Secure Your Business Against Security Threat

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Security Threats

Internal

External

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Why should we care about internal threats?

- Hype
  - I have enough of protections
  - It didn't cause much damage
  - Not as high profile

- Facts
  - Protections are mostly for containing external threats = no protection
  - Company data is stored everywhere with no access control = easy data leakage
  - Critical damage to your business!

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What could make things better / worse?

- Smarter gadgets
- Devices are highly mobile
- Cloud computing
- Access data anytime anywhere

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How smart are you?

0	Your phone is not very smart
1	Your phone is smarter
2	You might have more than 1 phone
3	You might have more than a phone plus a tablet
4 or more	Are you selling mobile devices?

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A new trend and challenges to internal - BYOD

Disaster

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BYOD

- Bring Your Own Device (BYOD)
- Allow employees bringing personally owned mobile devices to their place of work and using those devices to access privileged company resources
- NOT this simple…

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What BYOD means to you?

Users

Management

IT

Helpdesk

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Benefits of BYOD

- Increase productivity
  - familiar to the worker and makes their job easier and more efficient
- Portable and powerful
  - Always on data access anywhere
  - Can runs enterprise applications

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Benefits of BYOD

- Cost-Saving
  - Upfront and maintenance cost
  - Opex vs Capex
- Users demanding it and you answer it
  - Happy users

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BYOD Risks

- Change the way it works today
  - Decentralized
  - Unmanageable
- Confidential Data Leakage
  - Data is everywhere and so do devices
  - Device loss = Data loss
- System availability

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Where’re the risks from?

- Unknown devices
- Devices are NOT managed by company
- BYOD does not mean mobile devices only – how about laptop computers?
- Security policies are NOT enforced

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Where’re the risks from?

- BYOD does not mean wireless only
- NO BYOD planned - but how to prevent?
- Mobile devices should be pretty safe but guess what

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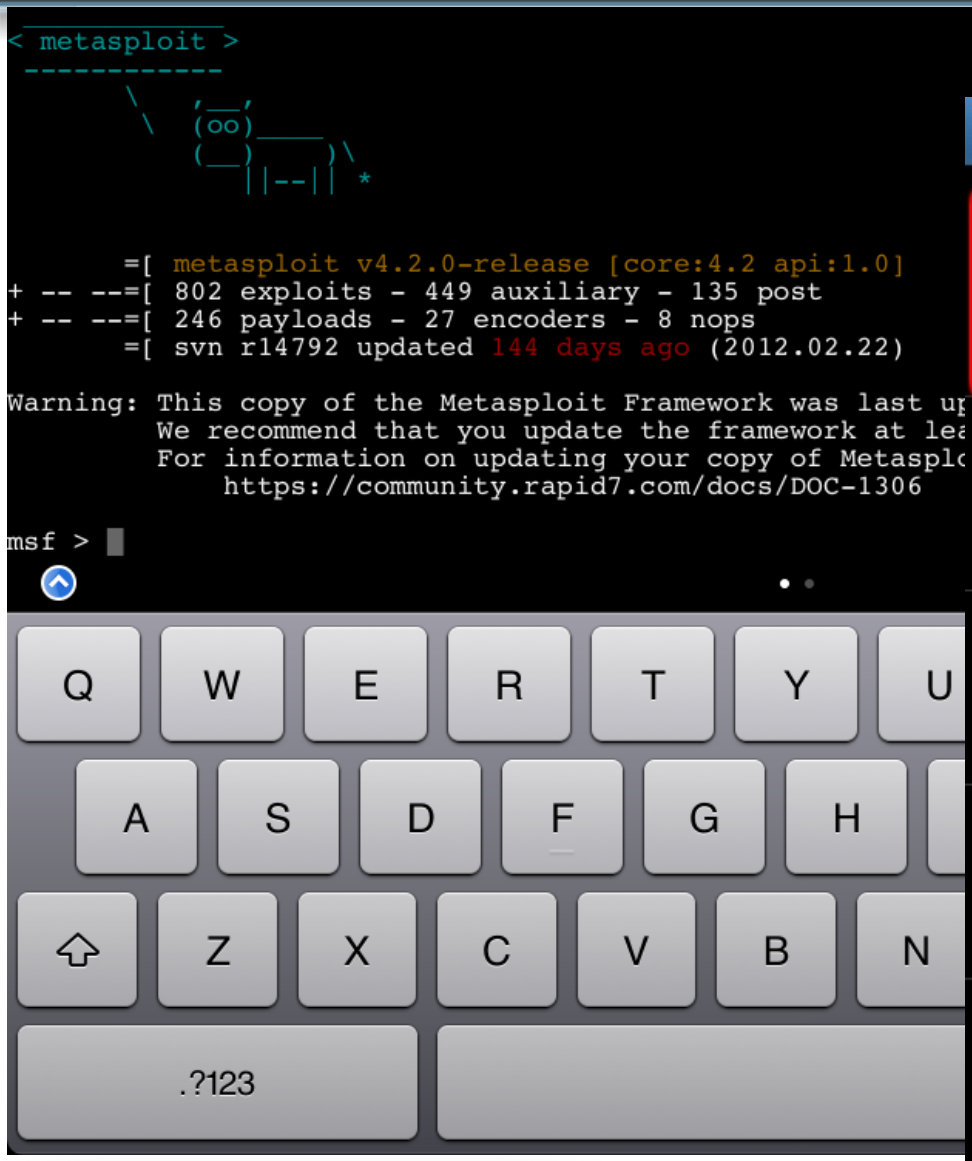

