

Password Protection in QEI Exec

1: Database Access Levels

By default, newly created QEI Exec databases are not password protected. For applications which require additional security it is possible to define passwords, which operate at three separate security levels (“access levels”). These access levels are:

Level	Functions Permitted
Owner	All operations permitted, including setting passwords and title
Write	As above, but cannot set passwords or title
Read	Changes made to databases cannot be saved

These access levels are independent of the database access mode, which can be read/write or read-only. It is therefore possible to open a database in read/write mode with read level access – this gives you a “what-if” mode, in which you are free to make changes in the database but will be unable to commit them.

If a database has no passwords set, the effective access level is Owner. This allows the user to set passwords on the database at a later stage if desired.

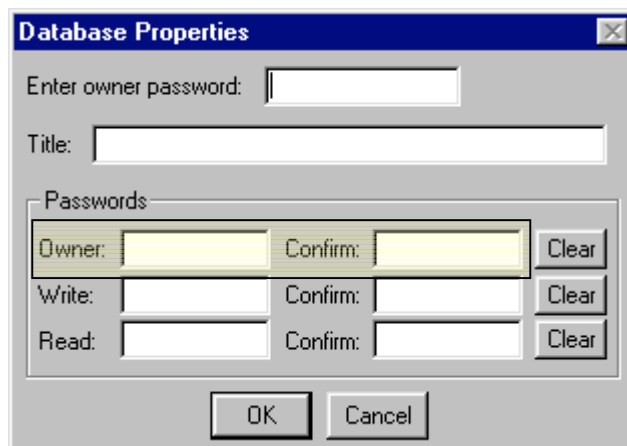
If one or more of the passwords are not set then all users will receive at least the access level of the highest unset password. For example, if the write password is unset then all users will receive write access regardless of what password is quoted, unless the correct owner password is quoted.

QEI Exec allows passwords of up to 120 characters, although the standard user interface limits password lengths to 20 characters. Passwords are case sensitive – i.e. “password” is different to “Password”.

2: Setting Passwords

2.1: Standard Dialog

To set passwords on an unprotected QEI Exec database via the standard user interface, pick Database/Properties from the menu. The following dialog box is displayed:



The screenshot shows a dialog box titled "Database Properties". It has a blue title bar with a close button. The dialog contains the following fields and controls:

- "Enter owner password:" followed by a text input field.
- "Title:" followed by a text input field.
- A section titled "Passwords" containing three rows of password input fields:
 - Row 1: "Owner:" followed by a text input field, "Confirm:" followed by a text input field, and a "Clear" button.
 - Row 2: "Write:" followed by a text input field, "Confirm:" followed by a text input field, and a "Clear" button.
 - Row 3: "Read:" followed by a text input field, "Confirm:" followed by a text input field, and a "Clear" button.
- At the bottom, there are "OK" and "Cancel" buttons.

If there are no passwords defined for the database, you will first need to register an owner password. To do this, enter your owner password in the owner password field (highlighted above), enter it again in the corresponding confirmation field, then click OK. Your database now has an owner password defined.

To enter a write or read password for the database, access the dialog box again and enter the owner password in the owner password field at the top of the dialog box, and then your chosen password in the write password or read password field below. Reenter the password in the corresponding confirmation field, then click OK. This will set the password.

2.2: Command Line

At the QEI Exec command line, you can define passwords for the current database using the SET PASSWORD command. The syntax for this command is:

```
SET PASS{WORD} (O{WNER}|W{RITE}|R{EAD}) /ownpass /newpass
```

To define an owner password “mypassword” for a database that currently has no passwords set, you would type

```
SET PASSWORD OWNER / /mypassword
```

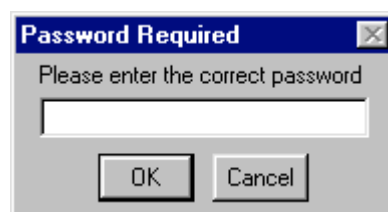
To then define a write password “writepwd” for this database you would type

```
SET PASSWORD WRITE /mypassword /writepwd
```

3: Opening Password Protected Databases

3.1: Standard Dialog

To open a password protected database, select it using the normal File/Open dialog box. If the database is password protected, a second dialog box appears:



You should now enter the appropriate password for the access level you require.

