The is a set of routines in the C library that provide access to the Internet Domain Name System. The configuration file contains information that is read by the routines the first time they are invoked by a process. The file is designed to be human readable and contains a list of keywords with values that provide various types of information. On a normally configured system, this file should not be necessary. The only name server to be queried will be on the local machine, the domain name is determined from the host name, and the domain search path is constructed from the domain name. The different configuration directives are: Internet address (in dot notation) of a name server that the should query. Up to (see name servers may be listed, one per keyword. If there are multiple servers, the library queries them in the order listed. If no entries are present, the default is to use the name server on the local machine. (The algorithm used is to try a name server, and if the query times out, try the next, until out of name servers, then repeat trying all the name servers until a maximum number of retries are made). Local domain name. Most queries for names within this domain can use short names relative to the local domain. If no entry is present, the domain is determined from the local host name returned by the domain part is taken to be everything after the first Finally, if the host name does not contain a domain part, the root domain is assumed. Search list for host-name lookup. The search list is normally determined from the local domain name; by default, it contains only the local domain name. This may be changed by listing the desired domain search path following the keyword with spaces or tabs separating the names. Most queries will be attempted using each component of the search path in turn until a match is found. Note that this process may be slow and will generate a lot of network traffic if the servers for the listed domains are not local, and that queries will time out if no server is available for one of the domains. The search list is currently limited to six domains with a total of 256 characters. Allows addresses returned by gethostbyname to be sorted. A is specified by IP address netmask pairs. The netmask is optional and defaults to the natural netmask of the net. The IP address and optional network pairs are separated by slashes. Up to 10 pairs may be specified. For example: sortlist 130.155.160.0/255.255.240.0 130.155.0.0 Allows certain internal variables to be modified. The syntax is where is one of the following: sets in sets a threshold for the number of dots which must appear in a name given to (see before an will be made. The default for is meaning that if there are dots in a name, the name will be tried first as an absolute name before any elements are appended to it. sets the amount of time the resolver will wait for a response from a remote name server before retrying the query via a different name server. Measured in seconds, the default is (see sets the number of times the resolver will send a query to its name servers before giving up and returning an error to the calling application. The default is (see sets in which causes round robin selection of nameservers from among those listed. This has the effect of spreading the query load among all listed servers, rather than having all clients try the first listed server first every time. sets in which disables the modern BIND checking of incoming host names and mail names for invalid characters such as underscore (_), non-ASCII, or control characters. sets in This has the effect of trying a AAAA query before an A query inside the function, and of mapping IPv4 responses in IPv6 “tunnelled form” if no AAAA records are found but an A record set exists. The and keywords are mutually exclusive. If more than one instance of these keywords is present, the last instance wins. The keyword of a system’s file can be overridden on a per-process basis by setting the environment variable to a space-separated list of search domains. The keyword of a system’s file can be amended on a per-process basis by setting the environment variable options as explained above under The keyword and value must appear on a single line, and the keyword (e.g., must start the line. The value follows the keyword, separated by white space.