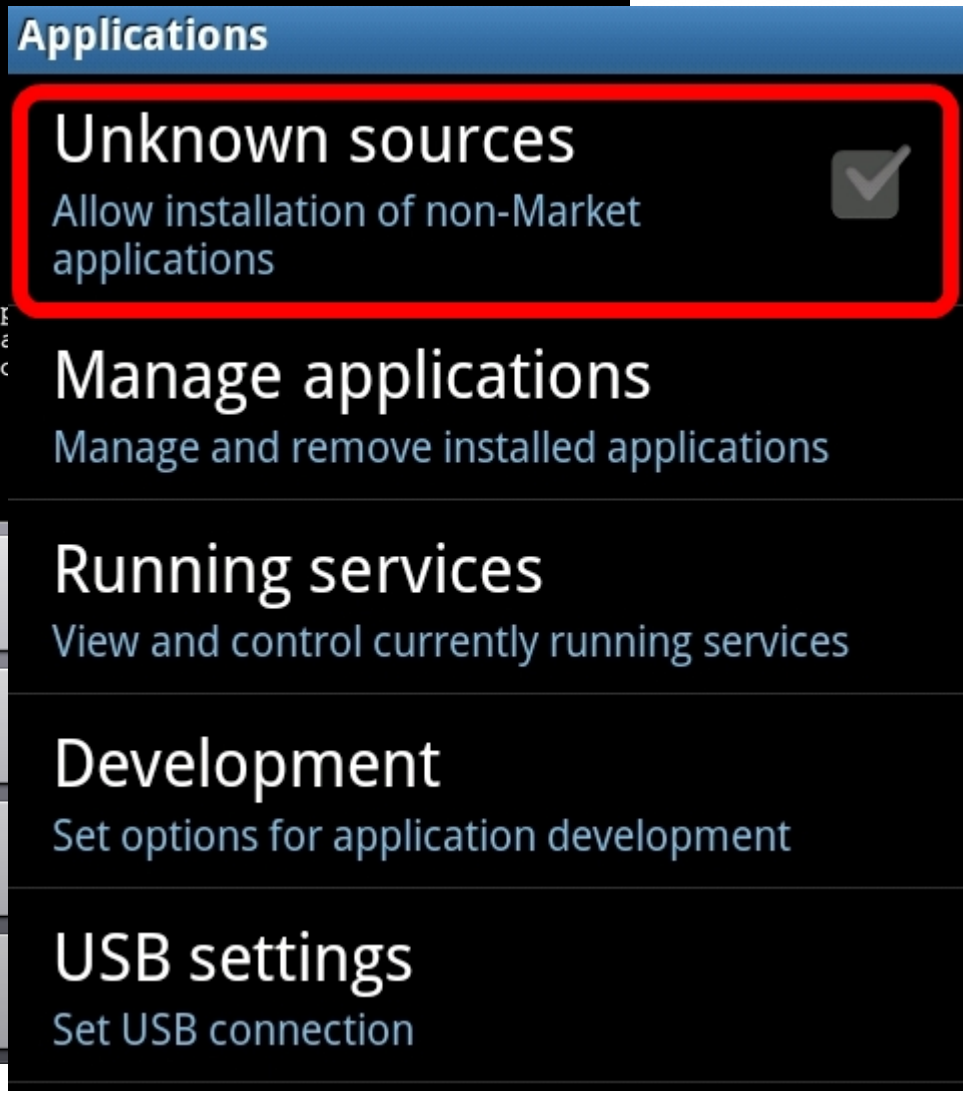

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What's your BYOD policy?

- Create your BYOD policy
- Ensure devices are secure the way you want
- Ensure your corporate network are secure and ready

- Create your no BYOD policy
- Ensure you have a way to enforce your no BYOD policy
- Ensure your corporate network are secure to prevent unknown devices

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BYOD security – Can you do it and enforce it yourself?

- Enhance your network
  - Wireless security
  - Accountability
  - Role-based access
- Pre-register devices
  - Register employees devices
  - Also prepare to cater “Guest” users
- Onsite device checkup before network connection

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BYOD security – Can you do it and enforce it yourself?

