NAME

ypbind – NIS binder process

SYNOPSIS

/usr/lib/netsvc/yp/ypbind [–**broadcast** | –**ypset** | –**ypsetme**]

DESCRIPTION

NIS provides a simple network lookup service consisting of databases and processes. The databases are stored at the machine that runs an NIS server process. The programmatic interface to NIS is described in **ypclnt**(3N). Administrative tools are described in **ypinit**(1M), **ypwhich**(1), and **ypset**(1M). Tools to see the contents of NIS maps are described in **ypcat**(1), and **ypmatch**(1).

ypbind is a daemon process that is activated at system startup time from the startup script **/etc/init.d/rpc**. By default, it is invoked as **ypbind** –**broadcast**. **ypbind** runs on all client machines that are set up to use NIS, see **sysidtool**(1M).

The function of **ypbind** is to remember information that lets all NIS client processes on a node communicate with some NIS server process. **ypbind** must run on every machine which has NIS client processes. The NIS server may or may not be running on the same node, but must be running somewhere on the network. The NIS server is **not supported** in SunOS releases anymore, but **ypbind** can communicate with an NIS server, **ypserv,** on an earlier SunOS release or an NIS+ server in "YP-compatibility mode", see **rpc.nisd**(1M). Refer to the NOTES section in **ypfiles**(4) for implications of being served by such an NIS+ server.

The information **ypbind** remembers is called a *binding* **—** the association of a domain name with a NIS server.

The process of binding is driven by client requests. As a request for an unbound domain comes in, if started with the –**broadcast** option, the **ypbind** process broadcasts on the net trying to find an NIS server, either a **ypserv** process serving the domain or an **rpc.nisd** process in "YP-compatibility mode" serving NIS+ directory with name the same as (case sensitive) the domain in the client request. Since the binding is established by broadcasting, there must be at least one NIS server on the net.

If started without the –**broadcast** option, **ypbind** process steps through the list of NIS servers that was created by **ypinit** –**c** for the requested domain. There must be an NIS server process on at least one of the hosts in the NIS servers file. All the hosts in the NIS servers file **must be listed** in /etc/hosts along with their IP addresses. Once a domain is bound by **ypbind**, that same binding is given to every client process on the node. The **ypbind** process on the local node or a remote node may be queried for the binding of a particular domain by using the **ypwhich**(1) command.

If **ypbind** is unable to speak to the NIS server process it is bound to, it marks the domain as unbound, tells the client process that the domain is unbound, and tries to bind the domain once again. Requests received for an unbound domain will wait until the requested domain is bound. In general, a bound domain is marked as unbound when the node running the NIS server crashes or gets overloaded. In such a case, **ypbind** will try to bind to another NIS server using the process described above.

ypbind also accepts requests to set its binding for a particular domain. The request is usually generated by the **ypset**(1M) command. In order for **ypset** to work, **ypbind** must have been invoked with flags –**ypset** or –**ypsetme**.

OPTIONS

–**broadcast** Send a broadcast datagram using UDP/IP that requests the information needed to bind to a specific NIS server. This option is analogous to ypbind with no options in earlier Sun releases and is recommended for ease of use.

–**ypset** Allow users from any remote machine to change the binding via the **ypset** command. By default, no one can change the binding. This option is really insecure.

–**ypsetme** Only allow **root** on the local machine to change the binding to a desired server via the **ypset** command. ypbind can verify the caller is indeed a **root** user by accepting such requests only on the loopback transport. By default, no external process can change the binding.

FILES

/var/yp/binding/*ypdomain***/ypservers**
/etc/hosts

SEE ALSO

ypcat(1), **ypmatch**(1), **ypwhich**(1), **ifconfig**(1M), **rpc.nisd**(1M), **ypinit**(1M), **ypset**(1M), **ypclnt**(3N), **hosts**(4), **ypfiles**(4)

NOTES

ypbind supports multiple domains. The **ypbind** process can maintain bindings to several domains and their servers.

The –**broadcast** option works only on the UDP transport. It is insecure since it trusts "any" machine on the net that responds to the broadcast request and poses itself as an NIS server.