IBM Client Security

Secure Wireless Solutions are Here Today

Brian Dalgetty

Director, Market Development and Alliances

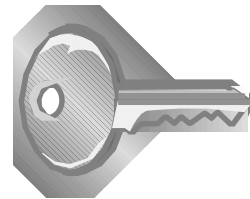**Personal Computing Division**

IBM Client Security

Enabling Wireless e-business
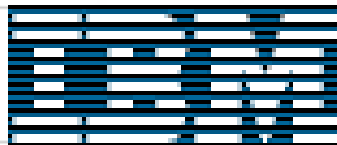
Mobile PC   *Flat Panel PC*

Requires a "Trusted Platform"
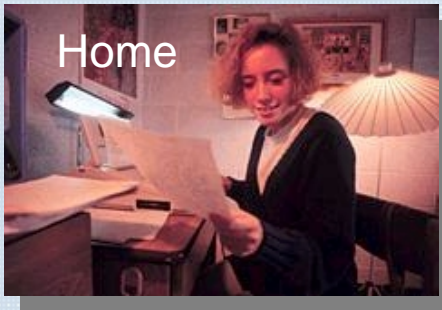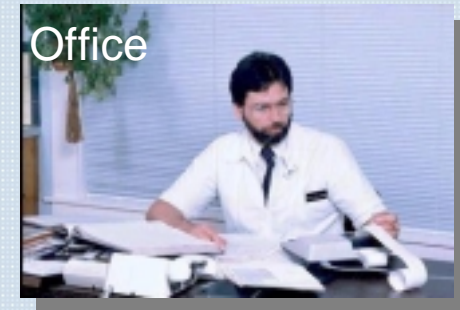
Today's Situation: Client Security Challenges

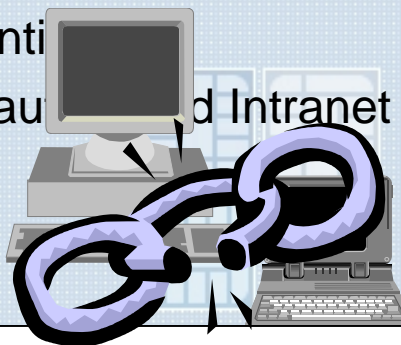**Home**

Password Proliferation

- Tracking/changing multiple passwords
- Convenience vs. Security
- Identi...
- Unau...d Intranet access

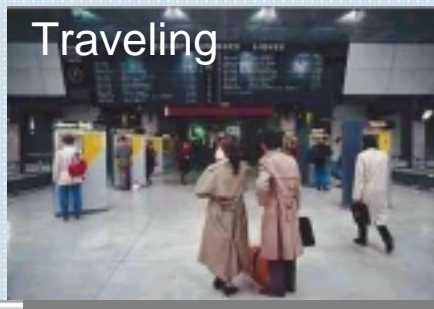**Office**

Increased Mobility

- Notebook theft
- Loss of asset and local data
- More remote access

Growing Demand for Wireless Connectivity

- ...quate protection
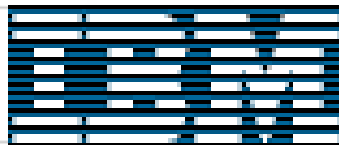- ...ransmission theft
- Content compromised /altered

The Client is the Weakest Link !

