Hostnames are domains. A domain is a hierarchical, dot-separated list of subdomains. For example, the machine in the subdomain of the subdomain of the Internet Domain Name System would be represented as (with no trailing dot). Hostnames are often used with network client and server programs, which must generally translate the name to an address for use. (This task is usually performed by the library routine The default method for resolving hostnames by the Internet name resolver is to follow RFC 1535's security recommendations. Actions can be taken by the administrator to override these recommendations and to have the resolver behave the same as earlier, non-RFC 1535 resolvers. The default method (using RFC 1535 guidelines) follows: If the name consists of a single component, i.e. contains no dot, and if the environment variable is set to the name of a file, that file is searched for a string matching the input hostname. The file should consist of lines made up of two strings separated by white-space, the first of which is the hostname alias, and the second of which is the complete hostname to be substituted for that alias. If a case-insensitive match is found between the hostname to be resolved and the first field of a line in the file, the substituted name is looked up with no further processing. If there is at least one dot in the name, then the name is first tried The number of dots to cause this action is configurable by setting the threshold using the option in (default: 1). If the name ends with a dot, the trailing dot is removed, and the remaining name is looked up (regardless of the setting of the option), without further processing. If the input name does not end with a trailing dot, it is looked up by searching through a list of domains until a match is found. If neither the search option in the file or the environment variable is used, then the search list of domains contains only the full domain specified by the option (in or the domain used in the local hostname (see and For example, if the option is set to then only will be in the search list, and this will be the only domain appended to the partial hostname. For example, if is the name to be resolved, this would make the only name to be tried using the search list. If the option is used in or the environment variable is set by the user, then the search list will include what is set by these methods. For example, if the option contained then the partial hostname (e.g., will be tried with domain name appended (in the same order specified); the resulting hostnames that would be tried are: lithium.CS.Berkeley.EDU lithium.CChem.Berkeley.EDU lithium.Berkeley.EDU The environment variable overrides the and options, and if both and options are present in the resolver configuration file, then only the one listed is used (see If the name was not previously tried (i.e., it fell below the threshold or did not contain a dot), then the name as originally provided is attempted. Affects domains appended to partial hostnames. Name of file containing pairs. See Name of file containing pairs.