

# Username and Passwords

There are different ways in IOS to configure users with corresponding passwords. For SSH, the Router/Switch doesn't need the cleartext password.

**That means you should not configure your users with**

```
switch(config)#username USER password PASS
```

**Better configure your users with hashed passwords. If you are running a recent IOS, you can configure the passwords to be hashed with sha256 algorithm or a type 9 password:**

```
switch(config)#username USER algorithm-type sha256 secret VERYSECUREPASSWORD
```

or

```
switch(config)#username USER algorithm-type scrypt secret VERYSECUREPASSWORD
```

**If your IOS doesn't support this new username-parameter, you configure them the following way:**

```
switch(config)#username USER secret VERYSECUREPASSWORD
```

**Some more protection-mechanisms that should be thought about are [Control-Plane-Protection](#) and [Management-Plane-Protection](#). But that is not SSH-specific.**