NAME

fns_policies – Overview of the FNS Policies

DESCRIPTION

FNS defines policies for naming objects in the federated namespace. The goal of these policies is to allow easy and uniform composition of names. The policies use the basic rule that objects with narrower scopes are named relative to objects with wider scopes.

FNS policies are described in terms of the following three categories: global, enterprise and application.

Global naming service.
A global naming service is a naming service that has world-wide scope. Internet DNS and X.500 are examples of global naming services. The types of objects named at this global level are typically countries, states, provinces, cities, companies, universities, institutions, and government departments and ministries. These entities are refered to as *enterprises.*

Enterprise-level naming service.
Enterprise-level naming services are used to name objects within an enterprise. Within an enterprise, there are naming services that provide contexts for naming common entities such as organizational units, physical sites, human users and computers. Enterprise-level naming services are bound below the global naming services. Global naming services provide contexts in which the root contexts of enterprise-level naming services can be bound.

Application-level naming service.
Application-level naming services are incorporated in applications offering services such as file service, mail service, print service, and so on. Application-level naming services are bound below enterprise naming services. The enterprise-level naming services provide contexts in which contexts of application-level naming services can be bound.

FNS has policies for global and enterprise naming. Naming within applications is left to individual applications or groups of related applications and not specified by FNS.

FNS policy specifies that DNS and X.500 are global naming services that are used to name enterprises. The global namespace is named using the name "...". A DNS name or an X.500 name can appear after the "...". Support for federating global naming services is planned for a future release of FNS.

Within an enterprise, there are namespaces for organizational units, sites, hosts, users, files and services, referred to by the names **orgunit**, **site**, **host**, **user**, **fs**, and **service**. In addition, these namespaces can be named using these names with an added underscore ('_') prefix (e.g. **host** and **_host** have the same binding). The following table summarizes the FNS policies.

Context Type	Subordinate Context	Parent Context
org unit	site user host file system service	enterprise root
site	user host file system service	enterprise root org unit
user	service file system	enterprise root org unit
host	service file system	enterprise root org unit
service	not specified	enterprise root org unit site user host
file system	none	enterprise root org unit site user host

In Solaris, an organizational unit name corresponds to an NIS+ domain name and is identified using either the fully-qualified form of its NIS+ domain name, or its NIS+ domain name relative to the NIS+ root. Fully-qualified NIS+ domain names have a terminal dot ('.'). For example, assume that the NIS+ root domain is "Wiz.COM." and "sales" is a subdomain of that. Then, the names **org/sales.Wiz.COM.** and **org/sales** both refer to the organizational unit corresponding to the same NIS+ domain **sales.Wiz.COM.**.

User names correspond to names in the corresponding NIS+ *passwd.org_dir* table. The file system context associated with a user is obtained from his entry in the NIS+ *passwd.org_dir* table.

Host names correspond to names in the corresponding NIS+ *hosts.org_dir* table. The file system context associated with a host corresponds to the files systems exported by the host.

EXAMPLES

The types of objects that may be named relative to an organizational unit name are: user, host, service, file and site. Here are some examples of names name objects relative to organizational unit names.

org/accounts_payable.finance/site/videoconference.northwing
names a conference room **videoconference** located in the north wing of the site associated with the organizational unit **accounts_payable.finance**.

org/finance/user/mjones
names a user **mjones** in the organizational unit **finance**.

org/finance/host/inmail
names a machine **inmail** belonging to the organizational unit **finance**.

org/accounts_payable.finance/fs/pub/blue-and-whites/FY92-124
names a file **pub/blue-and-whites/FY92-124** belonging to the organizational unit **accounts_payable.finance**.

org/accounts_payable.finance/service/calendar
names the **calendar** service of the organizational unit **accounts_payable.finance**. This might manage the meeting schedules of the organizational unit.

The types of objects that may be named relative to a site name are services and files. Here are some examples of names that name objects relative to sites.

site/b5.mtv/service/printer/speedy
names a printer **speedy** in the **b5.mtv** site.

site/admin/fs/usr/dist
names a file directory **usr/dist** available in the site **admin**.

The types of objects that may be named relative to a user name are services and files. Here are some examples of names that name objects relative to users.

user/jsmith/service/calendar
names the **calendar** service of the user **jsmith**.

user/jsmith/fs/bin/games/riddles
names the file **bin/games/riddles** of the user **jsmith**.

The types of objects that may be named relative to a host name are services and files. Here are some examples of names that name objects relative to hosts.

host/mailhop/service/mailbox
names the **mailbox** service associated with the machine **mailhop**.

host/mailhop/fs/pub/saf/archives.91
names the directory **pub/saf/archives.91** found under the root directory of the machine **mailhop**.

SEE ALSO

fncreate(1M), **nis+**(1), **xfn**(3N), **fns**(5), **fns_initial_context**(5), **fns_references**(5)