

Masterclasses and Workshops

Masterclass 1: Wireless Security

Maiendra Moodley

9am – 4pm, Thursday 31 May 2007

Wireless networks have become more pervasive as they offer the promise of effortless connectivity, with potential cost savings. As the drive to implement Wireless networks has moved to center point of many CIO's and CTO's agenda's, hackers and other malicious individuals have also quickly identified potential weaknesses that can be exploited. To ensure that wireless networks can be safely and securely deployed within an organization, it is essential that the critical risks are addressed. In this masterclass, the following key topics will be discussed:

- 1) Understanding the common attack techniques
- 2) Applying security principles to wireless networking
- 3) Security Solutions and Approaches

Adopting both a pragmatic and practical approach to wireless networking security, delegates will be able to identify the best practices, tips and techniques that they can implement within their own organizations. Recognising the link between portable computing and wireless networking, the requirements and the critical issues that should be addressed as part of developing an effective policy will be covered extensively.

About Maiendra Moodley



Maiendra Moodley is a Technical Security Advisor within the Infrastructure Renewal and Service Delivery Division of the Business Systems and Technology Department at the South African Reserve Bank. He is responsible for providing internal consulting services on a wide range of infrastructure and technical information security matters.

A graduate of the University of Natal, he completed his Bachelor of Commerce Degree with majors in Business Information Systems and Information Systems Technology, followed

by the Advanced Business Programme and Bachelor of Technology (Management) at Technikon Natal, before studying for his Masters in Business Administration through the University of Wales. His dissertation, which examined the security risk management measures that banks adopt in online banking, was awarded a distinction. His other qualifications include the Foundation Certificate in IT Service Management (ISEB), the Advanced Security Management Programme from Technikon Pretoria, and a Post-Graduate Diploma in Forensic and Investigative Accounting awarded by the University of Pretoria.

Masterclass 2: Wireless Communities

Paul Munnery, Technical Director, Wireless Integrating Networks, UK

9am – 4pm, Monday 4 June 2007

It is important that delegates understand the practical issues they may face when designing, rolling out and maintaining wide-area wireless network infrastructures to deliver data, voice, video and mobility.

With over ten year's experience of designing, installing and providing ongoing maintenance of wireless infrastructure, Paul will impart invaluable practical information to delegates.

Recognising that WiMAX, a current buzzword in the wireless industry, may be the ideal type of infrastructure solution for many wireless data, voice, video and mobility applications, it may not be ideal for many others.

Delegates will take away a practical understanding of how to set about determining which technology to deploy - WiMAX or conventional Fixed Wireless Access solutions and also how to design the network.

Subjects to be covered in the workshop include:

An introduction to wireless technologies

- An overview of radio technologies
- How to match the technology to the application
- Fixed Wireless Access, Internal Wireless LAN, Back-Haul & Mobility

Fixed Wireless Access

- Design
- Surveying & Installation
- Maintenance

Internal wireless LAN

- Design
- Surveying & Installation
- Maintenance

Summarising WiMAX 802.16 d & e

- Positioning WiMAX 802.16 d & e
- Cutting through the WiMAX 'hype'. What are the manufacturers really saying about WiMAX?
- Technology and relevance to applications
- A market opportunity for some. Unnecessary for others

- Can Fixed Wireless Access & WiMAX co-exist?
- The Path to WiMAX. Technology, Standards & New Services
- Which is right for your application – Fixed Wireless Access or WiMAX

Conclusions, questions and learning from sharing the practical experience of participants

About Paul Munnery



With over ten years experience of designing and delivering professional wireless solutions Paul Munnery is recognised as being a leader in the UK wireless data communications sector. In his role as Managing Director of Wireless CNP and Wireless Integrating Networks, Paul has responsibility for both commercial and technical areas of the business.

Paul is at the forefront of the wireless datacomms industry, promoting the use of wireless technologies across the world and helping organisations through the process of deploying professionally designed wireless datacomms solutions.

Paul founded *Wireless CNP* in 1996 and has developed the company from a distributor to become a market leader of specialist wireless datacomms solutions for Fixed Wireless Access, Point-to-Point backhaul, Enterprise wireless and Public Internet Access solutions for data, voice, video and mobility.

Paul founded *Wireless Integrating Networks (WIN)* in 2001 as a specialist Integrator of professional wireless connectivity solutions. In particular, the company delivers wireless solutions for security (CCTV) and 'mobility' applications.

In 1997, Paul founded *BreezeCom UK* which designed and installed high-end Fixed Wireless Access solutions. In 1998 the company was sold to Alvarion, Israel.

Understanding wireless technologies from a practical point of view and delivering best value has always been a priority for Paul, allowing him to develop and build *Wireless CNP* and *Wireless Integrating Networks (WIN)* into respected companies delivering innovative and robust wireless datacomms solutions and consultancy to organisations in the UK, Europe, Africa and in other parts of the world.