Traveling

Key Elements of Client Security

Secure Communications

- Authentication/Encryption
- Secure tunneling

Data Protection

- Encryption
- Backup / Restore

External Attacks

- Firewall
- Anti-virus
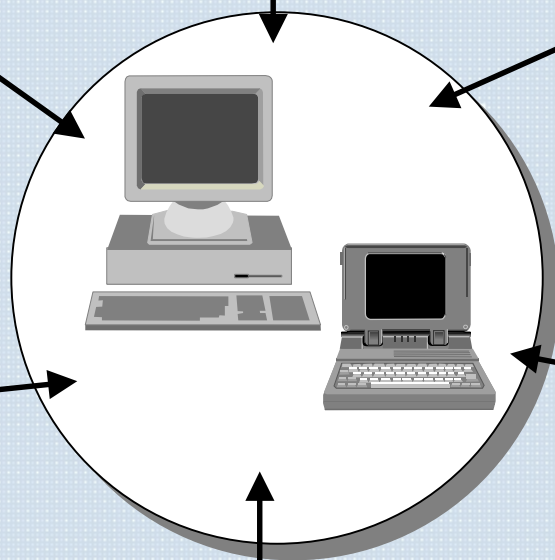- Recovery

Access Control

- Authentication
- Authorization
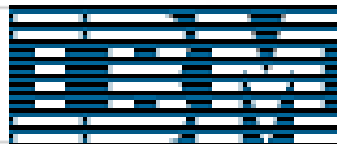- Administration

Internal Attacks

- Unauthorized Use

Physical Asset Security

- Prevent theft
- Asset tracking

IBM's Solutions: 9 October 2001

Integrated Communications

- Modem
- Ethernet
- WLAN (802.11b)
- Bluetooth
- Superior antenna design

Access Connections

- Connection Wizard/Manager

IBM Embedded Security Subsystem (ESS)

- Processor and Memory
- Client Security Software
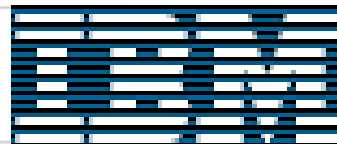
Rapid Restore PC

- Backup/Restore/Recover software

Physical Security

- Cable lock
- Asset ID

Password Protection

- Power-on
- Hard drive
- Supervisor

Standards Compliance

- TCPA
- Common Criteria Certified

Wireless e-business
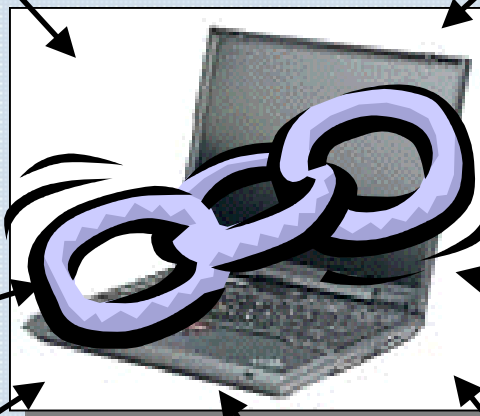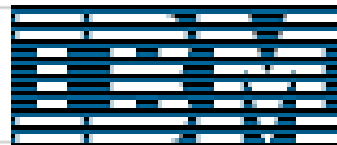
Embedded Security Subsystem (ESS)

Benefits

- Low cost Hardware-based Security Solution
- Secure storage of Private Keys and Credentials
- Provides secure support of Public Key Infrastructure (PKI)
- Strong User Authentication with support for 3rd party
  - Finger-print and Proximity badges
- Ensures e-mail Integrity & Confidential
- File encryption capability for secure data storage
- Support for Industry Standard Cryptographic Interfaces
  - MSCAPI, PKCS#11 and popular applications
- Improved VPN log-on: Eliminates the need for RSA key fob
- Based on the Trusted Computing Platform Alliance Standard

