth management
- antivirus inspection
- third-party identity management integration
- (i.e. LDAP, RADIUS, Active Directory)

ÖRNEK: Cisco ASA with FirePOWER Services

Network Güvenliği Üzerine Kariyer



Cisco Networking Academy

Küresel bir bilişim teknolojileri (ICT) eğitim programı

Katılımcılara bilgisayar ağlarını tasarlama, kurma, sorun giderme ve güvenlik konularında eğitim verir

Dünya çapında kariyer olanaklarına ve ekonomik fırsatlara kapı açar





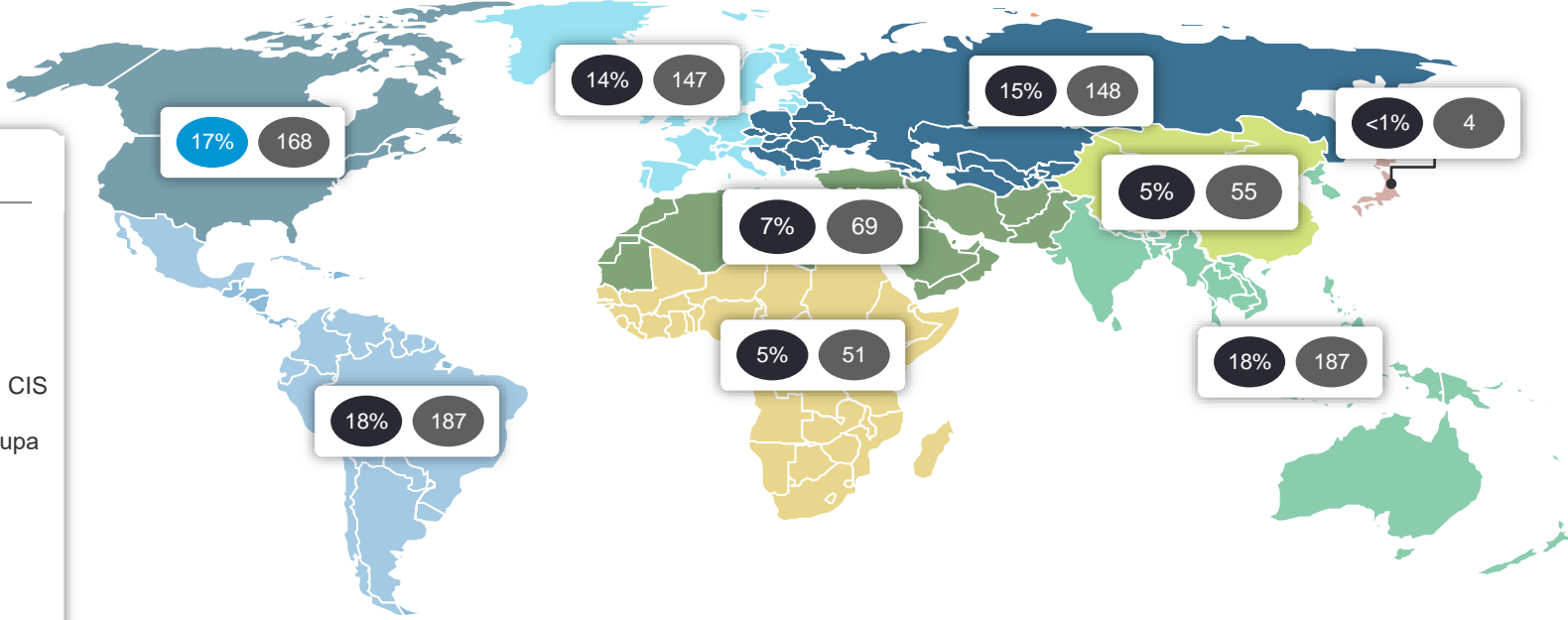
Cisco Networking Academy

Küresel ve Geniş Etki

1 Milyon Aktif Katılımcı

KÜRESEL TOPLAMIN % ORANI

18%	Latin Amerika
18%	Asya Pasifik
17%	A.B.D. Ve Kanada
15%	Orta Avrupa, Rusya, CIS
14%	Güney ve Kuzey Avrupa
7%	Türkiye, Orta Doğu, Kuzey Afrika
5%	Çin
5%	Afrika
<1%	Japonya



