Ducara Info Solutions (P) Ltd.

C|NPT

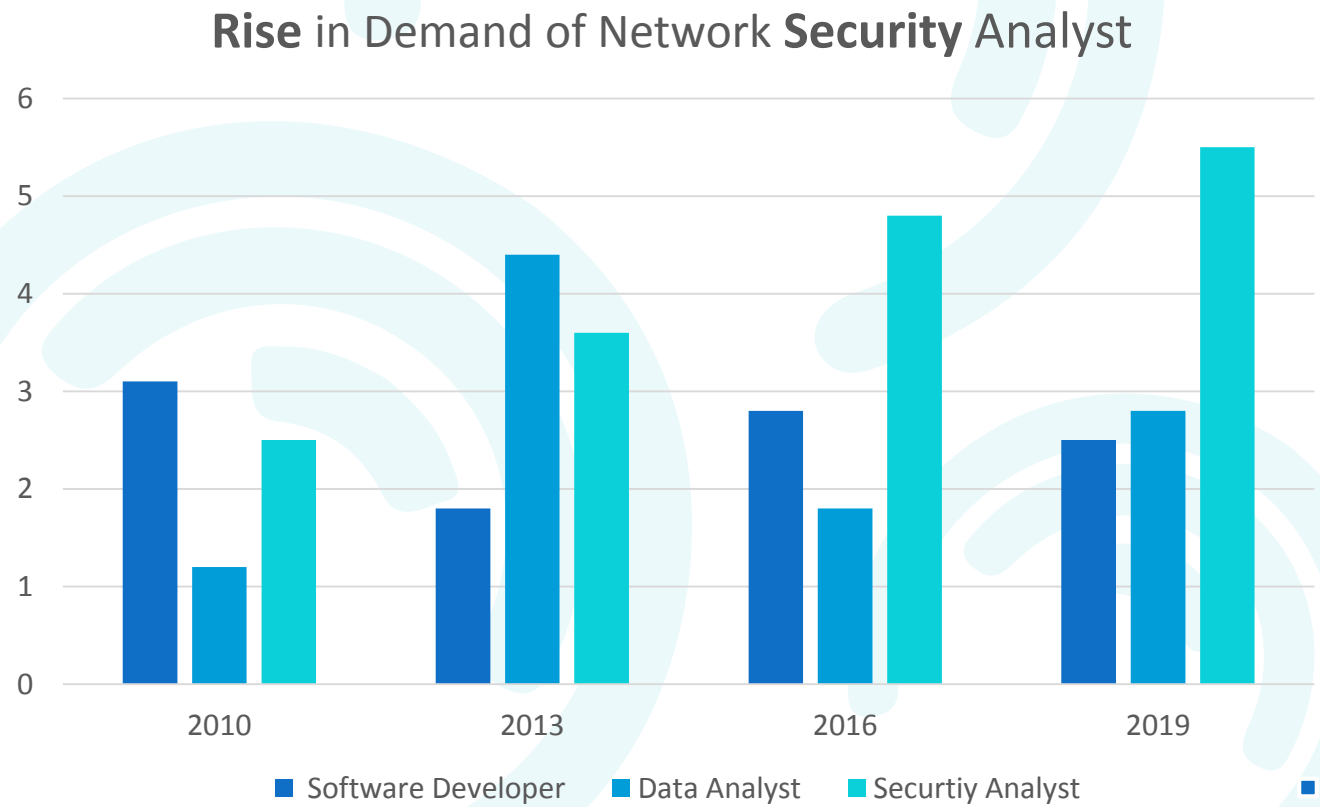
Certified Network Penetration Tester

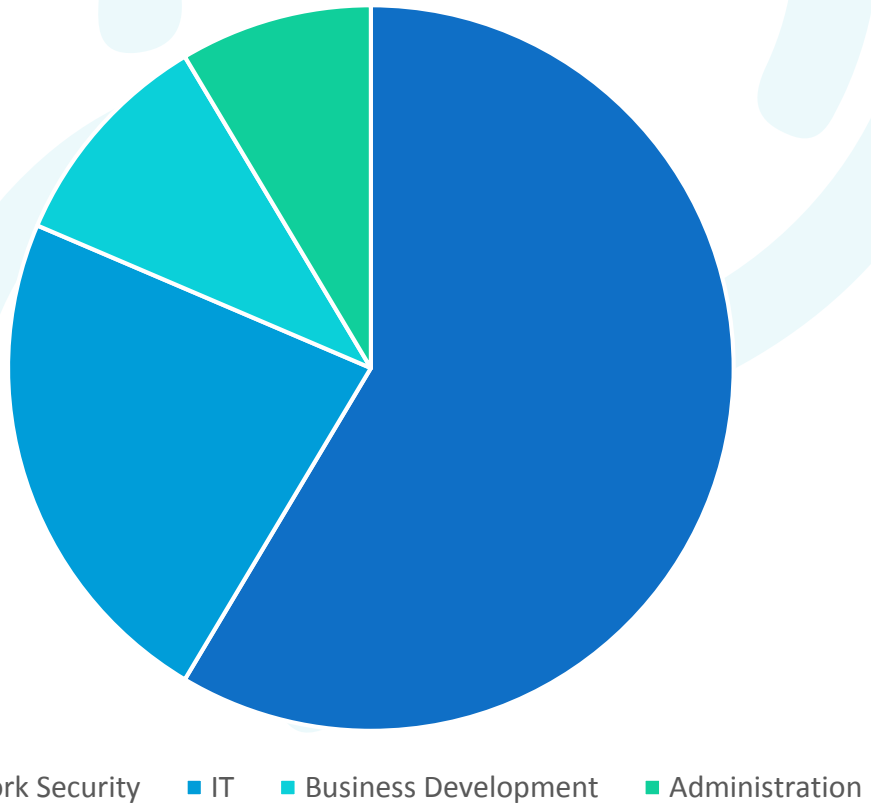
WHY C|NPT?

Network **Penetration** Testing is an authorized, proactive attempt to measure the security of an IT system by safely exploiting its vulnerabilities, mostly to evaluate application **Flaws**, improper configurations, **Risky** end-user behavior.

WHAT TREND SAYS?

The need for **Penetration** testers has grown well over what the IT industry ever anticipated. Running just a vulnerability scanner is no longer an effective method to determine whether a **Business** is truly secure. Pen-testers are among the **Highest** paid professionals in the IT industry.





TARGET AUDIENCE

DURATION: 40 HRS

PENETRATION TESTERS

ETHICAL HACKERS

SECURITY AUDITORS

FORENSICS SPECIALISTS

The Network Pen-tester program is designed to make you an **Expert** in vulnerability management and implement an end-to-end **Robust** vulnerability management and penetration testing program. Primary audience for this certification is cyber security personnel and **Defenders**.

WHAT IS THE OBJECTIVE?

Individuals **certified** at this level will have a demonstrated **understanding** of IT Security**.**

- Serve as the central point of contact for **Enterprise Security** for other Technology teams within the organization.
- **Scan** and test security architectures for various information systems.
- Design and implement architectures that will allow business requirements to be met with a minimal degree of **Risk** to the organization.
- Represent security **Platform** in development and implementation of the overall global enterprise architecture.
- **Conduct** a full-scale, high-value penetration test and develop the most effective penetration testing **skills** to protect your Network.
- Conduct an end-to-end pen test, applying **knowledge**, tools, and principles.
- Every organization needs skilled information security personnel who can find vulnerabilities and **mitigate** their effects.
- Exploit vulnerabilities in a **realistic** sample network, demonstrating the skills.

Become an **Expert** with Ducara, the stage is all set, get **Certified** with our best Network **Penetration** testing program.

C|NPT
CERTIFIED NETWORK PENETRATION TESTER

SCAN YOUR NETWORK FOR VULNERABILITIES

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WHAT YOU WILL LEARN IN THE COURSE?