- Enforce security policies in mobile devices
  - Passcode enabled
  - Device integrity
  - Ensure data is safe everywhere

- Cloud services could help to make data accessible anywhere anytime

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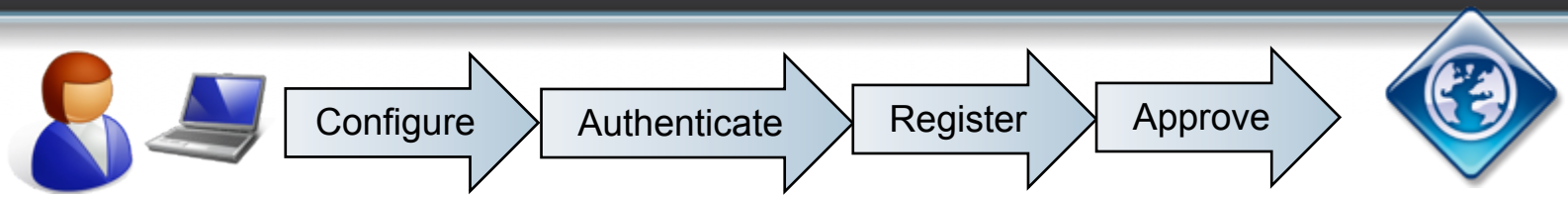
BYOD solution



- Device profiling
  - iPad vs Windows
- Onboarding / Device registration
  - User help themselves to configure secure wireless access
- Controlling network access
  - Ensure access is granted to a user according to your access control policies
- Guest access
  - Sponsored guest access
  - Self-register guest access

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What if the device is not in your network now?

- Mobile device management (MDM)
  - Encrypt corporate data
  - Locate a device if needed
  - Remote lock / wrap the device data
- BYOD is NOT MDM
- It complement each others

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How to secure your business?

- Internal access control – A combination of who can get access to what with which device at where

Who

CEO

Staff

Guest

Devices

Desktop

Laptop

BYOD Laptop

Tablet

Medium

Wired

Wireless

VPN

Cloud Services

Mobile Data Network

Resources

Internet

Intranet

Finance data

R & D data

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How to secure your business?

Who

CEO

Staff

Guest

- Enhance authentication and accountability
- Clean up super-user accounts
- Multiple factors authentication
- The higher the rank, the more the damage

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How to secure your business?

Devices

Desktop

Laptop

BYOD Laptop

Tablet

- Enforce security policies
  - Device integrity
  - Security protection
- Encryption helps to prevent unauthorized access
- The higher the mobility, the higher chance of being stolen / loss

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How to secure your business?

- Cloud services does not mean safe
  - Consider application level data encryption
- Wireless capacity and security need to be planned well
- Mobile mediums are harder to control than your wired
  - Prevent network bridging

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How to secure your business?

Resources

Internet

Intranet

Finance data

R & D data

- Company might be legally liable
  - Hard to say I don't care anymore even for Internet access
- More dynamic environment than ever
  - Ensure data allowed in authorized channels
  - Control P2P or IM access
- Internal resources and threats are more difficult to protect

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How to secure your business?

- Security policy should be reviewed to cover these aspects
- Lots of unmanaged devices in your managed network
- Your data is now mobile!
- Even corporate email access contains confidential information

Who

Devices

Medium

Resources

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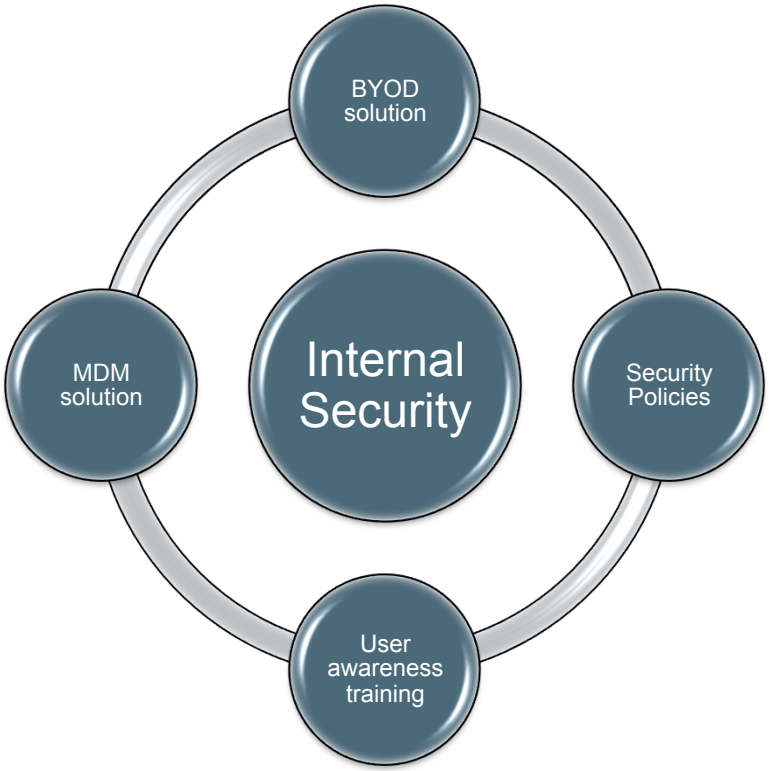
Secure your business network is a process



- Put insider threats as consideration and improves your security measures
- Consider encryption in different use case to protect data confidentiality
- Embrace BYOD, needs to control it
- Not Embrace BYOD, needs to prevent it
- Allow only authorized mobile device to be connected
- Control internal network security – Prevent rogue devices

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