Domain Name Service Policy:
Recording and Registration of Domain Names and Addresses

Date Established: 4/29/2009
Date Last Revised: 4/29/2009

Category: IT Policy
Responsible Office: CIO Office

Summary

As the steward of the UB campus network, the CIO office serves as the central point of contact for the outside world on network issues and ensures that the management of the network complies with applicable laws and regulations. The University at Buffalo (UB) domain name space is a University resource, managed for the benefit of the entire University community. UB requires the central recording and registration of all fully qualified domain names within University address space.

Policy

POLICY STATEMENT

UB requires the central recording and registration of all fully-qualified domain names within University address space. IT support staff or departmental technology representatives must register all hosts in the University at Buffalo address space as well as any non-Buffalo.edu domain names requested by University programs.

- The registration of domains for personal use within the UB address space is strictly prohibited and subject to disciplinary action per the Computer and Network Use Policy.

- Only CIO-authorized name servers are permitted on the University network. Any non-authorized name servers detected on the University network will need to be removed from the network.

- Active Directory entries within the campus DNS are maintained for the central campus active directory servers (UBAD). Records for individual workstations within active directory name space (itorg.ad.buffalo.edu and/or ad.buffalo.edu) are not maintained in the campus DNS.

Additional name space standards and address space management policy details are included in the policy, including:

- Standards for domain and sub-domain names within the buffalo.edu domain

- Standards for non-buffalo.edu domain names hosted on University at Buffalo domain name servers

- Standards for redirection from campus domain names to a third-party service provider

- Address space management

- Standards for use of Buffalo.edu vs. non-Buffalo.edu domain names

REASON FOR POLICY

The purpose of this policy is to conserve and manage limited campus resources (IP address space, staff time, IT processing and memory resources) and to ensure compliance with applicable laws and University regulations.

APPLICABILITY

This policy applies to all University departments and campus affiliates who utilize UB address space.

DEFINITIONS

Domain Name – the name that identifies and locates an organization or other entity on the Internet

UBIT.BUFFALO.EDU

Subdomain   second level   top level
Name   domain name   domain name

Domain Name System (DNS) - DNS is a set of protocols and database definitions. It is a distributed system that translates human-readable hostnames to network-readable IP addresses. It is comprised of name servers, resolvers (clients), and records.

Fully qualified domain names - A fully qualified domain name (FQDN) is the complete domain name for a specific computer, or host, on the Internet. The FQDN consists of two parts: the hostname and the domain name. For example, the FQDN for a mail server might be:

MAILSERVER.CIO.BUFFALO.EDU

Host Name   Subdomain   second level   top level
                           Name   domain name   domain name

NAME SPACE STANDARDS AND ADDRESS SPACE MANAGEMENT

All hosts on the University network providing services related to UB's institutional mission should have a name that ends in buffalo.edu. Additional naming conventions and standards are included below.

Records in buffalo.edu

1. Address records (A records) in the buffalo.edu domain are limited to campus-wide services. For example, www.buffalo.edu is the officially recognized web page of the University at Buffalo.

2. Alias records (MX and CNAME records) in the buffalo.edu domain will be reviewed to ensure they do not interfere with campus-wide services and to verify they are in support of the mission of the University at Buffalo. Records for non-UB-related functions are not supported.

3. MX, CNAME, and A records in buffalo.edu that are three letter names or less can only be established for existing University entities based on the entity code table and must belong to the requesting source.

Sub-domain of buffalo.edu and non-buffalo.edu domain naming standards

1. Sub-domain names of buffalo.edu and non-buffalo.edu domain names must be submitted for approval to dns-admin@buffalo.edu and meet the following standards.

   a. Requested names must not conflict with existing names

   b. Requested names must not conflict with potential service names.

   c. Names must represent an officially-recognized unit within University at Buffalo, such as a

      - Department

      - School

      - Research institute or center

      - Research area

      - Campus-wide initiative

   d. There must be a recognized support structure in place

   e. New sub-domains of buffalo.edu must contain a reasonable number of hostnames to substantiate a separate name space

2. New sub-domains and domains will not be created for personal use.

3. University units should normally use a Buffalo.edu domain. In certain limited circumstances, the use of a domain name outside of buffalo.edu may be allowed. Units requesting a domain name outside of buffalo.edu must submit a written business case explaining their request and justifying why a sub-domain of buffalo.edu is not acceptable. The justification must include the approval of relevant stakeholders and the unit head.

4. Non-buffalo.edu domain names within the address space registered to the University at Buffalo must be hosted on the central name servers.

5. The CIO or his/her designee and the Vice President for External Affairs or his/her designee will review a request for non-buffalo.edu domain names. If they grant approval, then the CIO Office will register the domain name. The requester is responsible for

   a. Paying any fees associated with the domain registration

   b. Providing a contact to dns-admin@buffalo.edu for reports of misuse

   c. Updating the registrations in a timely manner when changes are made to the campus DNS infrastructure

6. No registrations other than buffalo.edu are allowed within the EDU domain.

Redirection to third party service providers

The University at Buffalo does not redirect fully qualified domain names to third party service providers. Any exceptions to this policy require explicit approval by the Chief Information Officer (CIO). Requests for redirection should be submitted to:

dns-admin@buffalo.edu

Address Space Management

1. The usage of addresses on the network is periodically reviewed. Addresses that have not been used in the last 12 months will be removed from DNS and returned to the available pool after appropriate notifications.

2. All machines connected to the University at Buffalo networks are required to be registered in DNS.

3. IP address requests may only be made by faculty and staff.

SERVICE REQUEST PROCEDURES

The following procedures are used to request DNS services:

Static IP Address
> Email ipreq@buffalo.edu or complete the form:
> http://www.tks.buffalo.edu/usg/forms/nameservice.form.html.

Dynamic IP Address (DHCP)
> Follow the procedures outlined at: http://www.oss.buffalo.edu/Network/DHCP.

New Sub-Domains of buffalo.edu
> Email ipreq@buffalo.edu

New Non-buffalo.edu Domains
> Email ipreq@buffalo.edu

Active Directory srv records
> Complete this form:
> http://www.tks.buffalo.edu/usg/forms/activedirectory.form.html

All other requests and policy questions
> Email dns-admin@buffalo.edu

Contact Information

Please contact dns-admin@buffalo.edu if you have questions about the procedures outlined in this document.

Please contact the following office if you have questions or comments about the policy statement:

IT Policy Officer
Office of the CIO
517 Capen
University at Buffalo
716-645-7979
peters@buffalo.edu

Related Information

University Documents:
> Computer and Network Use Policy