# LPR Plate Lookups and Fuzzy Filtering

## Background

The OperationsCommander system has the ability for the system to map plates to new values. In layman's terms this means that this process of filtration can take an image of a plate and find many possibilities of what the plate may be matched to based on commonly misconstrued characters and the license plates registered or in the known area database.

An example of this may be a plate that is read by LPR may be read as **ABC128** when the plate is actually **ABC123** .

The user is able to make this update and store the details. This can be problematic for the user if the plate is never seen again and **8** 's are regularly interpreted as **3** 's

## Update

This issue in the functionality of the LPR software is addressed by the use of the above methods and the use of the lookup table implemented to match which characters are easily misconstrued.

The sample lookup table that follows is comprised of data from past LPR updates by users;

| Character | Similar Characters | | Character | Similar Characters |
|---|---|---|---|---|
| 1 | "1I" | | K | "HKR" |
| 2 | "2Z" | | M | "HKM" |
| 3 | "38B" | | O | "0DOQ" |
| 5 | "5S" | | P | "FP" |
| 8 | "38B" | | Q | "0DOQ" |
| B | "38B" | | R | "HKR" |

| | | |
|---|---|---|
| D | "0DOQ" | "TY" |
| E | "EF" | "VY" |
| F | "EFP" | "VTY" |
| H | "HKMZ" | "2Z" |
| I | "1I" | |

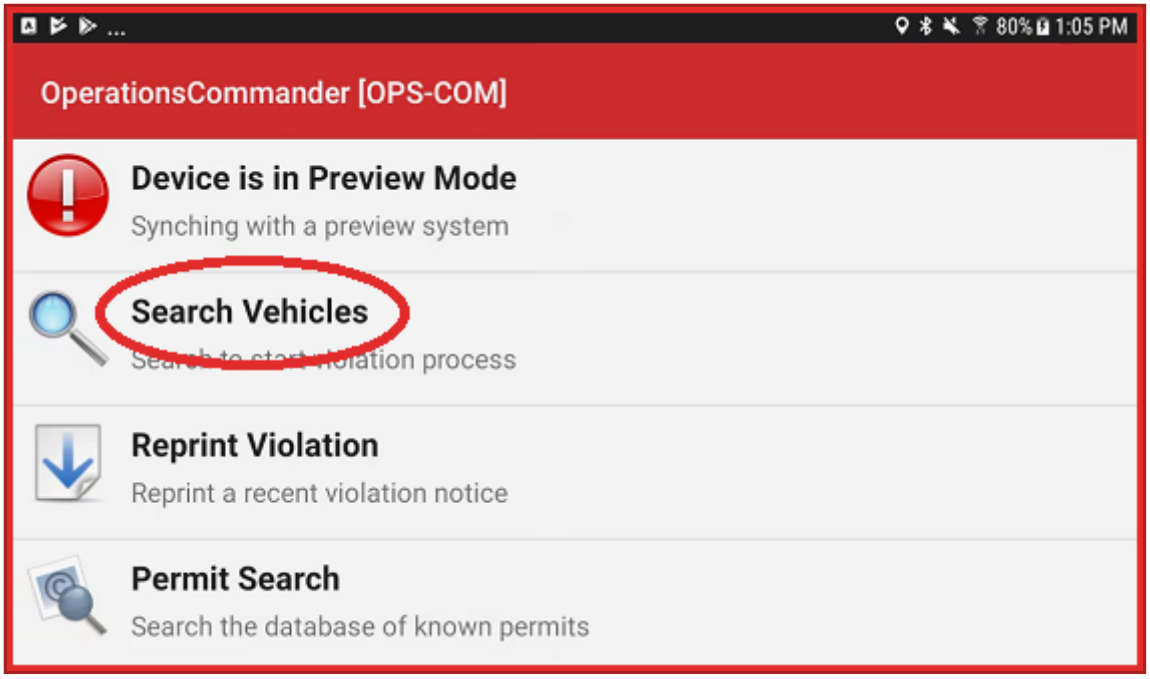
## Special Characters

The # (pound or hash) sign is a special wildcard character.  If this is seen, the PL8RDR has seen a character but is not sure what it is.




