Managing Who's on Your Network

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Gauge Your Network

- Size
- Data
- Threats
- Requirements

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How Much Do You Want to Manage?

- Public
- Private only
- Public and Private
- Segregated
- Nailed shut
- Wireless vs Wired

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What are the Zones?

Inner Wired

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Inner Wired

- Physical Security

- Don't be stupid
- Beware of visitors

- 802.1X

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What are the Zones?

Inner Wireless

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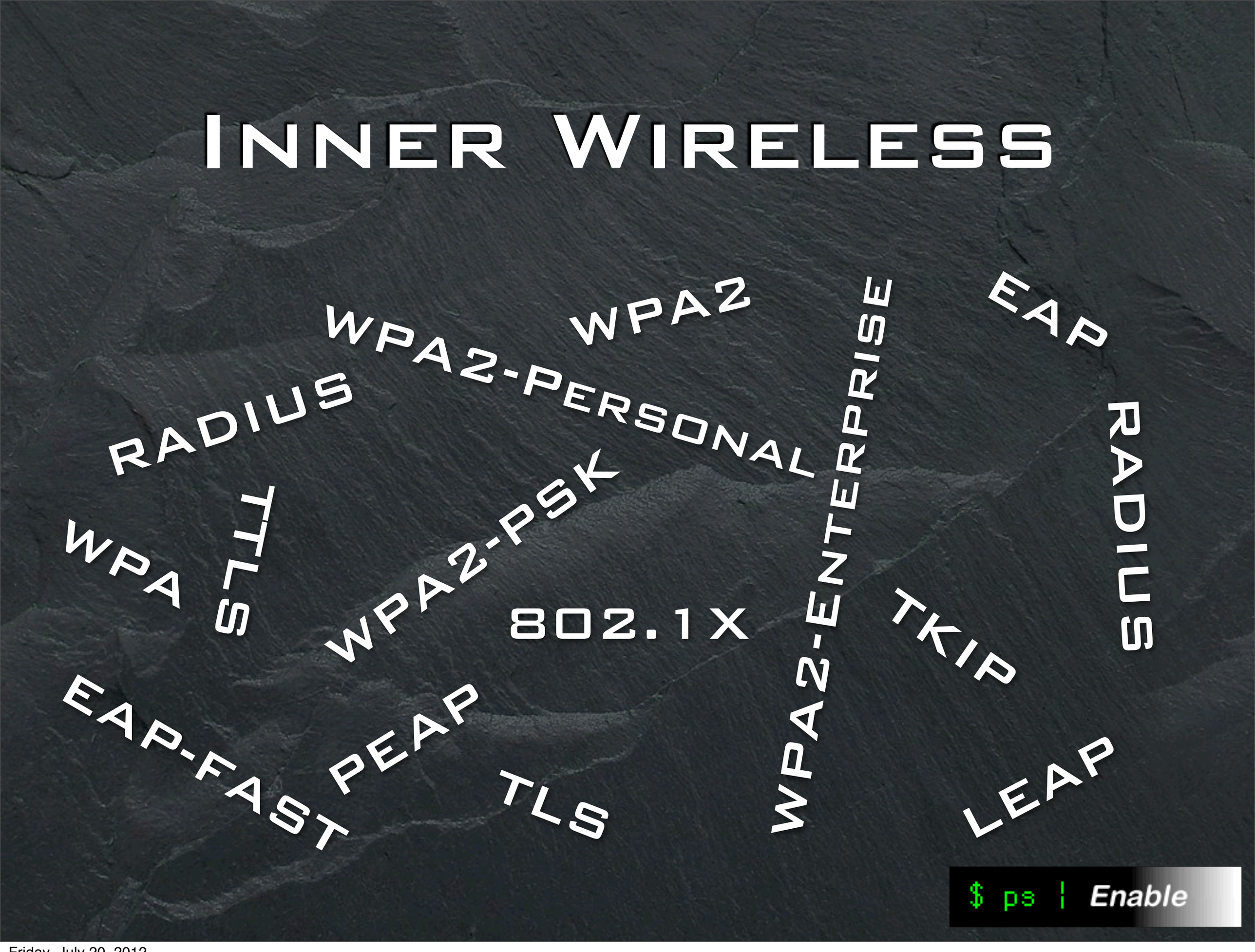
Inner Wireless



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Hidden SSID

- Worthless
- Worse than worthless

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Inner Wireless Simple

- Small, low risk
- WPA2-PSK
  - Single, fixed password
- Security compromises mean more work

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Inner Wireless Complex

- Large, high risk
- WPA2-Enterprise
- 802.1X
  - Per-user or per-Device authentication
- Security compromises mitigated

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802.1X Details

- Authentication of network devices
- Prior to Allowing network access
- EAP - extensible Authentication Protocol
  - Collection of protocols
  - Relies on Certificates or RADIUS server for actual authentication

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802.1X Details

- Configurable only via profiles
- 3 Modes
  - Device
  - User
  - Loginwindow

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Demo
802.1X Profile Creation

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What are the Zones?