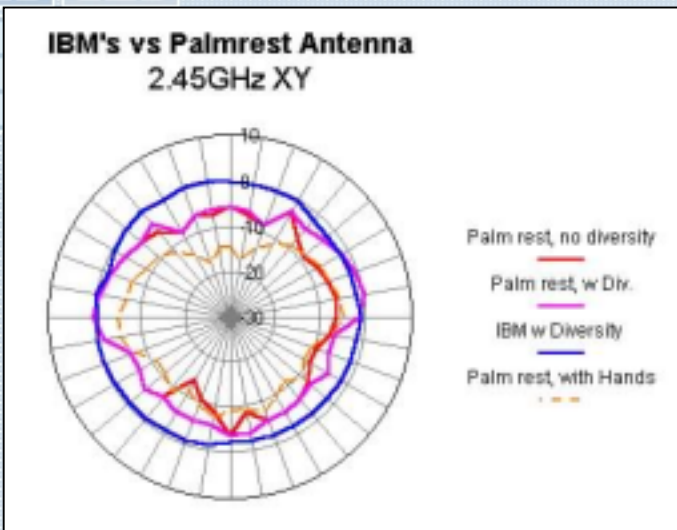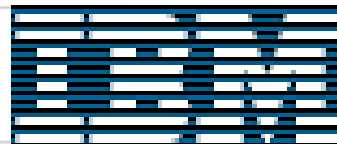Wireless e-business
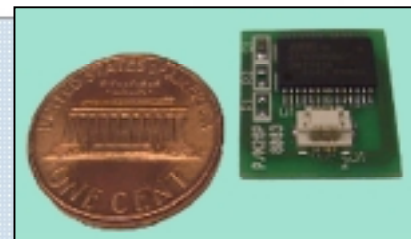
Wireless LAN IEEE 802.11b Integration

Benefits

- Save real $$$$ by not having to string cable throughout office
- Supports IEEE 802.1x Port-based Security Standard
- Superior Antenna Positioning to provide better Performance
- Access Connections for convenient connection switching
- Low Profile PCI adapter card option for NetVista

Antenna inside LCD bezel

Cut-away of mini-pci communications bay with 802.11 radio installed

IBM's vs Palmrest Antenna
2.45GHz XY

Palm rest, no diversity
Palm rest, w Div.
IBM w Diversity
Palm rest, with Hands

IBM Rapid Restore PC

Benefits

- Save real $$$$ by avoiding calls to help center for "lost" data!!!
- User application and data snapshot
    - Protection from computer data disasters and virus attacks
    - "Turn back the clock" even when system won't boot
- Quick Backups of the entire Primary Partition on a regularly scheduled or as-needed basis (Attended or Unattended)
- Better Protection of the Microsoft Windows OS:
    - Important Data Files, Registry Settings, Desktop Settings and Internet files
    - Productivity Files are all protected
- Offers a choice of Backup Storage
    - Locked partition on your hard drive or optional second HDD
    - User-created bootable CD-R
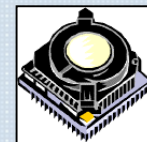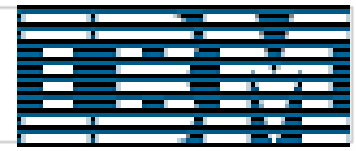
Today's Problem and Solution

The Problem: Many things to carry, lose or damage
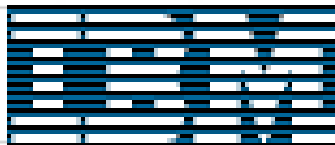
Which Adapter
Do I use?

Do I have my
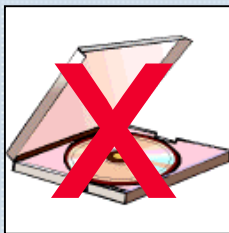back-up copies?

Do I have my
Authentication Devices ?

J.L. Picard

Today's Problem and Solution

The IBM Solution: 9 October 2001

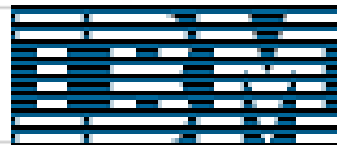**Integrated adapters**   **Rapid Restore PC**   **Embedded Security Subsystem**

Integration

- **Trusted Platform**
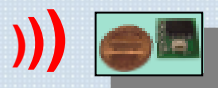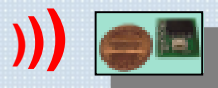- **Security with Convenience**

New IBM ThinkPads

4Q'01

Degree of Mobility

X — Xtreme Portability
Extra-light, extra-small ultraportable

3.4lbs | 12" Sleek Design

T — Thin and Light for Travel
Perfect balance of performance and portability

4.7lbs | 14" Balanced Performer

R — Essential Mobility
Best blend of portability and essential features
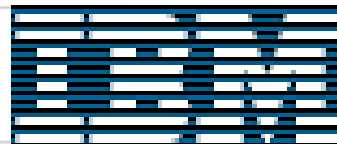
5.5lbs | 14" With all the Essentials

New!