BÖLGELERE GÖRE ÖĞRENCİ SAYILARI (Küresel 1,000,000 kişi)

100%

Küresel Toplamın % Oranı, Ocak 2014

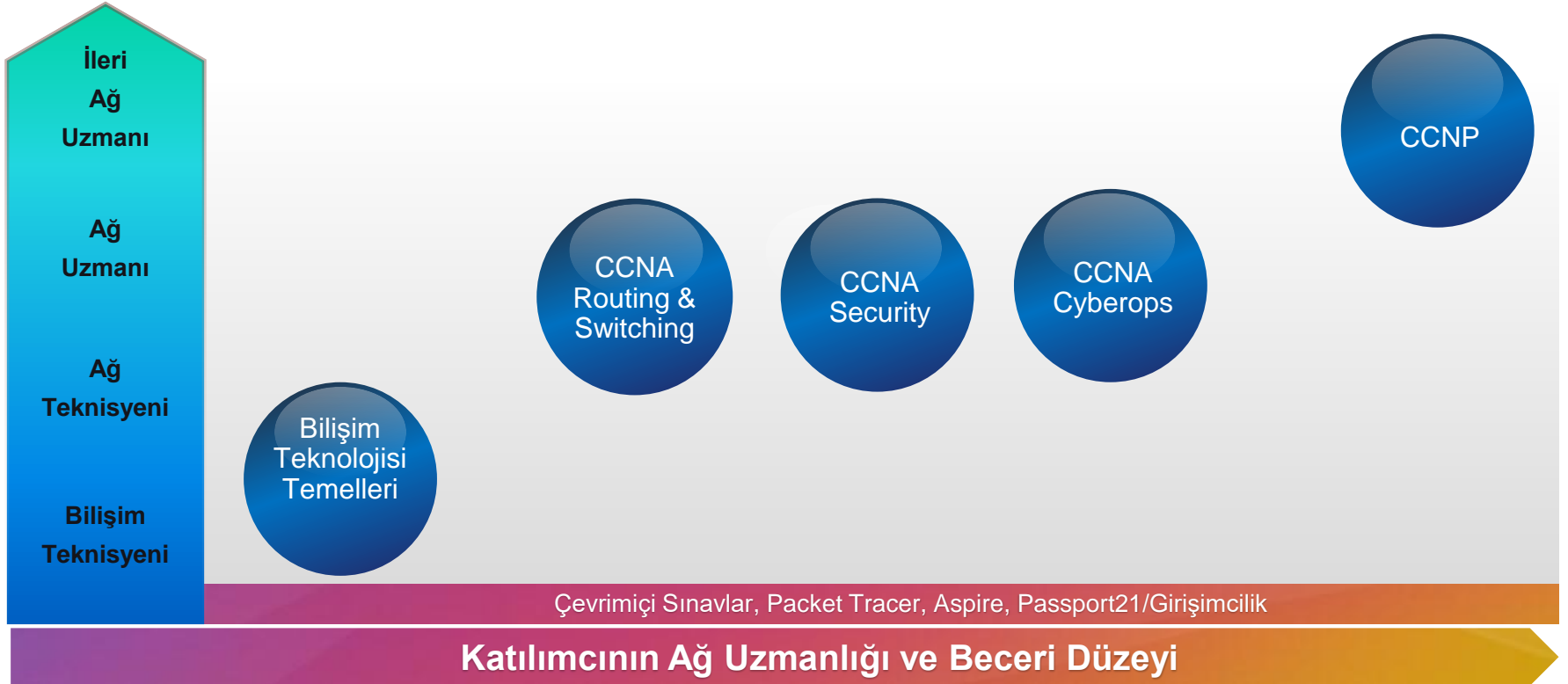
1,000

Bin'in katı olarak öğrenci sayıları



Cisco Networking Academy

Modüler Kurs Portföyü



Tüm Modüller

The Networking Academy Learning Portfolio

Current & Planned



Aligns to Certification



Instructor Training required



Self-paced

* Available within 12 months

Collaborate for Impact

Introduction to
Packet Tracer

Packet
Tracer

Hackathons

Prototyping Lab

NetRiders

Internships

Exploratory

Foundational

Career-Ready



Networking

Networking Essentials
Mobility Fundamentals

CCNA R&S: Introduction to Networks, R&S Essentials, Scaling Networks, Connecting Networks
CCNP R&S: Switch, Route, Tshoot
Emerging Tech Workshop: Network Programmability*



