

NAME

pam_listfile – deny or allow services based on an arbitrary file

SYNOPSIS

pam_listfile.so item=[tty|user|rhost|ruser|group|shell] sense=[allow|deny] file=/path/filename
onerr=[succeed|fail] [apply=[user|@group]] [quiet]

DESCRIPTION

pam_listfile is a PAM module which provides a way to deny or allow services based on an arbitrary file.

The module gets the **item** of the type specified — *user* specifies the username, *PAM_USER*; *tty* specifies the name of the terminal over which the request has been made, *PAM_TTY*; *rhost* specifies the name of the remote host (if any) from which the request was made, *PAM_RHOST*; and *ruser* specifies the name of the remote user (if available) who made the request, *PAM_RUSER* — and looks for an instance of that item in the **file=filename**. filename contains one line per item listed. If the item is found, then if **sense=allow**, *PAM_SUCCESS* is returned, causing the authorization request to succeed; else if **sense=deny**, *PAM_AUTH_ERR* is returned, causing the authorization request to fail.

If an error is encountered (for instance, if filename does not exist, or a poorly-constructed argument is encountered), then if **onerr=succeed**, *PAM_SUCCESS* is returned, otherwise if **onerr=fail**, *PAM_AUTH_ERR* or *PAM_SERVICE_ERR* (as appropriate) will be returned.

An additional argument, **apply=**, can be used to restrict the application of the above to a specific user (**apply=username**) or a given group (**apply=@groupname**). This added restriction is only meaningful when used with the *tty*, *rhost* and *shell* items.

Besides this last one, all arguments should be specified; do not count on any default behavior.

No credentials are awarded by this module.

OPTIONS

item=[tty|user|rhost|ruser|group|shell]

What is listed in the file and should be checked for.

sense=[allow|deny]

Action to take if found in file, if the item is NOT found in the file, then the opposite action is requested.

file=/path/filename

File containing one item per line. The file needs to be a plain file and not world writable.

onerr=[succeed|fail]

What to do if something weird happens like being unable to open the file.

apply=[user|@group]

Restrict the user class for which the restriction apply. Note that with **item=[user|ruser|group]** this does not make sense, but for **item=[tty|rhost|shell]** it have a meaning.

quiet

Do not treat service refusals or missing list files as errors that need to be logged.

MODULE TYPES PROVIDED

All module types (**auth**, **account**, **password** and **session**) are provided.

RETURN VALUES

PAM_AUTH_ERR

Authentication failure.

PAM_BUF_ERR

Memory buffer error.

PAM_IGNORE

The rule does not apply to the **apply** option.

PAM_SERVICE_ERR

Error in service module.

PAM_SUCCESS

Success.

EXAMPLES

Classic 'ftputers' authentication can be implemented with this entry in /etc/pam.d/ftpd:

```
#
# deny ftp-access to users listed in the /etc/ftputers file
#
auth required pam_listfile.so \
    onerr=succeed item=user sense=deny file=/etc/ftputers
```

Note, users listed in /etc/ftputers file are (counterintuitively) *not* allowed access to the ftp service.

To allow login access only for certain users, you can use a /etc/pam.d/login entry like this:

```
#
# permit login to users listed in /etc/loginusers
#
auth required pam_listfile.so \
    onerr=fail item=user sense=allow file=/etc/loginusers
```

For this example to work, all users who are allowed to use the login service should be listed in the file /etc/loginusers. Unless you are explicitly trying to lock out root, make sure that when you do this, you leave a way for root to log in, either by listing root in /etc/loginusers, or by listing a user who is able to *su* to the root account.

SEE ALSO

pam.conf(5), **pam.d(5)**, **pam(7)**

AUTHOR

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