A — Alternative to Desktop
High-performance desktop alternatives with

New!

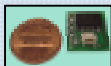Wireless e-business

New IBM NetVistas

4Q'01

New!

M — **Maximum performance with enhanced manageability and security features**

- ✓ Workhorse global models
- ✓ Stable platform and software images
- ✓ Three form factors to fit your needs

A — **Best blend of performance and essential features**

- ✓ Workhorse entry models
- ✓ Stable platform and software images
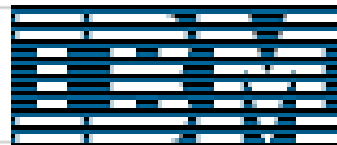- ✓ Three form factors to fit your needs

X — **Extraordinary, space-saving design with high performance**

- ✓ Workhorse global models
- ✓ Stable platform and software images

Wireless e-business

Team IBM: Putting it all Together

Personal Client Division

Delivering

Trusted Platforms

- Integrated WLAN
- ESS
- Access Connections
- Rapid Restore PC

Applications

IBM Research

Asset Management Tools

Pervasive Computing

Wherever,
Whenever,
However

WebSphere Everyplace Suite

IBM Global Services

Expert advice

Middleware

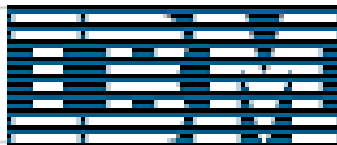**Services**

Wireless e-business

IBM's Trusted Computing Platforms

Security Without Sacrificing Convenience

Protect

- Data from Theft and Corruption

- Systems from Security Breaches, Hackers and Viruses

- Keys and User Credentials used for PKI Operations

- Wireless Communications

Ensure

- Only Authorized Persons have access to Corporate Networks
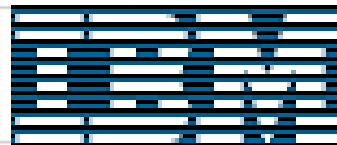
- Secure and Confidential e-mail

- Convenience

Comply

- Industry Standards
- International Organizations

Wireless e-business

Demo Proof Points

The day in the Life of Jean Luc Picard, CEO
Enterprise Manufacturing Ltd.

Jean Luc starts his day in the office with his ThinkPad:

- Uses Proximity alert and finger print authentication to gain access
- Sends/receives secure e-mail using the IBM ESS, 802.11b WLAN and 802.1x security standard
- Leaves for a business trip and while at the airport securely connects back to the corporate Intranet using a VPN, augmented with the IBM ESS
- During his business meeting at his destination, he quietly, and securely, connects back to his Intranet using his Bluetooth enabled ThinkPad and Bluetooth enabled Ericsson cell-phone
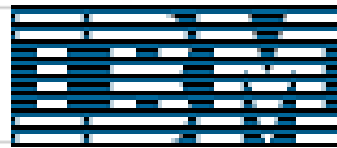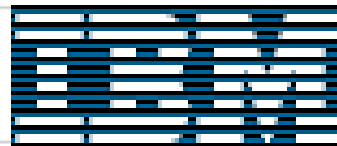
IBM Access Connections

