NAME

autofs.conf − autofs configuration

DESCRIPTION

Configuration settings used by **automount**(8) may be changed in the configuration file **/etc/autofs.conf**.

This file contains two primary sections, **autofs** and **amd**.

Configuration entries may be present at the beginning of the configuration file without a section header and are implicitly included as part of the **autofs** section.

Each section name is enclosed in square brackets with spaces between the brackets and the section name. The **amd** section may be followed by further sections, named by the top level mount point path, that contain per mount configuration settings.

SECTION autofs CONFIGURATION OPTIONS

Configuration settings available are:

timeout

Sets the default mount timeout in seconds. The internal program default is 10 minutes, but the default installed configuration overrides this and sets the timeout to 5 minutes to be consistent with earlier autofs releases.

negative_timeout

Set the default timeout for caching failed key lookups (program default 60). If the equivalent command line option is given it will override this setting.

mount_wait

Set the default time to wait for a response from a spawned mount(8) before sending it a SIGTERM. Note that we still need to wait for the RPC layer to timeout before the sub-process exits so this isn't ideal but it is the best we can do. The default is to wait until mount(8) returns without intervention.

umount_wait

Set the default time to wait for a response from a spawned umount(8) before sending it a SIGTERM. Note that we still need to wait for the RPC layer to timeout before the sub-process exits so this isn't ideal but it is the best we can do.

browse_mode

Maps are browsable by default (program default "yes").

mount_nfs_default_protocol

Specify the default protocol used by **mount.nfs**(8) (program default 3). Since we can't identify this default automatically we need to set it in the autofs configuration.

append_options

Determine whether global options, given on the command line or per mount in the master map, are appended to map entry options or if the map entry options replace the global options (program default "yes", append options).

logging

set default log level "none", "verbose" or "debug" (program default "none").

force_standard_program_map_env

override the use of a prefix with standard environment variables when a program map is executed. Since program maps are run as the privileded user setting these standard environment variables opens automount(8) to potential user privilege escalation when the program map is written in a language that can load components from, for example, a user home directory (program default "no").

LDAP Configuration

Configuration settings available are:

ldap_timeout

Set the network response timeout (default 8). Set timeout value for the synchronous API calls. The default is the LDAP library default of an infinite timeout.

ldap_network_timeout

Set the network response timeout (default 8).

ldap_uri

A space seperated list of server uris of the form <proto>://<server>[/] where <proto> can be ldap or ldaps. The option can be given multiple times. Map entries that include a server name override this option and it is then not used. Default is an empty list in which case either the server given in a map entry or the LDAP configured default is used. This uri list is read at startup and whenever the daemon receives a HUP signal.

This configuration option can also be used to request autofs lookup SRV RRs for a domain of the form <proto>:///[<domain dn>]. Note that a trailing "/" is not allowed when using this form. If the domain dn is not specified the dns domain name (if any) is used to construct the domain dn for the SRV RR lookup. The server list returned from an SRV RR lookup is refreshed according to the minimum ttl found in the SRV RR records or after one hour, whichever is less.

search_base

The base dn to use when searching for amap base dn. This entry may be given multiple times and each will be checked for a map base dn in the order they occur in the configuration. The search base list is read at startup and whenever the daemon recieves a HUP signal.

map_object_class

The map object class. In the **nisMap** schema this corresponds to the class **nisMap** and in the **automountMap** schema it corresponds to the class **automountMap**.

entry_object_class

The map entry object class. In the **nisMap** schema this corresponds to the class **nisObject** and in the **automountMap** schema it corresponds to the class **automount**.

map_attribute

The attribute used to identify the name of the map to which this entry belongs. In the **nisMap** schema this corresponds to the attribute **nisMapName** and in the **automountMap** schema it corresponds to the attribute **ou** or **automountMapName**.

entry_attribute

The attribute used to identify a map key. In the **nisMap** schema this corresponds to the attribute **cn** and in the **automountMap** schema it corresponds to the attribute **automountKey**.

value_attribute

The attribute used to identify the value of the map entry. In the **nisMap** schema this corresponds to the attribute **nisMapEntry** and in the **automountMap** schema it corresponds to the attribute **automountInformation**.

NOTE:

It is essential that entries use class and attribute in a consistent manner for correct operation of autofs. For example mixing **cn** and **automountKey** attributes in **automount** schema will not work as expected.

auth_conf_file

This configuration option may be used to specify an alternate location for the ldap authentication configuration file. See **autofs_ldap_auth.conf**(5) for more information.

SECTION amd CONFIGURATION OPTIONS

A number of the amd configuration options are not used by autofs, some because they are not relevant within autofs, some because they are done differently in autofs and others that are not yet implemented.

Since **mount_type** is always autofs (because there's no user space NFS server) the configuration entries relating to that aren't used. Also, server availability is done differently within autofs so the options that relate to the amd server monitoring sub-system are also not used.

These options are **mount_type**, **auto_attrcache**, **portmap_program**, **nfs_vers_ping**, **nfs_allow_any_interface**, **nfs_allow_insecure_port**, **nfs_proto**, **nfs_retransmit_counter**, **nfs_retransmit_counter_udp**, **nfs_retransmit_counter_tcp**, **nfs_retransmit_counter_toplvl**, **nfs_retry_interval**, **nfs_retry_interval_udp**, **nfs_retry_interval_tcp**, **nfs_retry_interval_toplvl** and **nfs_vers**.

