I. Standard Configuration – Update (Scott Richardson)

II. WiFi Cert-pocalypse – Update (Jason)

III. Self-Service DNS – Discussion (William Green)

IV. TSC Certification Program – Update (Sandra Germenis, Cam Beasley)
UT Austin Standard Computer Systems – AIC presentation

This AIC briefing is intended to establish transparency of process on the development and maintenance of PC hardware standards for the UT Austin campus. Additionally, we seek AIC’s approval of and guidance on this process so that it may continue to benefit our community.

➤ **Background and Purpose**

In 2010, ITS Customer Support Services engaged the IT community at UT Austin in an effort to establish more collaboration among campus IT shops. Volunteers representing several large colleges and business units began meeting to work on several goals, one of which was establishing general computing hardware standards for the campus. The working group (dubbed “Managing Desktops”) recognized multiple benefits could be realized from this effort:

- end users and professional staff would be guided to purchase preferred hardware with at least minimum recommended specs
- more consistency in computer fleets requires less systems management effort
- higher probability of meeting basic requirements for security policy compliance
- cost savings are leveraged through volume buying power

➤ **Group Processes**

➤ **Imparted Value**

UT Austin Standard Computer Systems, basic hardware specs:

(Excerpted from [https://wikis.utexas.edu/x/QsmtAg](https://wikis.utexas.edu/x/QsmtAg))

**Desktops**

- **CPU** - Intel 4th Gen Haswell (migrating to Intel 5th generation Skylake) Core i3, i5 & i7 Mobile
- **Memory** - 8GB default, downgrade to 4GB, upgrade to 8GB, 16GB and 32GB where supported by platform
- **Storage** - 500GB Self-Encrypting / 128-512GB Solid State/ 500GB conventional or hybrid/ 1TB conventional
- **Graphics** - Integrated Intel HD, add-in AMD or NVidia dual head
- **Security** - TPM chip

**Laptops**

- **CPU** - Intel 4th Gen Haswell (migrating to Intel 5th generation Skylake) Core i3, i5 & i7 Mobile
- **Memory** - 8GB default, downgrade to 4GB, upgrade to 8GB or 16GB
- **Graphics** - Integrated Intel HD, discrete AMD/ NVidia
- **Security** - TPM chip

**Recommended Dell Models**

**Desktops**

- OptiPlex 9020 Small form factor, Mini-Tower or All-In-One
- OptiPlex 7020 small form factor or Mini-tower

**Laptops**

- Latitude E6440 (Enterprise grade 14” notebook)
- Latitude E7440 (Enterprise grade 14” Ultra-book)
- Latitude E7240 (Enterprise grade 12” Ultra-book)
WiFi Change (Spring/Summer 2015)

Overview
Over 185,000 wireless devices are going to require user intervention to continue to function on UT's wireless network this summer. This is because the certificate (and its root authority) for restricted.utexas.edu expires July 3, 2015. [a.k.a. the cert-pocalypse]

Notes

1) Preliminary recommendation

A group of unit TSCs formed to investigate alternatives. They are testing technical functionality behind a recommendation:
   a. Create a new virtual wireless network over spring break. Back to “utexas”.
   b. Marketing campaign to encourage movement to “utexas” rest of semester.
   c. During the May intersession, deactivate “restricted.utexas.edu”, to determine if there are device problems (when it could still be turned on before July 3).

2) Example alternatives considered:

   a. Self-signed long expiration versus commercial certificate moving forward.
   b. Big bang on July 3rd.

3) Recommendation: expected back to AIC by February.
Self-Service DNS

**Background**
Currently, Networking manually processes requests for almost all DNS changes for “utexas.edu”, as well as a number of hosted domains. (>260K IP addresses)

These services are only available during business hours, and DNS changes are only pushed into production twice per day.

Units requested the ability to make their own changes (avoid ticket process/delays), be able to make changes outside business hours, and for changes to take effect on-demand.

**Solution**
Networking acquired and is deploying a self-service DNS system for authorized IT staff within units to make their own DNS changes.

Networking’s scope will change to administration of the overall system (managing user accounts, system software maintenance, etc.), training, and any tasks requiring escalation.
Self-Service DNS – Timeline

• Spring 2014 – Evaluation completed on Infoblox IPAM (IP Address Management) product, included Networking and several department TSCs

• Summer 2014 – Infoblox IPAM product purchased

• Fall 2014 – Infoblox IPAM appliances received, and Networking staff engaged with vendor on setup and configuration. UTNIC staff sent to Infoblox training.

• Spring 2014 – IPAM appliance to be brought into production

• Spring-Summer 2014 – Migration of “utexas.edu” zones and other hosted domains (coordinated with their respective units/owners)
Self-Service DNS – Communications

- General e-mail to TSCs informing of upcoming change (February 2015)
- Training sessions (Spring-Summer 2015)
- Individual communications/interaction with TSCs for coordinating migration of their zones and domains (Spring-Summer 2015)
Self-Service DNS – Migration Process (Overall)

The following migration process will be performed on the authoritative DNS servers:

1. Current “utexas.edu” domain will be split apart into individual zones (e.g. “its.utexas.edu”, “public.utexas.edu”)
   - This will require a configuration freeze (estimated three business days), during which no DNS changes may be made to anything within “utexas.edu”

2. Individual zones/domains will be migrated to Infoblox IPAM in coordination with units

3. Once all zones have been migrated, the Infoblox DNS servers will assume the names and roles of the current authoritative servers
   - Servers will be migrated one at a time, so there will be at least one authoritative server answering for “utexas.edu” at all times
   - We will continue to maintain an off-site fail-safe authoritative server (not self-manageable)
Self-Service DNS – Migration Process (Dept.)

The following migration process will be performed on each individual zone or domain in coordination with the respective departments: (> 500 zones)

1. Configuration freeze will be put in place three business days in advance

2. Zone/domain will be imported into Infoblox IPAM

3. Zone/domain will be delegated from old servers to new Infoblox DNS servers

4. Zone/domain entries will be deleted old servers after verification that Infoblox DNS servers are answering for those entries