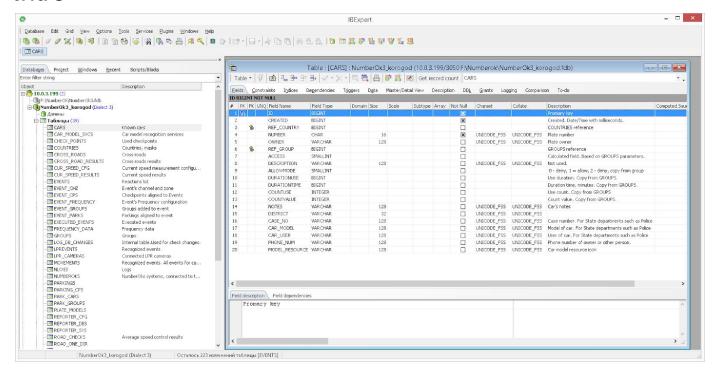


# Managing NumberOK via DataBase

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Latest version always at:	https://goo.gl/KHfmWx *

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#### Intro



Managing NumberOK via FireBird database is considered an unsupported non-documented method.

The database is accessible from outside NumberOK and access to the database should be restricted on OS and file system levels.

NumberOk vendor doesn't take any responsibility for the software features malfunctioning due to improper data manipulations. NumberOK employs transactions to keep data consistent.





### **Updating Data**

Whenever it is required to update database with a plenty of information, employing NumberOK native features (e.g. data import) is a recommended method.

Set up required groups via Car database > Groups and ACS.

The general recommended workflow to update license plates lists is as follows (under Car database > Vehicles):

- Export to XLS
- 2. Amend licence plate lists as required
- 3. Import to XLS with configuration settings Standard structure + Update database.

Please, note that Replace database option will change groups identificators that will affect reactions and other access related features.

## Manipulating data directly

There are a couple of relatively safe operations.

The database is located at C:\ProgramData\FF\NumberOk3\NumberOk3.fdb unless different location was indicated during NumberOK installation.

```
You will find DB access credentials in C:\ProgramData\FF\NumberOk3\NumberOk.ini file (Database.FB_Password, Database.FB_Path, Database.FB_User, Database.FB_host, Database.FB port).
```

You may want to use one of officially recommended tools to explore the database.

#### Adding and removing particular licence plates

Manage groups via NumberOK Car database > Groups and ACS.

For each license plate to add take a note of `GROUPS.ID` and `COUNTRIES.ID`.

To add license plate ABC12D belonging to Mr Whyte (UK, id is 23) associated with group id 3:

```
INSERT INTO CARS (CREATED, REF_COUNTRY, NUMBER, OWNER, REF_GROUP, ACCESS, DESCRIPTION, ALLOWMODE, DURATIONUSE, DURATIONTIME, COUNTUSE, COUNTVALUE, NOTES, DISTRICT, CASE_NO, CAR_MODEL, CAR_USER, PHONE_NUM) VALUES (UTCTIMES() * 1000, 23, 'ABC12D', 'Mr Whyte', 3, 0, '', 1, 0, 1, 0, 1, '', '', '', '', '');
```

To remove a license plate ABC12D:

```
DELETE FROM CARS WHERE NUMBER = 'ABC12D';
```





#### Single time access

The example below assumes the following:

- 1) the car plate number will be removed after access expiration;
- 2) any single plate number has a single scheduled access grant at any given moment.

#### Adding a scheduled entry

Example task allow **ABC12D** (owned by **Mr Whyte**) to access the site once between 09:00 and 12:30 on **February 15, 2018**. 09:00 is 9\*3600+0\*60=**32400**, 12:30 is 12\*3600+30\*60=**45000**.

The idea behind is to create an ad hoc group with access schedule details and associate a particular license plate with it.

NB! The below is in isql notation.

#### Removing the expired entry

SET TERM ;#

```
DELETE FROM GROUPS WHERE ID = (SELECT REF GROUP FROM CARS WHERE NUMBER = 'ABC12D');
```

All license plates associated with the group will also be removed.

The above SQL instruction can be improved to remove all groups where `GROUPS.DTO` is less than current date.





### General note

Please, take the above and any other data manipulations at your own risk.