

**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 'ftpusers' authentication can be implemented with this entry in `/etc/pam.d/ftpd`:

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

Note, users listed in `/etc/ftpusers` 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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