How to change your password, and how to choose a strong password and safeguard it.

## Answer:

## Changing your password

On linux systems, use the command yppasswd. you can type this at a shell prompt. This will change your password for all the group's Linux systems.

Windows passwords can by changed by typing smbpasswd -r server2 on any linux workstation, e.g. linappserv1. On Windows systems, after logging in, press control-alt-delete together. This should bring up the Windows Security box, which contains amongst other things the "change password" button. You can also get this via the Start menu, Settings, Windows Security. If you are connected to the terminal server from a Linux machine, it is likely that control-alt-delete will be intercepted by your Linux window manager instead. Disabling this feature is a rather advanced exercise, so use the second method instead.

Even though your user name may be the same on both Linux and Windows systems, your password is stored independently for each system. So if you change you Linux password it will not affect your Windows password and vice versa.

## Choosing a strong passwords

When choosing a password, it is important to pick one that is not easily guessed either by people with some knowledge of you or by systematic password cracking. Passwords can be guessed easily if they contain words easily associated with you, e.g. your date of birth, nick name, middle name, car registration, user name, favourite band, etc.

Systematic password cracking is done by programs that can try a large number of frequently used passwords against yours very quickly until they find a match. Computers are so fast these days that it does not take long to try $\sim 10^{\wedge} 8$ passwords! Words to try can be taken from English and foreign language dictionaries, lists of names and places, and specialist dictionaries/word lists like computing terms, science fiction, cartoons, etc. Small changes to these words will also be tried, e.g.

- first or last character upper case;
- vowels upper case;
- consonants upper case;
- appending or pre-pending one character e.g. 7tables or secret!;
- using simple substitutions like o->0, s->\$ e.g. sn00py or \$n00py.

To thwart systematic crackers, please follow the following guidelines and avoid the mistakes listed above when you choose a password:

- Use a password with mixed-case characters, digits and punctuation.
- Use long passwords with more than 6 characters. For UNIX (applies to Linux too), you can use all printable characters, case is significant and only the first 8 characters will be used. For Windows, you can use all printable characters, case is significant and the maximum length is 14.
- Don't use the same password as you use for any internet dialup accounts, web sites, internet shopping, etc.
- Just in case, change your password every so often (every 6 months would be a good compromise).

Here are some ideas to help you think up a good password. Do whatever works best for you.

- Choose something that is vaguely pronounceable to help you remember it, but has no meaning.
- Take a quotation or phrase - something uncommon or something you have made up - and use the first letter of each word, to make a jumble of apprently unrelated letters. To make it more obscure throw in some punctuation and/or numbers. E.g. "quick brown fox jumped over the moon" -> qbfj^otm
- Take a couple of unrelated words or a word and a number, and interleave the characters.
- Use the command 'mkpasswd -I 8' to generate something random.