Other options that are not used within the autofs implementation:

log_file, **truncate_log**
sends its output to syslog so an alternate log file (or truncating the log) can't be used.

print_pid
There's no corresponding option for this within autofs.

use_tcpwrappers, **show_statfs_entries**
There's no user space NFS server to control access to so this option isn't relevant. The show_statfs_entries can't be implemented for the same reason.

debug_mtab_file
There's no user space NFS server and autofs avoids using file based mtab whenever possible.

sun_map_syntax
Sun map format is handled by autofs itself.

plock, **show_statfs_entries**, **preferred_amq_port**
Are not supported by autofs.

ldap_cache_maxmem, **ldap_cache_seconds**
External ldap caching is not used by autofs.

ldap_proto_version
autofs always attempts to use the highest available ldap protocol version.

cache_duration, **map_reload_interval**, **map_options**
The mapentry cache is continually updated and stale entries cleaned on re-load, which is done when map changes aredetected so these configuration entries are not used by autofs.

localhost_address
This is not used within autofs. This configuration option was only used in the amd user space server code and is not relevant within autofs.

Options that are handled differently within autofs:

pid_file
To specify a pid file name a command line option must be used on startup.

print_version
Program version and feature information is obtained by using the automount command line option "-V".

debug_options , **log_options**
autofs has somewhat more limited logging and debug logging options. When the log_options options is encountered it is converted to the nearest matching autofs logging option. Since the configuration option debug_options would be handled the same way it is ignored.

restart_mounts
This option has no sensible meaning within autofs because autofs always tries to re-connect to existing mounts. While this has its own set of problems not re-connecting to existing mounts always results in a non-functional automount tree if mounts were busy at the last shutdown (as is also the case with amd when using mount_type autofs).

forced_unmounts
Detaching mounts often causes serious problems for users of existing mounts. It is used by autofs in some cases, either at the explicit request of the user (with a command line or init option) and in some special cases during program operation but is avoided whenever possible.

A number of configuration options are not yet implemented:

search_path
Always a little frustrating, the compiled in map location should be used to locate maps but isn't in some cases. This requires work within autofs itself and that will (obviously) include implementing this configuration option for the amd map parser as well.

fully_qualified_hosts
Not yet implemented.

unmount_on_exit
Since autofs always tries to re-connect to mounts left mounted from a previous shutdown this is a sensible option to implement and that will be done.

browsable_dirs
Not yet implemented.

exec_map_timeout
A timeout is not currently used for for program maps, might be implemented.

tag
The tag option is not implemented within autofs.

Supported options:

arch, **karch**, **os**, **osver**
These options default to what is returned from uname(2) and can be overridden if required.

full_os This option has no default and must be set in the configuration if used in maps.

cluster
If not set defaults to the host domain name. This option corresponds to the HP_UX cluster name (according to the amd source) and is probably not used in Linux but is set anyway.

vendor This option has a default value of "unknown", it must be set in the configuration if used in maps.

auto_dir
Is the base name of the mount tree used for external mounts that are sometimes needed by amd maps. Its default value is "/a".

map_type
Specifies the autofs map source, such as file, nis, ldap etc. and has no default value set.

map_defaults
This option is used to override /defaults entries within maps and can be used to provide different defaults on specific machines without having to modify centrally managed maps. It is empty by default.

search_path
Colon seperated paths to search for maps that are not specified as a full path.

dismount_interval
Is equivalent to the autofs timeout option. It is only possible to use this with type "auto" mounts due to the way the autofs kernel module performs expiry. It takes its default value from the autofs internal defaulti of 600 seconds.

autofs_use_lofs
If set to "yes" autofs will attempt to use bind mounts for type "auto" when possible.

nis_domain
Allows setting of a domain name other than the system default.

local_domain
Is used to override (or set) the host domain name.

normalize_hostnames
If set to "yes" then the contents of ${rhost} is translated in its official host name.

domain_strip
If set to "yes" the domain name part of the host is strippped when normalizing hostnames. This can be useful when using of the same maps in a multiple domain environment.

normalize_slashes
This option is set to "yes" by default and will collapse multiple unescaped occurrences of "/" to a single "/".

selectors_in_defaults, **selectors_on_default**
This option has a default value of "no". If set to "yes" then any defaults entry will be checked for selectors to determine the values to be used. selectors_in_defaults is the preferred option to use.

ldap_base
iThis option has no default value. It must be set to the base dn that is used for queries if ldap is to be used as a map source.

ldap_hostports
This option has no default value set. It must be set to the URI of the LDAP server to be used for lookups wheni ldap is used a map source. It may contain a comma or space seperated list of LDAP URIs.

hesiod_base
Sets the base name used for hesiod map sources.

linux_ufs_mount_type
This is an aditional configuration option for the autofs amd format parser implementation.

There’s no simple way to determine what the system default filesystem is and am-utils needs to be continually updated to do this and can easily get it wrong ayway. So allow it to be set in the configuration.

EXAMPLE

```
[ autofs ]
timeout = 300
browse_mode = no

[ amd ]
dismount_interval = 300
map_type = nis
autofs_use_lofs = no

[ /expamle/mount ]
dismount_interval = 60
map_type = file
```

SEE ALSO

automount(8), **auto.master**(5), **autofs_ldap_auth.conf**(5)

AUTHOR

This manual page was written by Ian Kent <raven@themaw.net>.