



## **BYOD** and Mobile access



### What is BYOD?



- From Wikipedia
  - BYOD refers to the policy of permitting employees to bring personally owned mobile devices (laptops, tablets, and smart phones) to their workplace, and use those devices <u>to access</u> <u>privileged company information and applications.</u>



# Why are companies doing this the business

#### Pro's

Cost Cutting: Employers may elect to offer little or no stipend for device and expenses.

Employee Satisfaction and Efficiency: Some employees prefer and are more effective with devices that are not the corporate standard.

Cool factor: Aside from their financial challenges, Blackberry has fallen out of fashion

#### Con's

<u>Data compliance</u>: How do do you assure compliance and customer confidence? Ownership: if lost, stolen or employee leave company can you remote wipe all data or just corporate data? Support Model: Help desks need to be well versed in multiple platforms and not just the corporate standard.



# Some hard decisions were required



- Can you allow corporate data on personal devices?
- VPN or DMZ exposed services?
- Container or Native Apps?
- MDM or ActiveSync Policies?
- Do we support both iOS and Android?
- WiFi or 3G/4G



## Some difficult answers were provided



- Can you allow corporate data on personal devices?
  kinda
- VPN or DMZ exposed services? DMZ
- Container or Native Apps? Container
- MDM or ActiveSync Policies? MDM ...kinda
- Do we support both iOS and Android? Both for now
- WiFi or 3G/4G? 3G/4G only



## Why no WiFi?



- This was a very controversial decision for us but it was a matter of cost and equality
  - We have a lot of locations with relatively low bandwidth T1 or less
  - We were sensitive to not create an environment of haves and have not's
  - Cost prohibitive to scale bandwidth across the enterprise to support all use cases
- It's my opinion that users want the convenience of one device and access to their personal apps Facebook, Twitter, Instagram etc.. and the occasional use of corporate e-mail, calendar and intranet.



## WiFi's dirty little BYOD secretary information with the business i

- If you don't actively control it determined users will find a way.
- If you only do 802.1x with username and Password you have a BYOD problem, you just don't know it's scale.

#### OK so now what?

- NAC has resurged as a device profiling and registration solution.
  - Cisco ISE, Foresout, Bradford Networks, FiberLink and others all offer solutions.
- Use what you already have to make after the fact decisions.
  - Correlate RADIUS servers logs and DHCP Server logs to identify rogue devices.



### 3 Lessons



- 1. Users want the native apps and not the container versions
- 2. Users want WiFi (3G iPad's are expensive)
- 3. Your users will find use cases you never thought of as to why they need items 1 and 2





## **Questions??**

