#### 1. Purpose

This minimum standard serves as a supplement to the <u>IT Network Operations Manual</u>, which was drafted in response to the <u>UT Austin Information Resources Security and Use Policy</u>. Adherence to the standard will help ensure effective network operation.

In order for The University of Texas at Austin to possess an effective presence on the Internet, and to operate, secure, and support the network effectively, the university requires systematic and responsible use of Internet names and addresses assigned to the campus inter-networking infrastructure and to departments, programs, and functions using names affiliated with the university. The following policies are adopted throughout The University of Texas at Austin to allocate assigned names and addresses for network-connected devices.

#### 2. Scope

This policy applies to all current and future domain names and address spaces associated with The University of Texas at Austin and its endeavors.

### 3. Definitions

- Domain: A unique name, ideally recognizable and memorable, that identifies and locates
  computers and, by extension, services and enterprises on the Internet. Initially a technical
  construct, domain names have taken on great value as "Internet identities" or "online brands."
  A domain defines a realm of administrative autonomy, authority, or control on the Internet.
- Top-level Domains (TLD) The last part of the domain name, intended to indicate either the type of enterprise or its location. Examples of TLDs are .edu (U.S. degree-granting institutions of higher education), .com (commercial entities). New TLDs are added over time.
- Subdomain: A domain name that falls under another domain name in the DNS hierarchy; for example, mccombs.utexas.edu is a subdomain of utexas.edu.
- Second-level domain name: A domain name consisting of two labels, such as utexas.edu.
- Third-level domain name: A domain name consisting of three labels, such as mccombs.utexas.edu.
- Fourth-level domain name: A domain name consisting of four labels, such as accounting.mccombs.utexas.edu.
- IP Address A unique numerical identifier for a computer or other device connected to the Internet (or any network utilizing the TCP/IP protocol suite). The format of an IP (Internet Protocol) address consists of four numbers separated by periods, where each number can be zero to 255 (for example, 1.160.0.240). Communication among computers on the Internet is actually based on IP addresses, but most people find the corresponding domain names easier to remember and to use. Translation between a given domain name and its IP address is done automatically by a network of Domain Name System servers.

# 4. Policy

# 4.1. UT Domain Name Ownership

The University of Texas at Austin is the owner and maintainer of all domain names associated with The University of Texas at Austin. ITS Networking delegates domain naming to the University Communication Standards Committee, which shall be responsible for reviewing all

third level domain requests and non-standard requests. The University Communication Standards Committee must provide approval before a domain is granted. ITS Networking is responsible for implementing and/or delegating domain name system service for ALL systems using the campus network, and for coordinating this service with other campus units.

## 4.2 UT Assigned Internet Address and Domain Name Space

UT has registered numerous Internet top-level domain names with the appropriate domain name registrars for intellectual property protection and branding purposes. The university's primary domain name is utexas.edu.

The University of Texas at Austin primarily uses

- six IPv4 address blocks externally:
  - 0 128.62.0.0/16
  - 0 128.83.0.0/16
  - 0 129.116.0.0/16
  - 0 146.6.0.0/16
  - o 198.213.192.0/18
  - o 206.76.64.0/18
- all of RFC1918 reserved space internally;
- and one IPv6 address block:
  - o 2620:0000:0050:/48.

## 4.3 UT Address Space Registration Requirements

All address space used by UT departments must be registered with and managed by ITS Networking. ITS Networking shall designate policies necessary for address assignment and use in the Network Operations

Manual:http://www.utexas.edu/cio/policies/pdfs/NetOpsMan%20v1.pdf

Each IP address in use at the university must reverse map to the appropriate domain name within the utexas.edu domain. This ensures that network administrators can always determine which organization/department claims responsibility for a given machine. Separately, a given IP address may then also reverse map to a name within a registered and approved non-UT domain.

## 4.4 Domain Names

The selection of a domain name for a university service or entity should be considered with the same seriousness as the naming of campus buildings or streets. Domain names for university endeavors should map within the utexas.edu naming hierarchy. Availability of third-level domain names for utexas.edu is constrained. All UT address space in use shall reverse map to an appropriate utexas.edu domain.

The Information Technology Services-Networking department (ITS Networking) shall act as the registrar and the University Communication Standards Committee shall act as the conduit for all

exceptions and approvals of domain names. ITS Networking will also manage all address spaces owned by UT and other address spaces in use on campus. Contact ITS Networking at <a href="mailto:utnic@utexas.edu">utnic@utexas.edu</a> and the University Communication Standards Committee at <a href="mailto:communications-standards@utlists.utexas.edu">communications-standards@utlists.utexas.edu</a>.

### 4.4.1 Domain name request submission

Petitioners for a domain will submit their request via a web form at https://www.utexas.edu/its/utnic/forms/domain-registrar.php. Petitioners using any other means for their request (will be referred to the Web form.

Requests for a domain name must originate from the IT director of the requesting entity if one exists, and have the endorsement of the entity's dean, director, or department head.

