Update: UT’s Wireless

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On the Agenda today

- SSID soup
- Coverage
- Filters
- Support
The SSID soup!

- ut-wpa2
- ut-open
- ut-visitor
- eduroam
- nomad

(all SSIDs are available everywhere!)
SSID = ut-wpa2

- Encrypted from device to the core of the network
- Required to join Active Directory
- Required to use GAL (Global Address List, in Exchange)
- 216.96.216.0/24 > 216.96.231.0/24, random subnets random IPs
- uses 802.1x, EAP-PEAP or EAP-TTLS, WPA2 with AES, MSChapV2, and Active Directory for Authentication
- Hosts need to be in NetReg
SSID = ut-open

- replacement of nomad
- 216.96.176.0/24 > 216.96.207.0/24
- Random Subnets, Random IPs
- Considered “untrusted” for firewalls purposes
- Hosts need to be in NetReg
SSID = ut-visitor

Web portal with two options:

- Registered by email
  - open to anyone
  - designed for passing-by visitors: Hot Spot
  - 256 Kbps max throughput, up and down
  - NAT
  - Timeout = 30 minutes

- Registered by a sponsored account
  - Accounts created by HelpDesk (974-9900)
  - NAT
  - One week maximum, renewable

(Web portal available on wired as well)
SSID = eduroam

- Allows you to join Academic Wi-Fi networks in:
  - Europe
  - Australia
  - New Zealand
  - China
  - Japan
  - Hong-Kong
  - Taiwan
  - Canada
  - USA: Harvard, LSU, UCSB, UTK

- Based on 802.1x, same “mechanics” as ut-wpa2. Requires full username (e.g. phanset@utk.edu)
nomad

- Don’t use it
- Large layer 2 network with huge broadcasting domain
- When you use it, everyone suffers!
  - one person joining nomad on one Wireless AP brings the entire broadcast domain to everyone associated with that AP!
Coverage

- AP positioning
  - Send email to help@utk.edu to report APs positioned horizontally

- Request additional coverage with the HelpDesk (974-9900)

- Fair use: Do not leave constantly connected devices on wireless (eg: printers, desktops)
Filters

- Netbios on port 137, 138, 139
- DHCP service
- IP addresses not in subnet
- Gateway Source IP
- DNS redirection
Support

- Provide as much information as possible (SSID, location, DHCP lease info, MAC, History of problem)
- Help us troubleshoot issues:
  - Is it specific to a SSID?
  - Is it specific to a location?
  - Do other devices have the same issue?
- Do not rely on wireless for mission critical applications (land line vs cellular)
Thank you

Presentation available at:

http://wireless.utk.edu