

# Matta Wireless Security Course



## Wireless Hacking & Technical Countermeasures

### Course Agenda and Information Booklet

#### Introduction

As a fiercely independent information risk management company, **Matta** represents a new breed of security consulting outfit. As an organisation, we do not buy into the methodology of forcing a square peg into a round hole, preferring to talk to our clients and partners and identify areas where we can help to improve their business through introducing security to their operating environments.

**Matta** has found that by enabling its clients' key members of staff (usually network operations or IT management personnel) through security training programmes, it is possible for them to effectively run their own security operations on a daily basis. By specialising in information security and techniques adopted by hackers and crackers to compromise networks 'in the wild', we can offer a unique insight to our clients and partners, which will in turn help them to manage their own networks in a secure fashion.

#### Course Overview

**Wireless Security** is a two-day technical course in wireless penetration and countermeasures. The first day is used to highlight the conceptual risks associated with badly configured wireless networks, and give live hands-on technical examples of attack & penetration techniques that are adopted by attackers 'in the wild' to compromise poorly protected networks. The second day of the course focuses more on best practice protection models and their application, including:

- 802.1X EAP / RADIUS authentication and key generation
- Proprietary 'per packet hashing' to protect from weak IV attacks
- Disabling SSID broadcast features
- Security functionality within Cisco and Symbol AP devices
- Deployment of VPNs over wireless segments
- Use of IDS systems in highly sensitive environments

#### Course materials presented to each attendee to take away include:

- A printed and bound booklet of the course material and examples
- A CD containing wireless assessment tools and white papers

Morning and afternoon refreshments and lunch are provided, along with a networked workstation for each attendee to use as part of the hands-on examples and live hacking segments throughout the two days.





## Wireless Hacking & Technical Countermeasures

### Course Agenda - Day 1

- 09:00** Registration and coffee
- 09:30** Introduction
  - Course welcome and introduction
  - An overview of wireless risks and threats
  - An insight into the wireless hacker
  - The anatomy of a wireless attack
- 11:00** Break and discussion
- 11:30** Wireless scanning and probing
  - The equipment used by attackers
  - Live scanning and probing segment
  - How are these networks identified?
  - War-driving and war-chalking
  - WEP
- 13:00** Lunch
- 14:00** Simple wireless countermeasures
  - Disabling SSID broadcast
  - Enabling 128-bit WEP
  - MAC filtering on your AP
- 15:30** Break and discussion
- 16:00** Technical reconfiguration of your AP
  - Live Cisco AP reconfiguration segment
  - Live attack against our hardened AP
- 17:30** Finish of day 1

### Course Agenda - Day 2

- 09:00** Morning coffee
- 09:30** WEP
  - How WEP works and keys are exchanged
  - Known vulnerabilities within 128-bit WEP
  - Vendor improvements to counteract known problems
- 11:00** Break and discussion
- 11:30** Attacking WEP
  - Using Kismet and WEPcrack to attack WEP
  - Building security around WEP (VPNs, firewalls)
  - EAP and the 802.1X standard
- 13:00** Lunch
- 14:00** The Matta wireless best practice model
  - Introduction to the model
  - VPN & firewall technologies used within the model
  - IDS technologies used within the model
- 15:30** Break and discussion
- 16:00** Wireless security issues within large networks
  - Authentication and roaming issues
  - Single sign-on and use of x.509 certificates
- 17:15** Course recap and debrief
- 17:30** Finish of day 2

### Course Dates and Booking Information

Due to such positive feedback from our clients regarding this course, we are capable of running the course in-line with demand. For information of the latest openings for attendees to book course places, please contact the **Matta Sales Team** on **08700 77 11 00**, or e-mail [courses@trustmatta.com](mailto:courses@trustmatta.com).

The standard price per attendee for this course is **£1500.00** (£1762.50 including VAT). Group discounts of 20% are available if clients are able to fill the 6 available spaces, please contact us for more details.