Outer Wireless

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Outer Wireless

- Different SSID
- Public access
- Untrusted
- Captive portal
  - Acceptable use policy
- Bandwidth management

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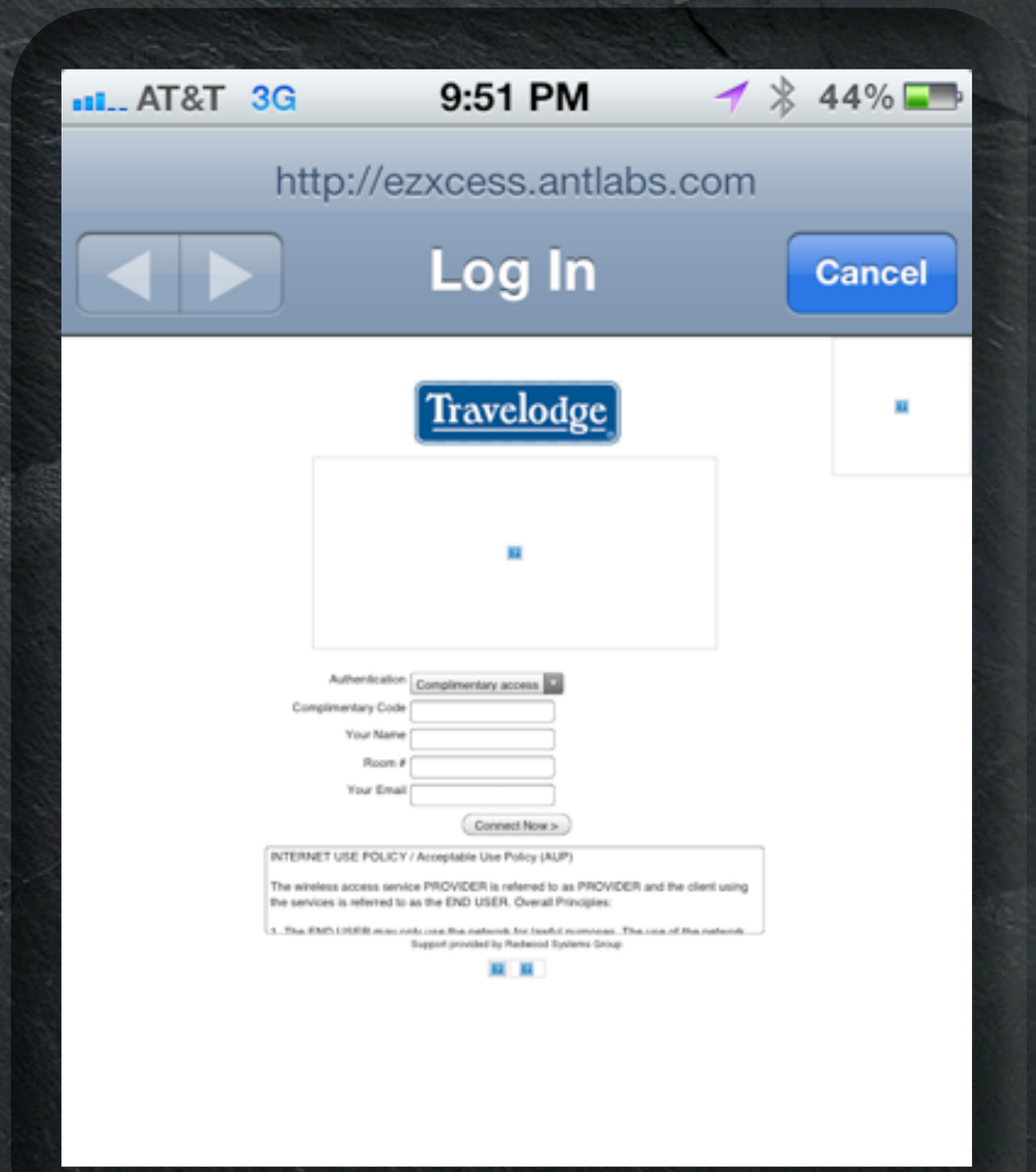
Captive Portal

- Open Wi-Fi nets
- http://www.apple.com/library/test/success.html



Bandwidth Management

- Limit usage by any one device
- Monitor and cut off commonly abused protocols — see IDS/IPS
- Wi-Fi is shared bandwidth
  - even with different SSID's
  - A bandwidth hog on the outer wireless will affect the inner wireless directly

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IDS/IPS

- Intrusion Detection System
  - Passive, detection only
- Intrusion Prevention System
  - Active, filters connections
- Unified Threat Management
- Lots of false positives

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One More Thing...