1. VULNERABILITY MANAGEMENT GOVERNANCE
2. PENETRATION TESTING BASICS
3. SECURITY ASSESSMENT PREREQUISITES
4. CUSTOMERS & LEGAL AGREEMENTS
5. NETWORK INFORMATION GATHERING
6. NETWORK SCANNING
7. NETWORK VULNERABILITY ASSESSMENT
8. NETWORK EXPLOITATION
9. SYSTEM & PASSWORD EXPLOITATION
10. PRIVILEGE ESCALATION & EXPLOITATION
11. WIRELESS EXPLOITATION
12. SNIFFING & SPOOFING
13. FIREWALL PENETRATION TESTING
14. IDS PENETRATION TESTING
15. WRITING THE PENETRATION TESTING REPORT

MODULE 1

VULNERABILITY MANAGEMENT GOVERNANCE

1. **Security** basics
2. **Need** for Security Assessments
3. **Business drivers**
4. **Calculating** ROIs
5. **Setting** up the Context
6. **Policy** & Procedure
7. **Penetration** Testing Standards
8. **Industry** Standards

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MODULE 2

PENETRATION TESTING BASICS

1. **Vulnerability** Assessment
2. **Goals** and Objectives
3. **Types** of Penetration Testing
4. **Phases** of Penetration Testing
5. **Gathering** Requirements
6. **Preparing** Test Plan
7. **Providing** Test Objectiveness & Boundaries
8. **Project** Management
9. **Third-party** Approvals
10. **Categorization** of Vulnerabilities

MODULE 3

SECURITY ASSESSMENT PREREQUISITES

1. **Target** Scoping and Planning
2. **Gathering** Requirements
3. **Deciding** type of Vulnerability Assessment
4. **Estimating** the Resources and Deliverables
5. **Preparing** a Test Plan and Test Boundaries
6. **Getting** Approval and Signing NDAs

MODULE 4

CUSTOMERS & LEGAL AGREEMENTS

1. **Legal** Consequences
2. **Confidentiality** and NDA Agreements
3. **Penetration** Testing Contract
4. **Liability** Issues
5. **Negligence** Claim
6. **Drafting** Contracts
7. **Rules** of Engagement (ROE)
8. **ROE** includes Key Elements
9. **Description** of Key Elements
10. **Steps** for Framing ROE
11. **Clauses** in ROE

MODULE 5

NETWORK INFORMATION GATHERING

1. **Discovering** Live Servers over the Network
2. **Bypassing** IDS/IPS/Firewall
3. **Discovering** ports over the Network
4. **Using** unicornscan for faster Port Scanning
5. **Service** Fingerprinting
6. **Determining** the OS using nmap and xprobe2
7. **Service** Enumeration
8. **Open-source** Information Gathering

