NAME

fns_references – Overview of FNS References

DESCRIPTION

Every composite name in FNS is bound to a *reference.* A reference consists of a type and a list of addresses. The reference type is used to identify the type of object.

An address is something that can be used with some communication mechanism to invoke operations on an object or service. Multiple addresses are intended to identify multiple communication endpoints for a single conceptual object or service. Each address in a reference consists of an address type and an opaque buffer. The address type determines the format and interpretation of the address data. Together, the address's type and data specify how to reach the object. Many communication mechanisms are possible; FNS does not place any restrictions on them.

The following summarizes the reference and address types that are currently defined. New types should be registered with the Federated Naming Group at SunSoft.

Reference Types

All reference types use the **FN_ID_STRING** identifier format unless otherwise qualified.

onc_fn_enterprise
Enterprise root context.

onc_fn_organization
A context for naming objects related to an organizational unit.

onc_fn_hostname
A context for naming hosts.

onc_fn_username
A context for naming users.

onc_fn_user
A context for naming objects related to a user.

onc_fn_host
A context for naming objects related to a computer.

onc_fn_site
A context for naming sites.

onc_fn_service
A context for naming services.

onc_fn_nsid
A context for naming namespace identifiers.

onc_fn_generic
A context for naming application-specific objects.

onc_fn_fs
A context for naming files, directories, and file systems.

onc_fn_printername

A context for naming printers.

onc_printers
A printer object. When implemented on top of NIS+, this could also be a context for naming printers.

onc_fn_null
A null context.

fn_link_ref
An XFN link.

inet_domain
An Internet domain.

Address Types

All address types use the **FN_ID_STRING** identifier format unless otherwise qualfied. The format of address contents is determined by the corresponding address type.

onc_fn_nisplus
For an FNS enterprise-level object implemented on top of NIS+. The address contains the context type, context representation type (either normal or merged), version number of the reference, and the NIS+ name of the object. The only intended use of this reference is that it be passed to **fn_ctx_handle_from_ref( )**.

onc_fn_nis
For an FNS enterprise-level object implemented on top of NIS. The address contains the context type and version number of the reference, and the NIS name of the object. The only intended use of this reference is that it be passed to **fn_ctx_handle_from_ref( )**.

onc_fn_files
For an FNS enterprise-level object implemented on top of **/etc** files. The address contains the context type and version number of the reference, and the location of the object in the /etc file system. The only intended use of this reference is that it be passed to **fn_ctx_handle_from_ref()**.

onc_fn_fs_user_nisplus
For a user's home directory. The address contains the user's name and the name of the NIS+ passwd table where the user's home directory is stored.

onc_fn_fs_host
For all file systems exported by a host. The address contains the host's name.

onc_fn_fs_mount
For a single mount point. The address contains the mount options, the name of the servers and the exported path. See **mount**(1M).

fn_link_addr
For an XFN link address. The contents is the string form of the composite name.

inet_domain
For an Internet domain. The address contains the fully-qualified domain name (e.g. "Wiz.COM.")

inet_ipaddr_string

For an object with an Internet address. The address contains an internet IP address in dotted string form (e.g. "192.144.2.3").

x500 For an X.500 object. The address contains an X.500 Distinguished Name, in the syntax specified in the **X/Open DCE: Directory Services.**

osi_paddr
For an object with an OSI presentation address. The address contains the string encoding of an OSI Presentation Address as defined in **RFC 1278.**

onc_printers_bsaddr
For a printer that understands the BSD print protocol. The address contains the machine name and printer name used by the protocol.

onc_printers_use
For a printer alias. The address contains a printer name.

onc_printers_all
For a list of printers that are enumerated using the "all" option. The address contains a list of printer names.

onc_printers_location
For a printer's location. The address format is unspecified.

onc_printers_type
For a printer's type. The address format is unspecified.

onc_printers_speed
For a printer's speed. The address format is unspecified.

SEE ALSO **fn_ctx_handle_from_ref**(3N), **xfn**(3N), **fns**(5), **fns_policies**(5)