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Think Different

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Think Different

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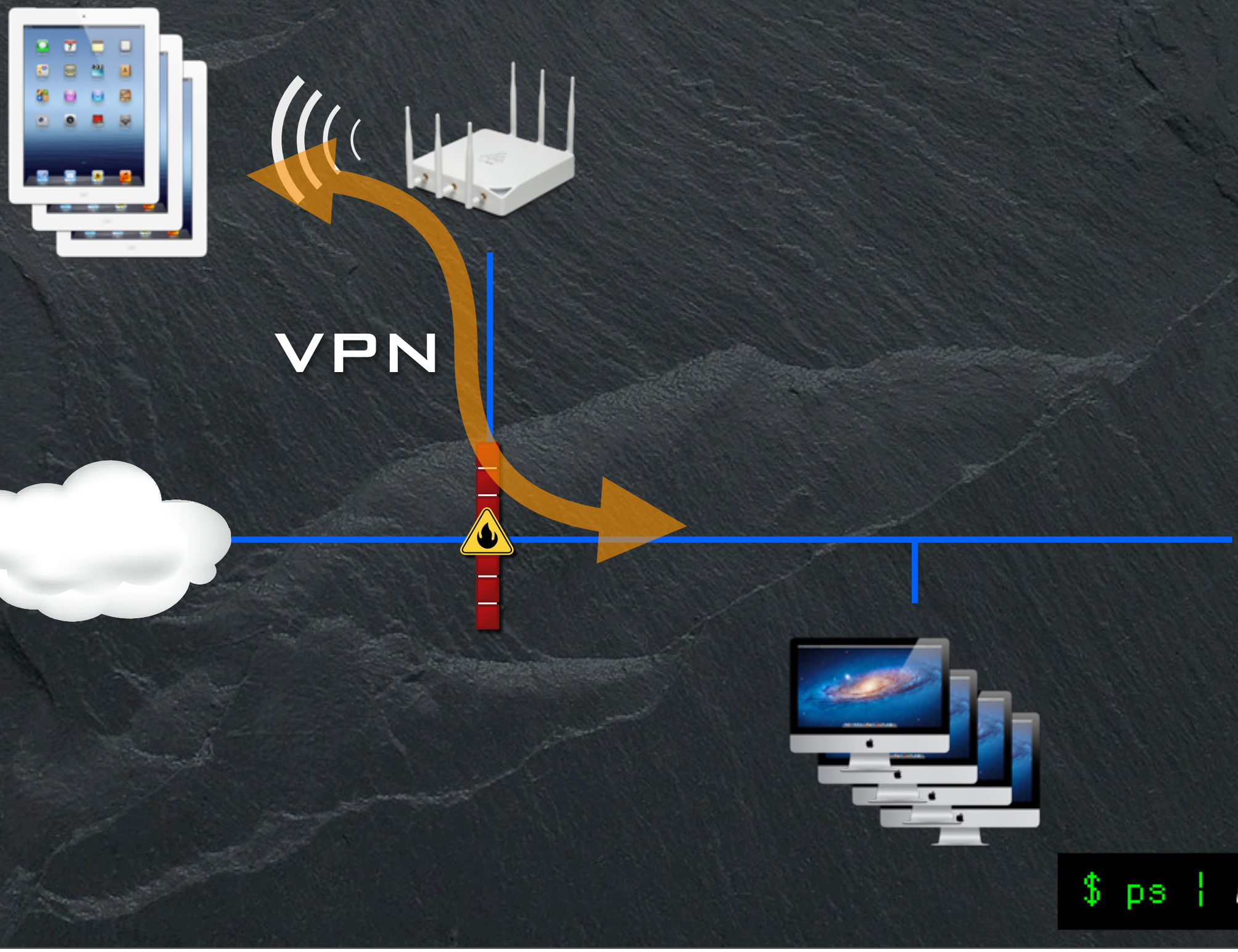
Think Different



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Steve Jobs
1955 - 2011

Q & A

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