

Process Protection

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The userid also plays a role in Fair Share scheduling, of course

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Exercise. Find out the userid allocated to you on the Uni's `linux.bath.ac.uk` machine

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In particular, root can suspend or kill any user's processes

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In the OS there is the equivalent of

```
if uid_of_process == uid_of_resource or
```

```
   uid_of_process == uid_of_root
```

```
then
```

```
    allow access
```

```
else
```

```
    disallow access
```

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It is the same idea being used in two different contexts

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When a user logs in to a system a process, owned by root, starts up, changes its userid to the user, and then starts other processes as that user

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Any shutdown program will need to have root ownership and this will be carefully policed by the system

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This is why you should keep the use of the administrator account to a minimum

Doing everyday stuff as administrator is just asking for trouble, and is throwing away many of those protection mechanisms that OSs have developed to provide

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Not ideal, but better than letting the malware have full reign over the entire machine

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A big part of the spread of malware in Windows OSs is the weakness of this kind of barrier to their spread: too many programs run as administrator and this can ultimately cause the entire system to be affected



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Note that if your OS *requires* the use of a virus checker, this is a strong sign that your OS is not confident in its implementation of process protection

Virus scanners address the *symptom*, not the *problem*