## Handheld Example

Navigate to the 'Search Vehicles' menu on the main menu screen.

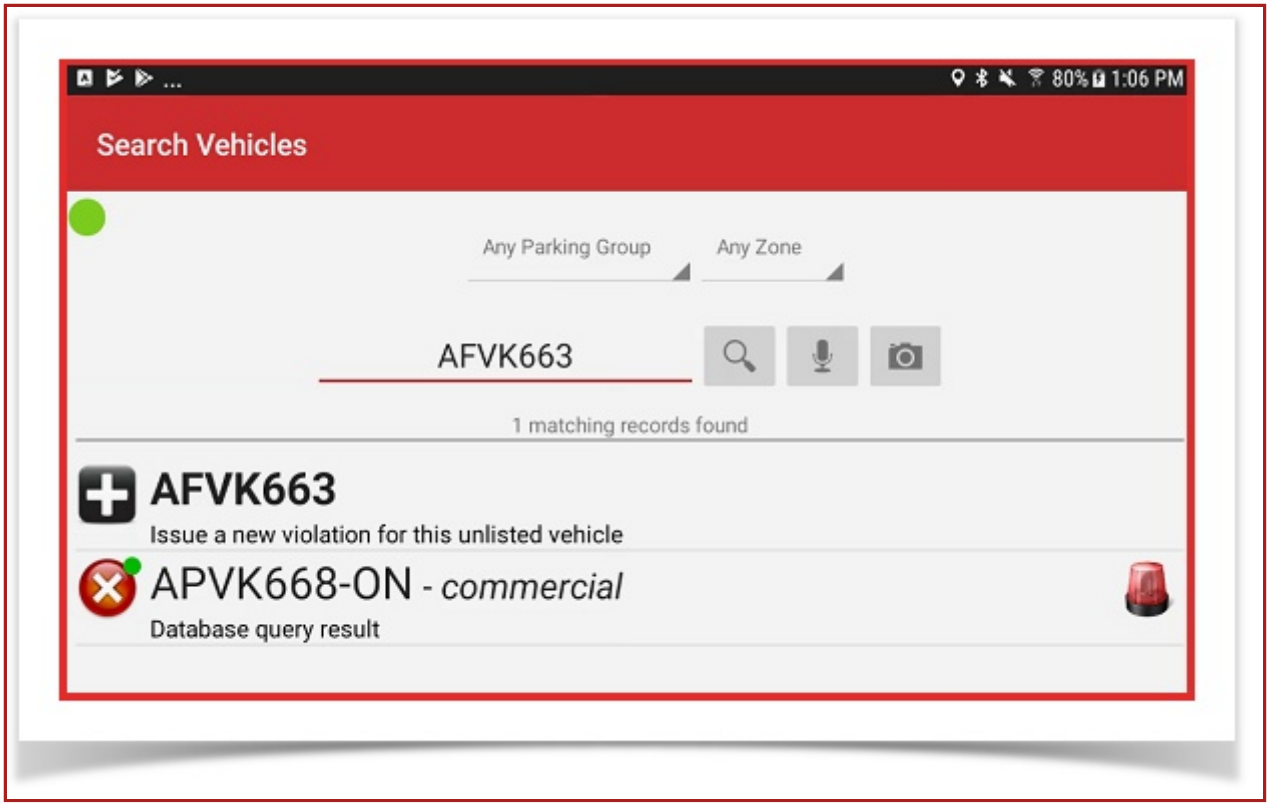



This will bring you to this search bar and type in the license plate number that you are looking for.

For this example we are using the license plate number **AFVK663**.