Security

Introduction to Cybersecurity

Cybersecurity Essentials
IoT Security*

CCNA Security
CCNA Cyber Ops*



IoT

Introduction to IoT

IoT Fundamentals:
Connecting Things, Big Data & Analytics
Hackathon Playbook



OS & IT

NDG Linux Unhatched

NDG Linux Essentials
IT Essentials

NDG Linux I
NDG Linux II



Programming

CLA: Programming Essentials in C
CPA: Programming Essentials in C++
PCA: Programming Essentials in Python*
Emerging Tech Workshop: Collaboration / Spark API*

CLP: Advanced Programming in C*
CPP: Advanced Programming in C++*



Business

Be Your Own Boss

Entrepreneurship



Digital Literacy

Get Connected

September 2017

SiberGüvenlik Sertifikaları

- **CompTIA Security+**
- **CEH: Certified Ethical Hacker**
- **GSEC: SANS GIAC Security Essentials**
- **CISSP: Certified Information Systems Security Professional**
- **CISM: Certified Information Security Manager**
- **CCNA Security**
- **CCNA Cyberops**

SiberGüvenlik Sertifikaları

Certification	<u>LinkedIn Jobs</u>
CEH	1,427
CISM	2,337
CISSP	7,632
GSEC	954
Security+	1,275

CompTIA Security+

Certification Name	CompTIA Security+
Prerequisites & Required Courses	None. CompTIA recommends at least two years of experience in IT administration (with a security focus) and the Network+ credential before taking the Security+ exam.
Number of Exams	One: SYO-401
Cost of Exam	\$311 (discounts may apply)
URL	https://certification.comptia.org/certifications/security
Self-Study Materials	Exam objectives, sample exam questions, the CertMaster online training tool, training kits, computer-based training and a comprehensive study guide are available at CompTIA.org.

CEH: Certified Ethical Hacker

Certification Name	Certified Ethical Hacker (CEH)
Prerequisites & Required Courses	Training is highly recommended. Without formal training, candidates must have at least two years of information security-related experience and an educational background in information security, pay a nonrefundable eligibility application fee of \$100, and submit an Exam Eligibility Application prior to purchasing an exam voucher.
Number of Exams	One: 312-50 (125 multiple-choice questions, four hours)
Cost of Exam	\$500 EC-Council test center; \$600 Pearson VUE test center
URL	https://www.eccouncil.org/programs/certified-ethical-hacker-ceh/
Self-Study Materials	EC-Council instructor-led courses, computer-based training, online courses and more are available at ECCouncil.org. A CEH skills assessment is also available for credential seekers.



Certified Information Systems Security Professional

Certification Name	Certified Information Systems Security Professional (CISSP)
	Optional CISSP concentrations:
	<ul style="list-style-type: none">• CISSP Architecture (CISSP-ISSAP)• CISSP Engineering (CISSP-ISSEP)• CISSP Management (CISSP-ISSMP)
Prerequisites & Required Courses	At least five years of paid, full-time experience in at least two of the eight (ISC) ² domains or four years of paid, full-time experience in at least two of the eight (ISC) ² domains and a college degree.
Number of Exams	One for CISSP (250 multiple-choice and advanced innovative questions, six hours)
	One for each concentration area
Cost of Exam	CISSP is \$599; each CISSP concentration is \$399
URL	https://www.isc2.org/CISSP/Default.aspx
Self-Study Materials	See the CISSP Exam Preparation web page. A variety of training materials are available, including instructor-led, live online, on-demand and private training.