MODULE 6

NETWORK SCANNING

Check for Live Systems by using Ping

Check for Open and Closed Ports using Nmap

Various Scanning Techniques by using Nmap

MODULE 7

NETWORK VULNERABILITY ASSESSMENT

Manual Vulnerability Assessment

Integrating nmap with Metasploit

Metasploitable Assessment with Metasploit

OpenVAS Framework

MODULE 8

NETWORK EXPLOITATION

Operations

Intelligence & Counter Intelligence

Reconnaissance

Surveillance

MODULE 9

SYSTEM & PASSWORD EXPLOITATION

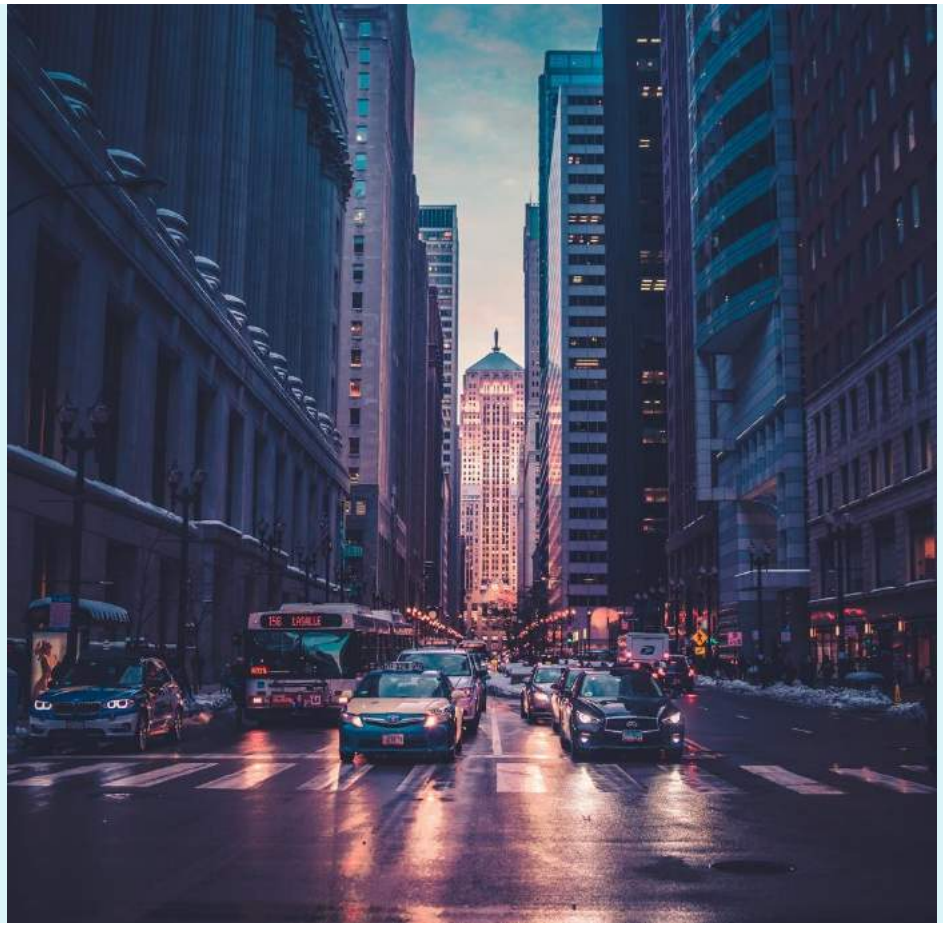
Using local Password-Attack tools

Cracking Password Hashes

Using Social-Engineer Toolkit

Using BeEF

Cracking NTLM Hashes



MODULE 10

PRIVILEGE ESCALATION & EXPLOITATION

Using WMIC

Sensitive-Information Gathering

Unquoted Service-Path Exploitation

Service Permissions Issues

Misconfigured Software Installations

Insecure File Permissions

Linux Privilege Escalation

MODULE 11

WIRELESS EXPLOITATION

- MAC Address Filtering
- Cracking WEP Encryption
- Cracking WPA/WPA2 Encryption
- Cracking WPS

MODULE 12

SNIFFING & SPOOFING

- Sniffing Network Traffic
- Spoofing Network Traffic
- Denial-of-Service Attacks

MODULE 13

FIREWALL PENETRATION TESTING

- Introduction
- Firewall **OPERATIONS**
- **FIREWALL** Logging Functionality
- Firewall **POLICY**
- Firewall **IMPLEMENTATION**
- **MAINTENANCE** & Management of Firewall
- **TYPES** of Firewall
- Steps for Firewall **PENETRATION** Testing