# 4.4.1.1 Third Level Domain Names

- Third-level domains should clearly identify the requesting entity, avoiding the
  use of acronyms or generic terms that could apply to multiple campus entities
  or services.
- The granting of a third-level name will be a relatively rare occurrence and limited to entities of broad scope and long duration.
- Third-level domain requests from entities that do not fall in the categories listed below will be reviewed on an individual basis, but will generally be denied.
- Third-level domains will be granted to:
  - UT schools and colleges
  - Core university-wide services, entities, and units that are not associated with a college or school such as recsports.utexas.edu or hrc.utexas.edu
  - Departments and Organized research units (ORUs) as defined in the UT
     Department System
  - Officially recognized interdisciplinary research centers and institutes that do not report to a single college, school, or unit
  - Degree programs that belong to more than one college or school such as gamedev.utexas.edu
  - Central university-wide computing services of global interest to the UT community, such as ftp.utexas.edu or utmail.utexas.edu.
  - University-wide services of broad scope and long duration with widely recognized branding

### 4.4.1.2 Fourth Level Domain Names and longer

Fourth-level domain name requests will be forwarded to the owner of the third-level domain owner for review.

In general, workstations and server names should be at the fourth-level, behind a third-level domain name, in which case consultation with ITS Networking is unnecessary. Fifth-level and higher domain names should be restricted to end user devices and equipment.

### 4.4.2 Review process

Requests will be reviewed first by the University Communication Standards Committee. If a request is denied, it may be appealed one time for further review. After the committee has considered the appeal and rendered a decision, the University Communication Standards Committee will notify the petitioner of the decision via email. The Committee meets every two weeks with some exceptions and petitioners can expect to receive a decision within 2-4 weeks.

## 4.4.2.1 Naming Conflicts and Priority

Some domain names are or will be reserved for university-wide use. Otherwise, domain names are generally available on a first-come, first-served basis. In cases where a desired name or alias name is already taken, the University Communication Standards Committee can explain the alternatives. The University Communication Standards Committee and ITS Networking survey the database regularly to avoid naming conflicts, to preserve the UT AUP, and to otherwise protect the interests of The University of Texas at Austin.

## 4.4.2.2 Unacceptable Domain Names

The University of Texas at Austin network is for research, instruction, business transactions, and applications use only.

Reasons for rejecting applications for third-level domain names include but are not limited to the following:

If in the opinion of University Communication Standards Committee:

- The implied scope of the name exceeds the intended use of the name as indicated in the domain name application
- The requested name does not comply with policies stated in sections 4.4.1.1(Third Level Domain Names) and 4.4.2.1 (Naming Conflicts and Priority).
- The requested name would generally be considered vulgar or offensive or would reflect poorly on The University of Texas at Austin

 The proposed activity to which the requested name would be attached would violate The University of Texas at Austin Information Resources Use and Security Policy.

#### 4.4.3 **Revocation**

Domains are a revocable resource. The revocation of a domain will be a rare occurrence, but could happen, for example, if an existing third-level domain conflicts with the request of a major new university entity or in the case of a major revision of the university's online information architecture or physical storage architecture.

Third-level domains may also be revoked if they have not been actively used for a period of one year. The review process for new third-level domains will include screening for current or potential future conflicts.

#### 4.4.4 Alternative Domains

It is the intent that university endeavors be represented by UT domain names and use of alternative domains to utexas.edu (.com, .org, .net, etc.) are discouraged. All exceptions for non-utexas.edu domains must be registered with utnic@utexas.edu.

### 4.4.5 **Exceptions**

Unusual name requests, circumstances, and other exceptional issues will be referred to the University Communication Standards Committee for further consideration, as appropriate.

## 5. Fees for Assignment of Domain Names

There is no charge for domain name assignments or hosting within the utexas.edu. However, for utexas.org and utexas.net domains, the requesting department must purchase Domain Hosting Service for a fee. DNS service for non-UT domains will also require hosting fees. Requesting parties are responsible for payment of all fees associated with registering a previously unregistered non-UT domain name through a commercial domain registry service. ITS Networking will manage this service and payment for the fees should be transferred to their department. (https://www.utexas.edu/its/utnic/forms/domain-registrar.php)

Other services associated with a name, such as Web server or Web page hosting, may not be free. These services are available on a cost-recovery basis from ITS and possibly from other departments.

### 6. Problem Resolution

In cases where faculty and staff are involved in creating or hosting an unacceptable domain name, ITS Networking will first contact the individual and attempt to resolve the issue directly. If this fails, the department head and the Information Security Office will be notified. Failures to resolve problems will be escalated to the Chief Information Office and other relevant officers.

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When an undergraduate or graduate student is involved, whether on the residence hall network or elsewhere, ITS Networking will request that the network owner contact the student first to attempt to resolve the issue. Failing this, the student will be referred to the Office of Student Affairs through the Information Security Office. Failure to resolve problems will be escalated to the Chief Information Officer and other relevant officers.

In the event any issues are not resolved in a timely fashion, ITS Networking is authorized to:

- a) remove the inappropriate domain name or alias name, or
- b) filter or disconnect the system from the network,

depending upon the nature and severity of the problem. Notice of any such action will be provided to the responsible parties and units, as well as to the Chief Information Officer.

## 7. Recommendations for Policy Changes

Requests for changes in the existing DNS policy are to be made to the Director of ITS Networking and the Director of Digital Strategy, who will forward them to the University Communication Standards Committee for consideration. Changes in the DNS policy will be posted to the <u>policy Web</u> site for the Chief Information Officer.

# 8. Related UT Austin Policies, Procedures, Best Practices and Applicable Laws

The policies and practices listed here inform the procedures described in this document; you should be familiar with these documents. (This is not an all-inclusive list of policies and procedures that affect information technology resources.)

**UT Austin Information Resources Use and Security Policy** 

**UT Austin Acceptable Use Policy** 

UT System (UTS 165) Information Resources Use and Security Policy