Benefits

- Allows Users to Manage Multiple Connections
    - Wired and Wireless
- Pre-loaded Client Application which is Accessed from System Tray
- One-time set-up of Multiple "Profiles"
- Easy to Switch between Connections
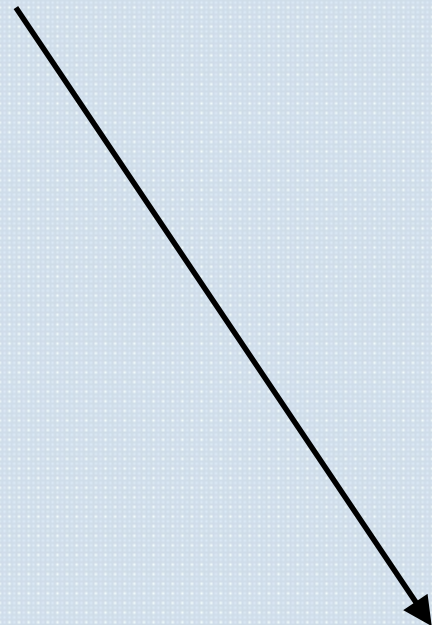- Automatic Un-docking when going from Wired to Wireless Profile

5:44 PM

Wireless e-business

IBM Access Connections

Once the Profiles have been created, simply click on the
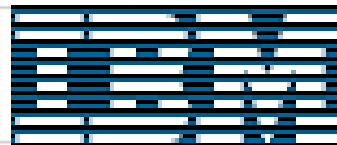Access Connection icon in the System Tray and select your location

	Home - Wireless	
•	Office - Token Ring	▶
	Office - Wireless	
	Airport / Hotel / Public Places	
	Menu text size	▶
	Launch IBM Access Connections	
	Manage Location Profiles	

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IBM Access Connections

For instant connection status, simply move the pointer over the Access Connections ICON which pops up the status window
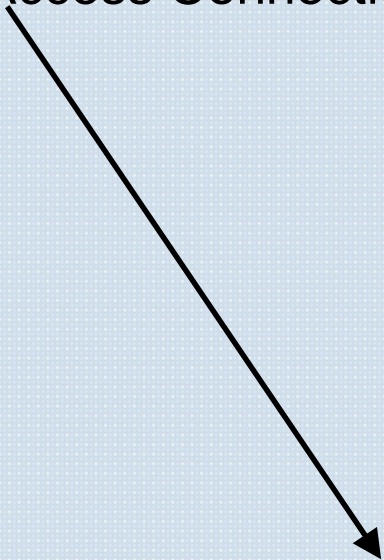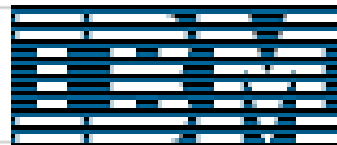
Office - Token Ring
Status: Enabled, Operational
Speed: 16.0 Mbps
IP Address: 9.37.126.139

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PCD's Wireless Options Portfolio

IBM High Rate Wireless LAN PC Card 128-bit ·············

IBM High Rate Wireless LAN PCI Adapter (Low Profile Enabled) ····

IBM High Rate Wireless LAN Access Point 500 ·············

IBM High Rate Wireless Gateway ·············

Bluetooth PC Card from IBM ·············

Bluetooth UltraPort Adapter from IBM ·············

Solving Customer Problems: Team IBM

ThinkPad · IBM · **NetVista**

PvC: WebSphere Everyplace / **Tivoli**: Manage.Anything.Anywhere / **Lotus**: Applications / **PCD**: Secure Clients

