



## **Fort Pond Research**

**15 Fort Pond Road  
Acton, MA 01720**

In order to make it easier for people across the internet to send you mail you may want to register your site as an internet domain. This enables other sites to send you mail without knowing an explicit uucp path to your machine. To register a domain you need to get some internet site to be

your forwarder. An internet site can be your forwarder without you being directly connected to it. If you know someone at an internet site that might be your forwarder contact them and ask. They must also be willing to give you a uucp account or to forward your mail to the site you will be calling to collect your mail.

The UUNET site is willing to allow people to call to collect their mail and to act as an internet forwarder via a direct call. They charge a \$35/month fee for this. Contact them at:

UUNET Communications Services  
3110 Fairview Park Drive, Suite 570  
Falls Church, VA 22042  
+1 703 765 5050  
uunet!uunet-request

In addition UUNET Communication Services will register your domain for you for a \$35 one time charge if you provide them with the information below. Call them at the above address if you have any further questions.

### **BACKGROUND:**

A "zone" is a registry of domains kept by a particular organization. A zone registry is "authoritative", that is, the master copy of the registry is kept by the zone organization, and this copy is, by definition, always up-to-date. Copies of this registry may be distributed to other places and kept in caches, but these caches are not authoritative because they may be out of date. An authoritative answer is required for certain decisions, such as "this mail cannot be delivered because there is no such domain", or "the name you have chosen is available and is now assigned uniquely to you."

A registered domain name is necessary to use software (including smail) which supports domain addresses. This name must be unique in the world, and must be registered with the appropriate registry. You also

need to be in a domain that has a forwarder from the ARPANET.

Currently, the domain tree in the USA has three major top level domains: COM for companies, EDU for educational institutions, and GOV for government entities. Three other top level names exist: MIL, NET, ORG, but are somewhat specialized. For the most part, countries other than the USA are using the ISO 3166 2 letter abbreviation for their country as a top level.

The second level is generally the name of the organization, using the shortest possible abbreviation that is clear and unique, thus ATT, DEC, IBM, HP, etc. The choice of exact name is up to the organization, and longer names, such as Berkeley.EDU or Tektronix.COM are perfectly acceptable. Just remember that people must type the name, as well as see it displayed.

Not all countries use the second level for the organization. In particular, Australia and Britain have set up second level domains OZ.AU and AC.UK for their academic communities, and put the organization at the third level.

The third and subsequent levels, if used, should be organizational units within the organization. Try to keep the number of levels to a minimum, since people have to type the names. More than four total levels (country, org, org-unit1, and org-unit2) should rarely be needed. The actual organizational units to be used are up to you, for example, they might be departments, or they might be machine names.

#### CHOOSING NAMES:

Names are case independent. uucpnames MUST be all lower case.

"vax", "3b20", and the like are terrible host names, because sooner or later you'll have more than one vax, or more than one 3b20, and the names will be confusing. We recommend organizational names, based on the department or project the machine is used for. Of course, in order to keep the names reasonably short and to avoid duplicating names in the hierarchy, some compromise will be needed. For example, csvax.CS.UND.EDU is redundant, but RISC.CS.UND.EDU might be a good name for the computer used by the RISC project in the CS department.

Please note that you should support both RFC 976 and the documents it refers to, in particular RFC 822 and RFC 920. This means, for example:

- (a) The name "postmaster" on all machines visible to the outside should be forwarded to the technical contact. This can be easily done with an alias in /usr/lib/aliases, if your site

runs sendmail or smail release 2.0 or beyond.

(b) Your machine should not alter valid RFC 822 headers, such as From:, of mail it generates or forwards. Many machines running sendmail have a bug which adds uucpname! to the front of such addresses. Installing smail will fix the bug, because mail passed through the machine is not passed through sendmail. We hope to make a fix to sendmail available, also, at a later date.

#### COSTS:

UUNET charges a one time fee of \$35 for processing the forms and setting up the servers. This fee does NOT include a connection to the uunet computer.

Payment may be sent to:

UUNET Communications Services  
3110 Fairview Park Drive, Suite 570  
Falls Church, VA 22042  
+1 703 765 5050  
uunet!uunet-request

or we will invoice you. Please indicate the name of your domain and the uucp name of your gateway machine so that we may properly credit you.

Information about UUNET's other services Can be obtained by sending your postal address to uunet!uunet-request.

#### IMPLEMENTATION DETAILS:

We will notify you (via mail to "postmaster" in your domain) when your domain is registered. You cannot use your domain name in outgoing mail until registration is completed, although it is OK to install smail (using the host.UUCP domain) ahead of time. We do recommend that you set up to accept incoming mail for your domain name ahead of time, if this is convenient.

Several steps are needed before your registration is complete. Some of these steps are approval by the NIC, setting up the nameservers, setting up the forwarder. Seeing your domain published in the UUCP map is not, by itself, sufficient (or necessary) for the use of your domain name.

#### FORWARDERS:

A forwarder is a kind of mail bridge host between DDN (formerly called the ARPANET) and UUCP. The DDN nameserver structure directs all DDN mail for your domain to the forwarder, and the forwarder passes the mail from DDN into UUCP. Forwarders can also forward your mail from UUCP to DDN, but it is not strictly necessary to use your forwarder for this, since mail to any of the published UUCP->DDN gateways can do this.

