Electronic Stewardship for Small and Handheld Electronics

Federal Electronics Challenge

Partner Call

May 2, 2013

Agenda

- What is a small or handheld device
- Purchasing
- Data security
- Recycling/End-of-life

Small and Handheld Devices

- Small or handheld electronic devices are everywhere
- They are for a variety of users
- Handheld devices can do many things

John Karakatsanis

Small and Handheld Devices

- For the purposes of this call they are generally:
  - Battery operated
  - Can operate independently of other devices
  - Self contained
  - May have some accessories

What's the difference?

- Smaller devices are condensed and mobile
- Smaller devices are different than the larger devices because:
  - Different operating systems/software
  - Input and output devices aren't always there to support the device

Purchasing

- ENERGY STAR
- Notebooks and Tablet Computers
  - Power supplies
  - Multiple modes of operation (Off, Sleep, and Idle)
  - An ENERGY STAR label is not a guarantee that your machine is saving energy
- Power management features can be tweaked
  - Screen brightness
  - Display turn-off time
  - Cellular/Wi-Fi services

Purchasing

- **ENERGY STAR labeled battery chargers**
  - 230 million battery chargers are used in the US
  - Efficient battery chargers can save more than 1.5 billion kWh of energy per year
  - Conventional chargers can draw as much as 5 to 20 times more energy than is stored in the battery!
  - Advanced energy-saving designs are now available that, on average, use 30% less energy.

Purchasing

- Ecolabels:
  - TCO and Blue Angel list some products in this class
  - Other certifications are being considered
- Look at key environmental attributes, similar to what is available for other electronics
  - Reduced toxins
  - Recyclability
  - Upgradability/Reusability
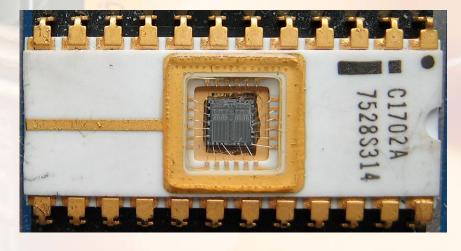 - End-of-life management

Purchasing

- Use FEC tools
  - Product environmental assessment tools
  - Total cost of ownership tool
  - http://go.usa.gov/TNtT
- Manufacturer's product environmental information sheet
- Possible future standards for mobile devices

External Power Supplies

- Removed from ENERGY STAR due to:
  - High market penetration
  - Federal minimum efficiency standards
  - Fewer products were using external power supplies (EPS)
  - EPS requirements were added to the ENERGY STAR device requirements
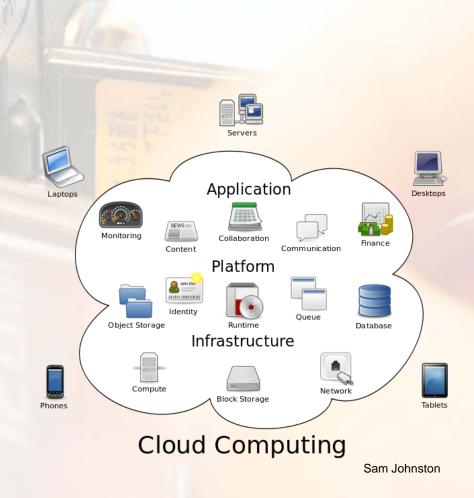
Purchasing

- **Other considerations**
  - Compatibility with existing equipment, backwards compatibility
  - Can one device support another, can cell phone tethering replace a laptop modem?
  - Can one device replace others?
  - Compatibility with networks

Poil

Data Security

- What kind of information are your devices carrying?
- What about information on personal devices?
- Where is information stored on devices, and computers they sync with?
- What's the security like?

Cloud Computing

Sam Johnston

Data Security

- Understand how end-of-life data security effects these devices
    - Clearing
    - Purging
- Know the difference between resets
    - Soft
    - Hard/factory
- Different devices may use different methods to clear memory
- Mobile viruses and malware are becoming issues

Data Security

- Equipment may contain sensitive information
  - Learn reset procedures
- Remember data security
- Some devices may not have a way to clear data
- Work with your IT department

Arnold Reinhold

End-of-Life Management

- Following the regular property process:
    - Reuse, donation, recycling before disposal
    - Refer to GSA Bulletin FMR B-34 for information: http://go.usa.gov/ySU
- Remember:
    - Cables and documentation
    - Memory cards and SIM chips
    - Will any outside services be needed?
    - Property tags
- Consumables:
    - Rechargeable batteries are recyclable
        - If the battery is not removable, can it be replaced?
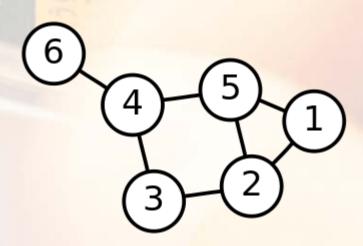   - Some accessories can also be recycled

SIM - Subscriber Identity Module - chip

End-of-Life Management

- Use the FEC end-of-life tools to evaluate recyclers
  - Remember certified recyclers - http://go.usa.gov/TNSC
- Because of the small size, many retailers and manufactures may offer recycling programs
  - EPA's website has links to manufacture and retailer environmental sites: http://go.usa.gov/TN7H
  - The Call2Recycle www.call2recycle.org
- Some devices have value at the end-of-life, can an exchange sale be done for newer equipment?
- Follow property management rules

Reusability

- Network compatibility
- Connection to servers
  - Do cloud services impact reusability?
- Compatible features
- Repurposing
- Include accessories

Discussion

- Has any one tried to buy a 'greener' small device?

- How have people recycled these devices?

- Has old equipment been suitable for reuse or donation?

- How has data security been handled?

Contact Information

- **Main FEC Point of Contact:**
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Federal Electronics Challenge

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