IGS: Making it all Work Together

In office / on campus	Airports Hotels	Home	Wide open spaces
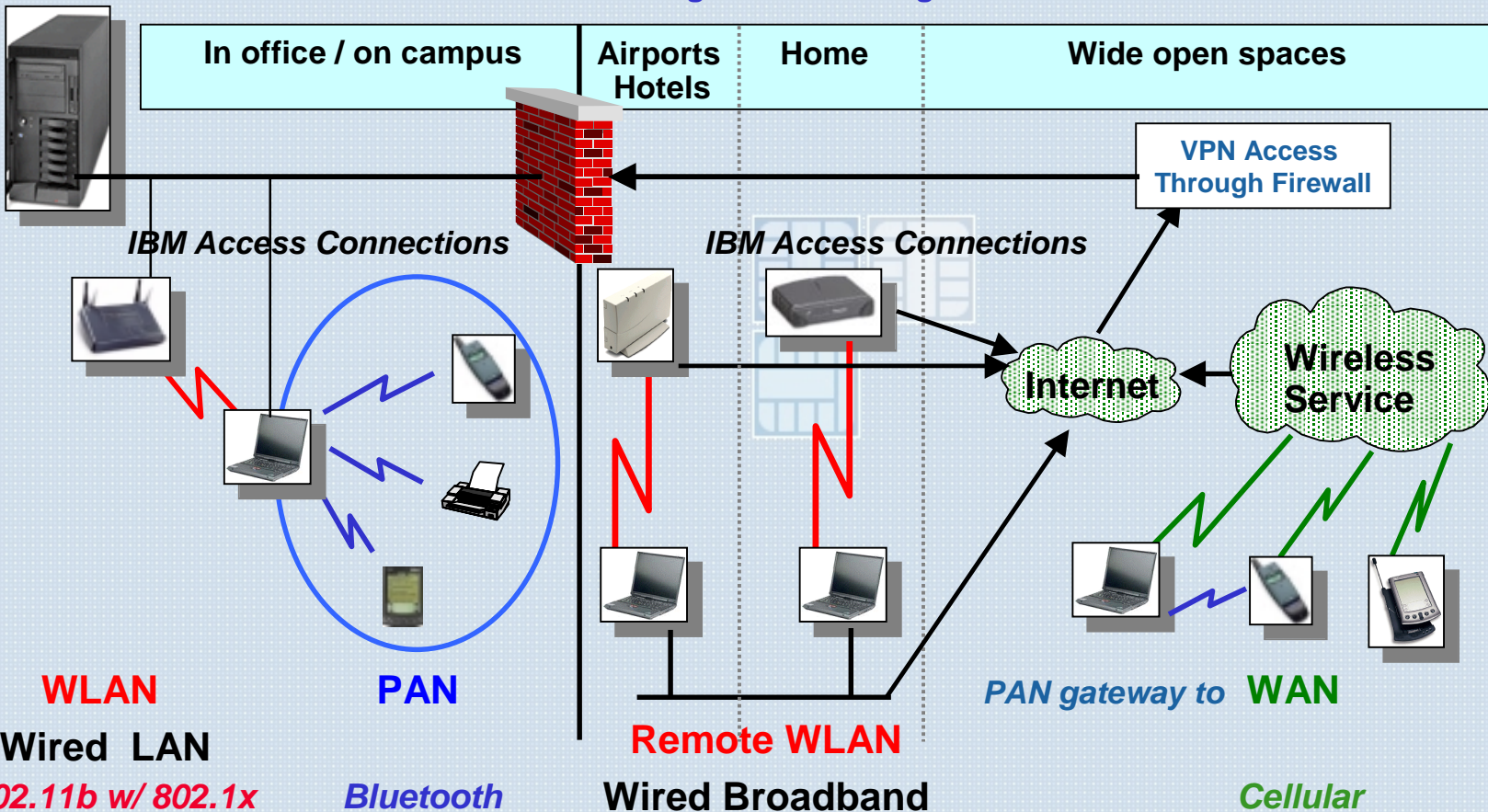
VPN Access Through Firewall

IBM Access Connections

IBM Access Connections

Internet

Wireless Service

WLAN   **PAN**   *PAN gateway to* **WAN**

Wired LAN   **Remote WLAN**

802.11b w/ 802.1x   *Bluetooth*   **Wired Broadband**   *Cellular*

Wireless e-business

IBM Access Connections

IBM Access Connections