To register your domain, you need to have a forwarder. If you know of an Internet site that is willing to be a forwarder for your domain, let us know. As a last resort, uunet can be a forwarder for you. HOWEVER, we require that you obtain the permission of the site that is directly connected to uunet before we start forwarding mail through them.

#### THE APPLICATION:

To register your domain with the NIC, we need to send in the following form. Questions 5,6,7 and 9 are already answered for you. Do not change them.

Answer questions 1,2,3,4,8 and 10 and return THE ENTIRE FORM to me. PLEASE do not just return the questions you answer. Also don't do anything "helpful" like insert characters to show what you've changed. It creates extra work for me, as I have to copy your answers back onto the form I originally sent you.

If you don't have a "NIC Handle" or dont know what that means, answer <NEW>

Return everything below this line to uunet!domain-request.

Specify what machine you want to be your forwarder. If you are directly connected to uunet, uunet can be your forwarder. If you are not directly connected, then you need to find some other site to be your forwarder OR get the permission of a site that IS directly connected to uunet to allow your arpanet mail to be forwarded through them. I must receive the permission of the uunet site or the other forwarder directly from that forwarder.

Who will be your forwarder?:

For Example:

UUNET

the NIC Domain Registrar (HOSTMASTER@SRI-NIC.ARPA). Questions may be addressed to the NIC Hostmaster by electronic mail at the above address, or by phone at (415) 859-3695 or (800) 235-3155.

NOTE: The key people must have electronic mailboxes and NIC "handles," unique NIC database identifiers. If you have access to "WHOIS", please check to see if you are registered and if so, make sure the information is current. Include only your handle and any changes (if any) that need to be made in your entry. If you do not have access to "WHOIS", please provide all the information indicated and a NIC handle will be assigned.

(1) The name of the top-level domain to join.

For example: COM

(2) The NIC handle of the administrative head of the organization. Alternately, the person's name, title, mailing address, phone number, organization, and network mailbox. This is the contact point for administrative and policy questions about the domain. In the case of a research project, this should be the principal investigator.

For example:

Administrator

Organization The NetWorthy Corporation  
Name Penelope Q. Sassafrass  
Title President  
Mail Address The NetWorthy Corporation  
4676 Andrews Way, Suite 100  
Santa Clara, CA 94302-1212  
Phone Number (415) 123-4567  
Net Mailbox Sassafrass@ECHO.TNC.COM  
NIC Handle PQS

(3) The NIC handle of the technical contact for the domain. Alternately, the person's name, title, mailing address, phone number, organization, and network mailbox. This is the contact point for problems concerning the domain or zone, as well as for updating information about the domain or zone.

For example:

Technical and Zone Contact

Organization The NetWorthy Corporation  
Name Ansel A. Aardvark  
Title Executive Director  
Mail Address The NetWorthy Corporation  
4676 Andrews Way, Suite 100  
Santa Clara, CA. 94302-1212  
Phone Number (415) 123-6789  
Net Mailbox Aardvark@ECHO.TNC.COM  
NIC Handle AAA2

(4) The name of the domain (up to 12 characters). This is the name that will be used in tables and lists associating the domain with the domain server addresses. [While, from a technical standpoint, domain names can be quite long (programmers beware), shorter names are easier for people to cope with.]

For example: TNC

(5) A description of the servers that provide the domain service for translating names to addresses for hosts in this domain, and the date they will be operational.

We will be running the BIND software as provided by UC Berkeley.  
The servers are currently operational.

(6) Domains must provide at least two independent servers for the domain. Establishing the servers in physically separate locations and on different PSNs is strongly recommended. A description of the primary and secondary server machines, including

- Host domain name and network addresses
- Any domain-style nicknames (please limit your domain-style nickname request, if any, to one)
- Hardware and software, using keywords from the Assigned Numbers RFC.

Primary Server: uunet.UU.NET, 192.12.141.129, SEQUENT-S81, UNIX  
Secondary Server: seismo.CSS.GOV, 192.12.141.25, SUN-3/160, UNIX

(7) Planned mapping of names of any other network hosts (including any ARPANET or MILNET hosts), other than the server machines, into the new domain's naming space.

NONE

(8) An estimate of the number of hosts that will be in the domain.

- (a) Initially
- (b) Within one year
- (c) Two years
- (d) Five years.

For example:

- (a) Initially = 50
- (b) One year = 100
- (c) Two years = 200
- (d) Five years = 500

(9) The date you expect the fully qualified domain name to become the official host name in HOSTS.TXT, if applicable.

The host name should never appear in HOSTS.TXT. MX records to forward mail off the internet will be established.

(10) Please describe your organization briefly.

For example: The NetWorthy Corporation is a consulting organization of people working with UNIX and the C language in an electronic networking environment. It sponsors two technical conferences annually and distributes a bimonthly newsletter.

PLEASE ALLOW AT LEAST 10 WORKING DAYS FOR PROCESSING THIS APPLICATION