CCNA Security

Kurs Bölümleri ve Hedefler

Chapter 1	Modern Network Security Threats Goal: Describe the security threats facing modern infrastructures
Chapter 2	Securing Network Devices
Chapter 3	Authentication, Authorization and Accounting Goal: Implement AAA on Cisco routers using local router database and external ACS
Chapter 4	Implementing Firewall Technologies Goal: Mitigate threats to Cisco routers and networks using ACLs.
Chapter 5	Implementing Intrusion Prevention Goal: Implement secure network design, management and reporting.
Chapter 6	Securing the Local Area Network
Chapter 7	Cryptographic Systems Goal: Implement the Cisco IOS firewall feature set.
Chapter 8	Implementing Virtual Private Networks Goal: Implement the Cisco IOS IPS feature set.
Chapter 9	Implementing the Cisco Adaptive Security Appliance (ASA) Goal: Implement a site-to-site VPN.
Chapter 10	Managing a Secure Network

CCNA Security Eğitimi – Hangi sıra ile alınmalı?

- Katılımcılar CCENT dersini tamamlayıp daha sonra CCNA Security kursuna kayıt olabilir.
- Öğrenciler tüm CCNA R&S kurslarını tamamlayıp daha sonra CCNA Security kursuna kayıt olabilirler.

Cisco Güvenlik Sertifikaları

Sertifika İsmi	Deneyim Yılı	İş Tanımları	Sınav Sayısı	Önşartlar
CCNA Security	1-3	<ul style="list-style-type: none">• Network Security Specialist• Security Administrator• Network Security Support Engineer	1	<ul style="list-style-type: none">• Geçerli Cisco CCENT, CCNA Routing and Switching, veya herhangi bir CCIE sertifikası
CCNP Security	3 – 5	<ul style="list-style-type: none">• Network Security Engineer	4	<ul style="list-style-type: none">• Geçerli CCNA Security veya herhangi bir CCIE Sertifikası
CCIE Security	5-7	<ul style="list-style-type: none">• Network Security Engineer	2	<ul style="list-style-type: none">• Resmi bir ön koşul bulunmamaktadır

Sertifikalar



«CCNA Security» Sertifikası

IINS (Implementing Cisco IOS Network Security)

Sınav Kodu	: 640-554 IINS
Sınav Süresi	: 90 dakika (55-65 soru)
Sınav Dili	: İngilizce
Sınava Kayıt	: Pearson VUE
Sınav Geçerlilik Süresi	: 3 yıl

«CCNA Cyberops» Sertifikası

210-250 - CCNA Cyber Ops Understanding Cisco Cybersecurity Fundamentals

Sınav Kodu	: 210-250 210-255
Sınav Süresi	: 90 dakika (55-65 soru)
Sınav Dili	: İngilizce
Sınava Kayıt	: Pearson VUE
Sınav Geçerlilik Süresi	: 3 yıl

Cyberops İçeriği

Chapter 1

Cybersecurity and the Security Operations Center

Chapter 2

Windows Operating System

Chapter 3

Linux Operating System

Chapter 4

Network Protocols and Services

Chapter 5

Network Infrastructure

Chapter 6

Principles of Network Security

Chapter 7

Network Attacks: A Deeper Look

Chapter 8

Protecting the Network

Chapter 9

Cryptography and the Public Key Infrastructure

Chapter 10

Endpoint Security and Analysis

Chapter 11

Security Monitoring

Chapter 12

Intrusion Data Analysis

Chapter 13

Incident Response and Handling

Siber güvenlik uzmanı

- 1- İyi temel network bilgisi
- 2- İyi network güvenliği bilgisi
- 3- İyi Linux bilgisi
- 4- Windows bilgisi / MacOS bilgisi (OPS)
- 4- Bir script dili
- 5- Siber güvenlik atakları ve tooları bilgisi
- 6- Olay Müdahalesi (Incident Response) (OPS)

Teşekkürler



Dernek Sitesi: www.agyoneticileri.org

Eğitim Portalı: www.ag.org.tr

Email: [egitim @ agyoneticileri.org](mailto:egitim@agyoneticileri.org)

www.facebook.com/AgYoneticileriDernegi