Workshop 1: An Interactive Introduction to VoIP for Corporate Users

Sunday Folayan, MD, Skannet Nigeria

9am – 1pm, Friday 8 June 2007

While VoIP is set to change the landscape of the communications industry, it is already being used by a number of traditional Telephone companies to connect their regional offices, while on a smaller scale, it is being used by Small Offices/Home Offices who want to trim their communications expenses.

The advantages of using VoIP technology includes simplicity, flexibility, cost savings as well as finally removing the huge constraint of circuit switched architecture, and taking advantage of the ubiquitous nature of IP, which is fast becoming a de-facto medium of world-wide communication.

This hands-on workshop is designed to introduce participants to the VoIP technology, using the Asterisk Open Source PBX software. Participants will amongst others be exposed to the following:

- Introduction to the VoIP technology
- Basic definitions and building blocks
- Transport protocols and packetization
- Public Switched Networks and characteristics
- Protocols for VoIP call control
- Introduction to the Asterisk Open Source PBX
- Configuring simple VoIP Servers
- Configuring simple VoIP Clients
- Quality of Service (QoS) Issues
- Services and implementation issues
- Overview of large scale implementations and issues

At the end of the workshop, participants will be able to setup and deploy an Asterisk-based PBX system which will work either via IP or PSTN and be capable of Least Cost Routing.

WORKSHOP 2: VoIP - Survival strategies for telcos, ISPs and cyber-cafes

Russell Southwood, CEO, Balancing Act, UK

2pm – 5pm, Friday 8 June 2007

VoIP will change the business model for telcos, ISPs and cyber-cafes. Beyond the ever-present hype, it will begin to transform business fundamentals in some of the following way: threatening existing international revenues; lowering the cost of entry to the voice market; and creating new opportunities like mobile VoIP. All of this will upset traditional markets and the question is: will you survive this shake-out? The workshop has three sessions of just under an hour each with a coffee break. Each of the sessions will have time for questions and answers and sessions 2 and 3 will have interactive exercises. The three sessions deal with the following:

Session 1: The business opportunities VoIP offers

In this session Russell will look at the kinds of business models that have arisen elsewhere and how things might develop in Nigeria. He will look at the business models for businesses like Skype and Vonage to illustrate how the business model for retail VoIP is developing in North America and Europe.

He will then look in greater detail at the type of opportunities that might arise in Africa, including:

- Pre-pay VoIP calling cards
- IP-payphones
- Skype/Vonage clones
- Campus-wide IP-mobility solutions
- Municipal networks
- Corporate IP calling via VPNs
- Push-to-talk
- Home broadband
- Triple/Quad play (including mobile TV)
- Mobile VoIP
- VoIP peering

He will explain the relationship between these opportunities and the changes in regulation that will enable them to flourish legally.

Session 2: Assessing investment in new VoIP opportunities

VoIP produces very different types of opportunities. For example, grey market operators have taken advantage of the price arbitrage opportunities that exist. In other words, for example, they are able to compete on price against artificially high international calling prices.

Once VoIP is more widely legalised, then this level of price arbitrage opportunity will decline or disappear as prices come down in the market. It will be important to look at the relationship between quality and pricing and to understand what latitude exists for differentiating different service offers.

Some opportunities will allow new players to enter the market relatively cheaply whereas others will require capital investment in new infrastructure. The level of capital required – along with an assessment of the risks inherent in different propositions – will help clarify where any potential should be made and whether a new opportunity is suitable for your company.

Lastly the session will examine timing issues and their impact. Some opportunities – like those related to price-arbitrage – are short or medium-term. Others like mobile VoIP are longer term because the technology is not yet available.

All of these factors will be gathered into a simple matrix and scored so that participants can see where the better opportunities lie in Africa.

Session 3: VoIP pricing and service strategies in a competitive market

The last session of the workshop will look pricing and service strategies and how they develop in a competitive market. Russell Southwood will explain how operators tackle these issues and the way in which different approaches to service and pricing are reflected in the service offer to customers. He will examine the relationship between cost and the price of providing different levels of service.

After this briefing, participants will be split into two groups to devise pricing and service strategies for two different companies, one a start-up and the other an existing operator. The two groups will then come together and show what approaches they have arrived at. The group will then look at how it is possible to respond to competitor pricing in ways that differentiate the customer offer.

About Russell Southwood

Russell Southwood is a leading analyst of the African ICT market, specializing in Internet and telecommunications development. His company, Balancing Act, publishes the continent's leading ICT e-letter, and also produces a series of specialised sector reports, including the most authoritative report on the African VoIP market.

To register as a delegate, log on to www.aitecafrica.com