Since we have looked up **AFVK663** the Handheld will match you with the registered vehicle **APVK668**.

It does this because in coherence with the lookup table the character **3** is similar to the number **8** and **F** is similar to the character **V** therefore fixing the license plate error by finding a plate in the database that matches.




|

Application on Admin Side

The aforementioned example is not the only field in which the fuzzy filtration system is applied.

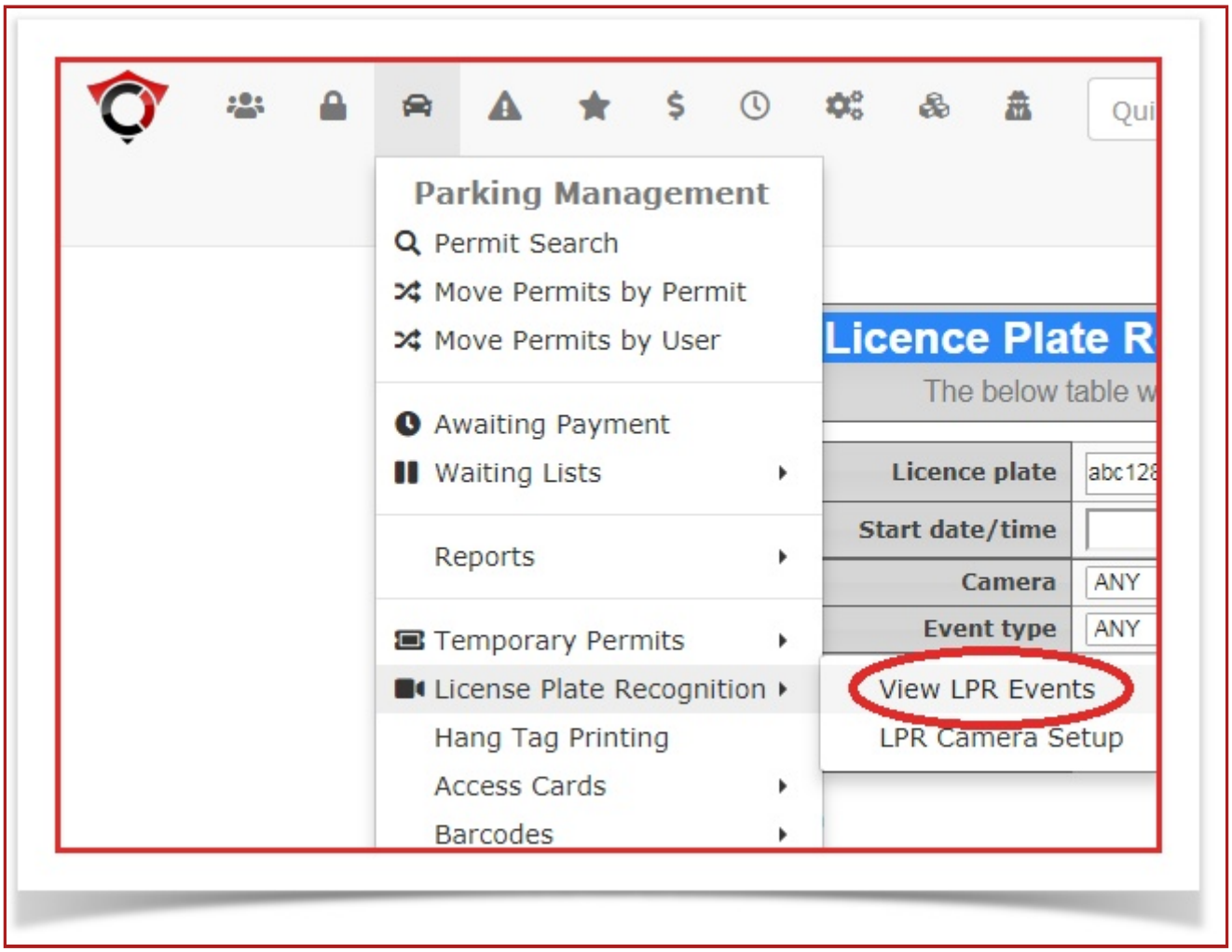
It is also shown in any form of  license plate search that is on the admin side as well as the license plate reader's capture log.

