



# Tech Info Library

## A/UX: How Users Can Shut Down Without Root Access (9/94)

Revised: 9/23/94  
Security: Everyone

A/UX: How Users Can Shut Down Without Root Access (9/94)

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TOPIC -----

A system administrator at an A/UX site wants to give users the ability to power off their machines, but without giving them root access. Is the following procedure a suitable way to power down the machine? Here is what he did:

1) He modified the /mac/bin/Login file with ResEdit, changed the string Guest to poweroff (STR# resource), and modified the dialogs accordingly.

2) He compiled the following C program and named the executable poweroff:

```
poweroff.c
#include <stdio.h>

main(argc, argv)
int      argc;
char     *argv[];

{
    setuid(0);
    argv[0] = "reboot";
    execl("/etc/reboot", "reboot", "-h", 0); /* -- run reboot */
    /* -- NOTREACHED */
}
```

3) Poweroff\* was put in the /root directory and given these permissions:

```
# ls -l /root/poweroff
-rwsr-xr-x  1  root    root      2373 Aug 17 18:20  /root/poweroff
```

4) An account called "poweroff" was added to /etc/passwd that executes /root/poweroff when a user logs in under that name (or selects the power-off radio button in the Login screen). For example:

```
# grep poweroff /etc/passwd
poweroff::8:1000:user shutdown account:/root:/root/poweroff
```

The only possible problem with this is that a user could log on to another user's machine and shut it down. Giving the user a power-off password makes this unsuitable for installations where there is limited network discipline.

#### DISCUSSION -----

Your C code seems to meet the customer's need: shutting down A/UX without being root.

This additional code can be included in the poweroff.c to prevent a remote user from shutting down the system:

```
char *ttyname();
char *p;
char *d="/dev/ttyC";

p=ttyname(0);
if (strncmp(p, d, 9) != 0) {
    fprintf(stderr, "%s: not a CommandShell type of window\n", argv[0]);
    exit(1);
}
```

#### Article Change History:

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