The functions are a set of routines in the C library which provide access to various system maps. The maps that irs currently controls are the following: passwd, group, services, protocols, hosts, networks and netgroup. When a program first calls a function that accesses one of these maps, the irs configuration file is read, and the source of each map is determined for the life of the process. If this file does not exist, the irs routines default to using local sources for all information, with the exception of the host and networks maps, which use the Domain Name System (DNS). Each record in the file consists of one line. A record consists of a map-name, an access-method and possibly a (comma delimited) set of options, separated by tabs or spaces. Blank lines, and text between a # and a newline are ignored. Available maps: Map name Information in map ========= ================================== passwd User authentication information group User group membership information services Network services directory protocols Network protocols directory hosts Network hosts directory networks Network "network names" directory netgroup Network "host groups" directory Available access methods: Access method Description ============ === local Use a local file, usually in /etc dns Use the domain name service (includes hesiod) nis Use the Sun-compatible Network Information Service irp Use the IRP daemon on the localhost. Available options: Option Description ======== == continue don't stop searching if you can't find something merge don't stop searching if you CAN find something The continue option creates whereby subsequent access methods of the same map type can be tried if a name cannot be found using earlier access methods. This can be quite confusing in the case of host names, since the name to address and address to name mappings can be visibly asymmetric even though the data used by any given access method is entirely consistent. This behavior is, therefore, not the default. The merge option only affects lookups in the groups map. If set, subsequent access methods will be tried in order to cause local users to appear in NIS (or other remote) groups in addition to the local groups. # Get password entries from local file, or failing that, NIS passwd local continue passwd nis

Build group membership from both local file, and NIS. group local continue,merge group nis

Services comes from just the local file. services local

protocols local

Hosts comes first from DNS, failing that, the local file hosts dns continue hosts local

Networks comes first from the local file, and failing # that the, irp daemon networks local continue networks irp

netgroup local If a local user needs to be in the local host's group but not in every host's group, put them in the local host's entry and set up the portion of your file as: group local continue,merge group nis NIS takes a long time to time out. Especially for hosts if you use the option to your server's daemon. It is important that the file contain an entry for each map. If a map is not mentioned in the file, all queries to that map will fail. The classic NIS mechanism for specifying union namespaces is to add an entry to a local map file whose name is ‘‘+’’. In IRS, this is done via ‘‘continue’’ and/or ‘‘merge’’ map options. While this results in a small incompatibility when local map files are imported from non-IRS systems to IRS systems, there are compensating advantages in security and configurability. The file resides in