For the extent of this example we will be looking for license plate **ABC128** in the License Plate Recognition (LPR) Capture Log although this method will work for any license plate search.

## Administration Example

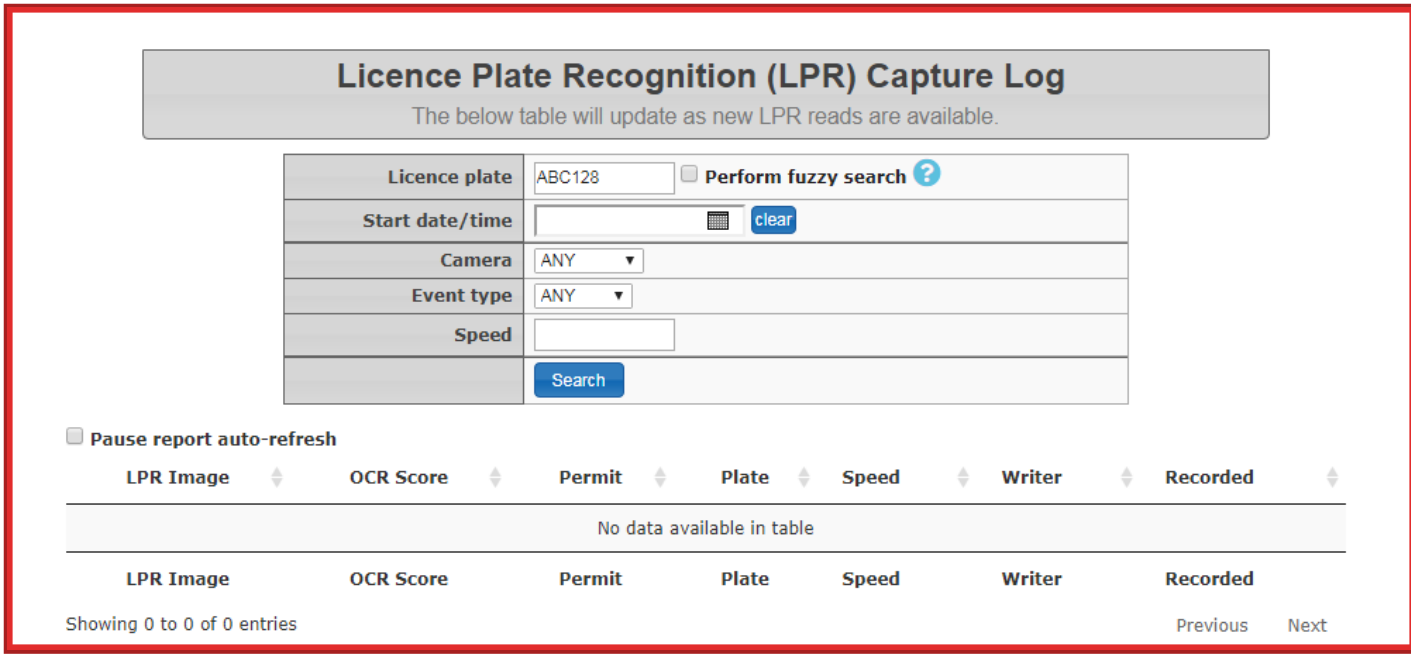
Navigate to the License Plate Recognition (LPR) Capture Log by clicking view LPR events under the License Plate Recognition sub-header in the Parking

Management tab.