MODULE 14

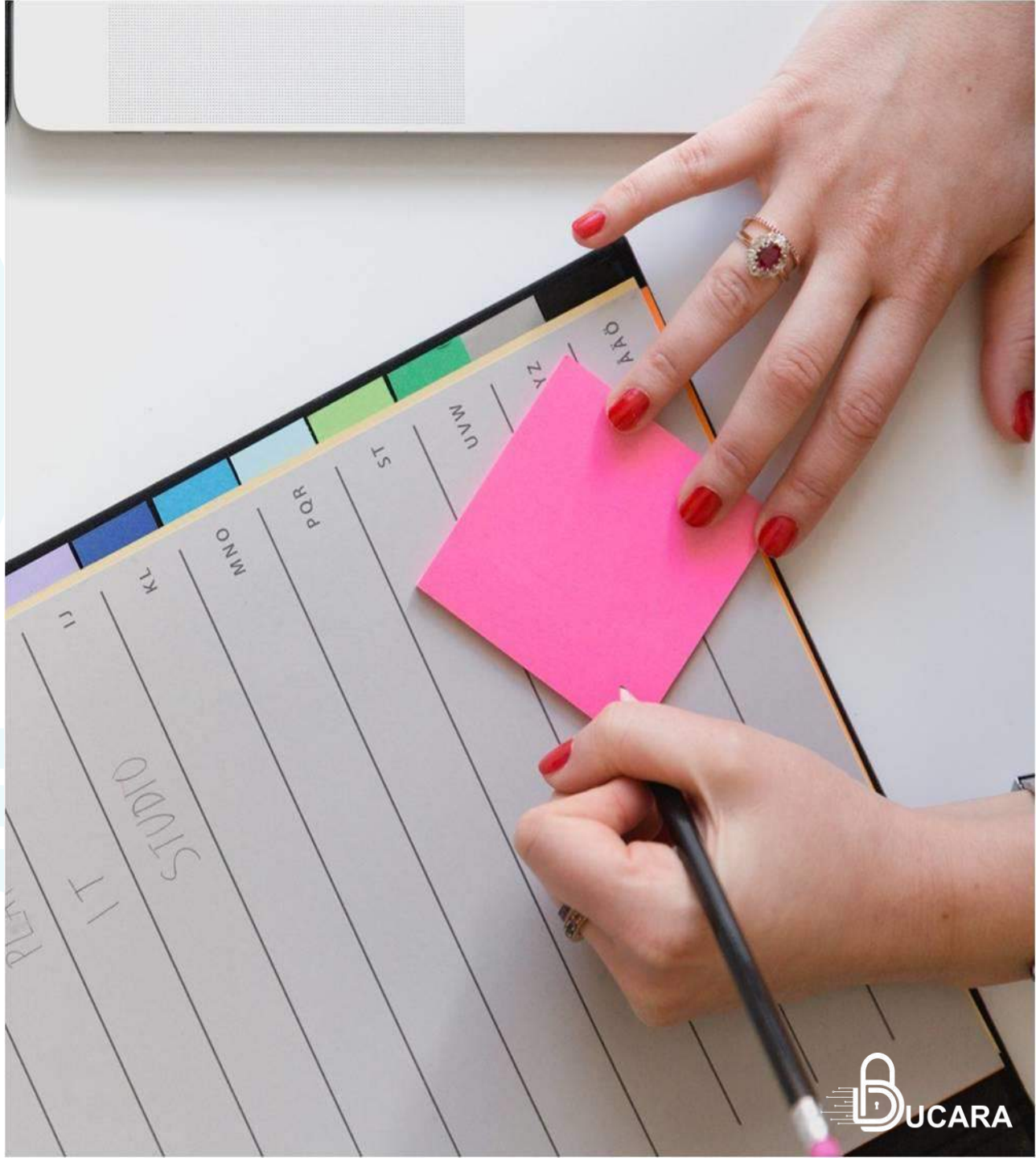
IDS PENETRATION TESTING

- Introduction
- Intrusion Detection **SYSTEM**
- **TYPES** of IDS
- **MULTI-LAYER** IDS
- Wireless **IDS**
- Common **TECHNIQUES** to Evade IDS
- Snort **ANALYSIS**
- IDS **PENETRATION** Testing Steps

MODULE 15

WRITING THE PENETRATION TESTING REPORT

1. **Gathering** all your data
2. **Importance** of defining Risk
3. **Structure** of a Penetration Test
4. **Report** Building the Report
5. **Delivering** the Report



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THE TECHNOLOGY IS CHANGING EVERY DAY AND WE AT DUCARA ARE COMMITTED TO DEMONSTRATING VALUES. EMBRACING A DIGITAL TRANSFORMATION STRATEGY WHICH DRIVE RETURNS ON IT SECURITY INVESTMENT.

CONNECT US!

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