3.2: Command Line

To open a password protected database at the command line, you use the normal OPEN command but specify the password in the command line:

```
OPEN ('db'|{'path'} dbno) {LIB{RARY}} {R{EAD}|W{RITE}} {/pwd}
```

For example, to open the example database covered in section 2.2 in write mode, you would enter

```
OPEN 'c:\qeexec\database\example.db' WRITE /writepwd
```

To open it in “what-if” mode (and assuming you had defined a read level password), you could enter

```
OPEN 'c:\qeexec\database\example.db' WRITE /readpwd
```

3.3: Registry

QEI can open up to 5 databases automatically on startup. This behaviour is controlled by entries in the registry database. The default location for these registry entries is:

```
HKEY_LOCAL_MACHINE\Software\PCF\QEI Exec\<<version (eg 2.3)>\QEI
```

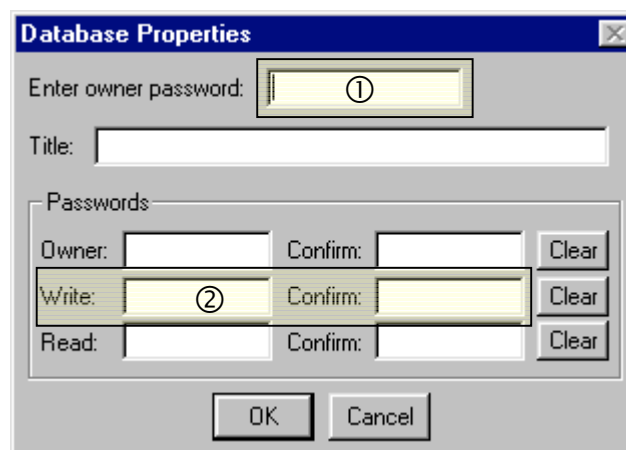
and they are called DB1 to DB5. Each entry contains a list of parameters to be fed to the OPEN command as described above, so that if for example the library database had a read password of “library”, then the registry entry for DB1 would contain

```
'c:\qeexec\database\example.db' LIBRARY READ /readpwd
```

4: Changing Passwords

4.1: Standard Dialog

To change a password on a database that already has been password protected select Database/Properties and enter the owner password in the field at the top of the dialog (1):



Then enter the new password in the appropriate field and confirmation field below (2), and click OK.

4.2: Command Line

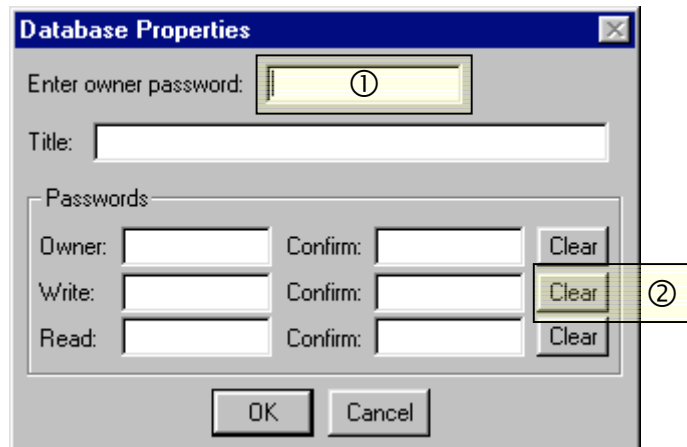
The SET PASSWORD command can be used to change the current passwords for a database. For example, if the current owner password is “owner” and you wish to change the read password to “secret”, you would type

```
SET PASSWORD READ /owner /secret
```

5: Removing Passwords

5.1: Standard Dialog

To clear a password, you enter the owner password (1), then click on the appropriate “clear” button (2).



5.2: Command Line

To clear a password at the command line, you use the SET PASSWORD command. For example, if the current owner password is “owner” and you wish to clear the write password, you would type

```
SET PASSWORD WRITE /owner /
```