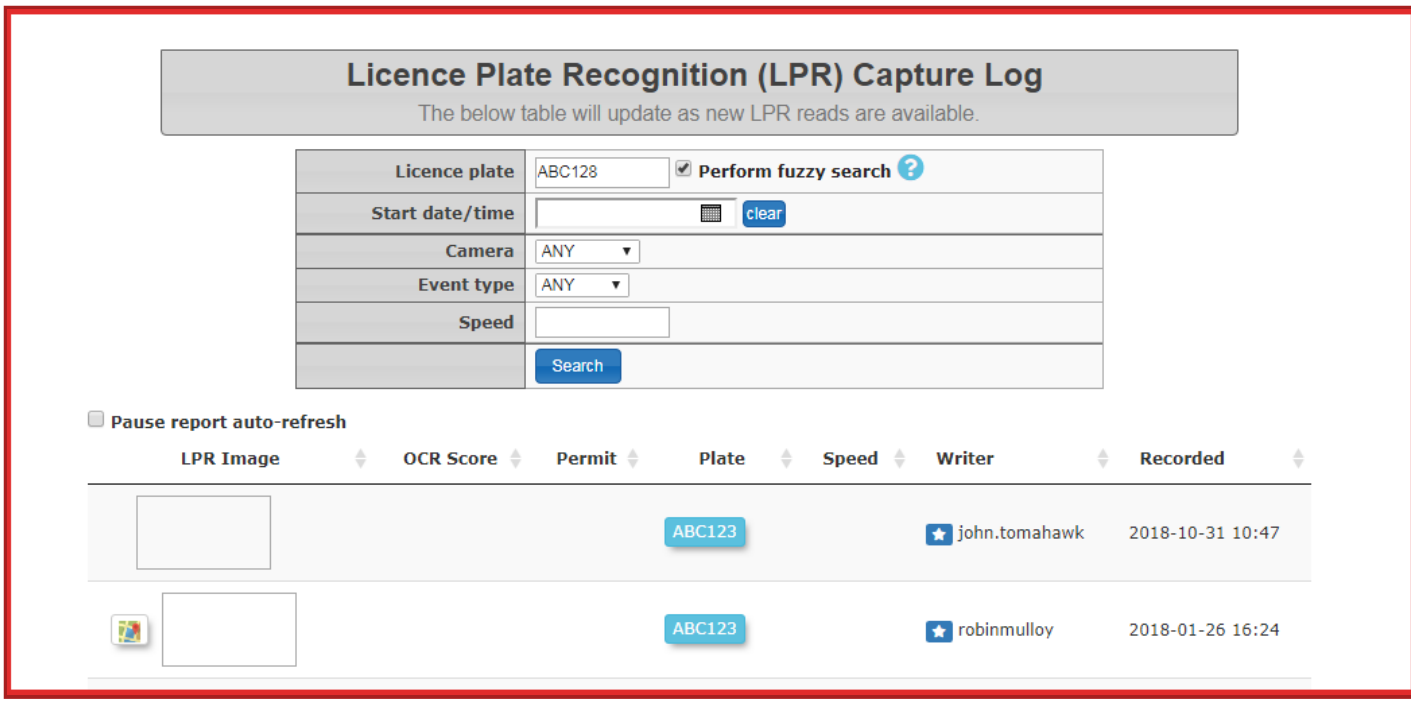

This will bring you to the License Plate Recognition (LPR) Capture Log which is where you can search for your chosen license plate.

In this scenario we will search our license plate **ABC128** with the 'Fuzzy Search' prompt toggled off.  *Expected Result: No License Plates Found.*




Now if we repeat this search with the 'Fuzzy Search' toggled on the results are vastly different with there being many License Plate Captures for the registered vehicle with license plate **ABC123** which is what we want.

It does this by referencing the previously provided lookup table and repeating license plate searches for each variation of the license plate's similar characters and by doing so it corrects any errors in the LPR reads.




---



Revision #2
Created 24 May 2024 11:42:52
Updated 21 May 2025 10:33:52