

Throw away your PC – run your desktop from a USB flash drive

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Why carry your desktop on a USB drive?

- My laptop is:
 - Too heavy
 - Too bulky
 - Too expensive
 - Dangerous to lose
 - Not powerful enough
- Storing everything on the web:
 - Too cumbersome
 - Can't use my normal applications
 - Don't always have network connection
 - Network is too slow
 - I don't trust Google
- Solution: Carry your computer on a USB flash drive

Run anywhere using virtualization



- Use *virtualization* to use same image on any x86 hardware (PC or Mac)
- Carry your OS, applications, and data with you – no network required

Compression

- Use image compression
 - Decompress on-the-fly: improves flash performance
- Optimize virtual machine image
 - Most drivers unnecessary
 - System restore points, uninstall scripts redundant with VM snapshots
 - Page file can be empty
 - Zero free space
- End result of compression techniques:
 - Barebones Windows XP: about 100MB
 - XP plus Office 2007: about 1GB
 - Windows Vista Ultimate: about 3GB

Security issues

- What if I lose my USB drive?
 - Store the data encrypted so no one can access it
 - Keep a backup of the contents on a machine or in the network
 - Can remotely “self-destruct” data when USB drive is marked as lost
- Protection from malware
 - Separate system and user data, revert to golden system state on every reboot
 - Run in secure virtual environment – not affected by malware on host
 - Boot from USB drive into secure Linux – avoid software keyloggers
- Keeping up-to-date
 - Administrator posts updates to system state on server
 - Automatically download updates in the background (only deltas)
 - Start using latest version on every reboot

Demo

Virtualization Use Cases



Disaster Recovery

- Provision users during disaster recovery operations
- Set up temporary offices quickly and easily



Secure Remote Access

- Enable remote and guest workers to gain access to corporate network



Secure Mobile Workforce

- Work from anywhere, on any hardware, and any OS
- Maximize productivity without sacrificing security