Name mount_smbfs – mount a shared resource from an SMB file server

Synopsis

```
/sbin/mount [-F smbfs] [generic-options] [-o name=value] [-O] resource
/sbin/mount [-F smbfs] [generic-options] [-o name=value] [-O] mount-point
/sbin/mount [-F smbfs] [generic-options] [-o name=value] [-O] resource mount-point
```

Description The `mount` utility attaches a named resource, *resource*, to the file system hierarchy at the path name location, *mount-point*, which must already exist.

If *mount-point* has any contents prior to the `mount` operation, those contents remain hidden until the resource is unmounted. A process requires the `SYS_MOUNT` privilege to perform a `mount` operation.

If the resource is listed in the `/etc/vfstab` file, you can specify either *resource* or *mount-point* as the `mount` command will consult the `/etc/vfstab` file for more information. If the `-F` option is omitted, `mount` takes the file system type from the entry in the `/etc/vfstab` file.

If the resource is not listed in the `/etc/vfstab` file, the command line must specify both *resource* and *mount-point*.

Operands The `mount` command supports the following operands:

resource //[*workgroup*;][*user*[:*password*]@]*server*/*share*

The name of the resource to be mounted. In addition to its name, you can specify the following information about the resource:

- *password* is the password associated with *user*. If *password* is not specified, the mount first attempts to use the password stored by the `smbutil login` command (if any). If that password fails to authenticate, the `mount_smbfs` prompts you for a password.
- *server* is the DNS or NetBIOS name of the remote computer.
- *share* is the resource name on the remote server.
- *user* is the remote user name. If *user* is omitted, the logged in user ID is used.
- *workgroup* is the name of the workgroup or the Windows domain in which the user name is defined.

  If the resource includes a workgroup, you must escape the semicolon that appears after the workgroup name to prevent it from being interpreted by the command shell. For instance, surround the entire resource name with double quotes: `mount -F smbfs "//SALES;george@RSERVER" /mnt`.

mount-point
The path to the location where the file system is to be mounted. The `mount` command maintains a table of mounted file systems in the `/etc/mnttab` file. See the `mnttab`(4) man page.

SMBFS File System Limitations

The SMBFS file system currently has the following limitations:

- **No hard links.** The `link()` system call returns `ENOSYS` if you attempt to create a hard link.
- **No symlinks.** The `symlink()` system call returns `ENOSYS` if you attempt to create a symbolic link.
- **No real byte-range locks.** The `fcntl()` system call lock operations are arbitrated locally (`MI_LLOCK`).
- **No ACLs set/get.** `GETACL` with the `acl()` and `facl()` system calls returns a fabricated ACL like the PCFS file system does. `SETACL` returns `ENOSYS`.
- **No device nodes.** The `mknod()` system call returns `ENOSYS` if you attempt to create a device node.

Options

See the `mount`(1M) man page for the list of supported *generic-options*.

`-o` *name=value*
Set the file system-specific parameters. You can specify more than one name-value pair as a list of comma-separated pairs. No spaces are permitted in the list. The parameters are as follows:

`case=upper` | `case=lower`
Force mapping to upper case names or lower case names, respectively. By default, no case mapping is done, which is specified as `case=""`.

`dirperms=`*octaltriplet*
Specify the permissions to be assigned to directories. The value must be specified as an octal triplet, such as `755`. The default value for the directory mode adds the execute permission.

Note that these permissions have no relation to the rights granted by the SMB server.

`fileperms=`*octaltriplet*
Specify the permissions to be assigned to files. The value must be specified as an octal triplet, such as `644`. The default value for the file mode is taken from the mount point and adds the read permission.

Note that these permissions have no relation to the rights granted by the SMB server.

`gid=`*groupid*
Assign the specified group ID to files. The default value is the group ID of the directory where the volume is mounted.

`uid=`*userid*
Assign the specified user ID files. The default value is the owner ID of the directory where the volume is mounted.

`-O`
Overlay mount. Allow the file system to be mounted over an existing mount point, making the underlying file system inaccessible. If a mount is attempted on a pre-existing mount

point without setting this flag, the mount fails, producing the error “device busy.”

Examples

EXAMPLE 1 Verifying That an SMB File System is Mounted

The following example shows how to mount the `/tmp` share from the `nano` server on the local `/mnt` mount point. You must supply the password for the `root` user to successfully perform the mount operation.

```
# mount -F smbfs //root@nano.sfbay/tmp /mnt
Password:
```

You can verify that the share is mounted in the following ways:

- View the file system entry in the `/etc/mnttab` file.

  ```
  # grep root /etc/mnttab
  //root@nano.sfbay/tmp   /mnt    smbfs   dev=4900000     1177097833
  ```

- View the output of the `mount` command.

  ```
  # mount | grep root
  /mnt on //root@nano.sfbay/tmp read/write/setuid/devices/dev=4900000 on
  Fri Apr 20 13:37:13 2007
  ```

- View the output of the `df /mnt` command.

  ```
  # df /mnt
  /mnt               (//root@nano.sfbay/tmp): 3635872 blocks       -1 files
  ```

Obtain information about the mounted share by viewing the output of the `df -k /mnt` command.

```
# df -k /mnt
Filesystem            kbytes    used   avail capacity  Mounted on
//root@nano.sfbay/tmp
                      1882384   64448 1817936     4%    /mnt
```

Files

`/etc/mnttab`
: Table of mounted file systems

`/etc/dfs/fstypes`
: Default distributed file system type

`/etc/vfstab`
: Table of automatically mounted resources

Attributes

See the `attributes`(5) man page for descriptions of the following attributes:

ATTRIBUTE TYPE	ATTRIBUTE VALUE
Availability	SUNWsmbfscu

ATTRIBUTE TYPE	ATTRIBUTE VALUE
Interface Stability	Committed

See Also `smbutil`(1), `mount`(1M), `mountall`(1M), `acl`(2), `facl`(2), `fcntl`(2), `link`(2), `mknod`(2), `mount`(2), `symlink`(2), `umount`(2), `mnttab`(4), `nsmbrc`(4), `vfstab`(4), `attributes`(5), `pcfs`(7FS)

Notes If the directory on which a file system is to be mounted is a symbolic link, the file system is mounted on the directory to which the symbolic link refers, rather than being mounted on top of the symbolic link itself.