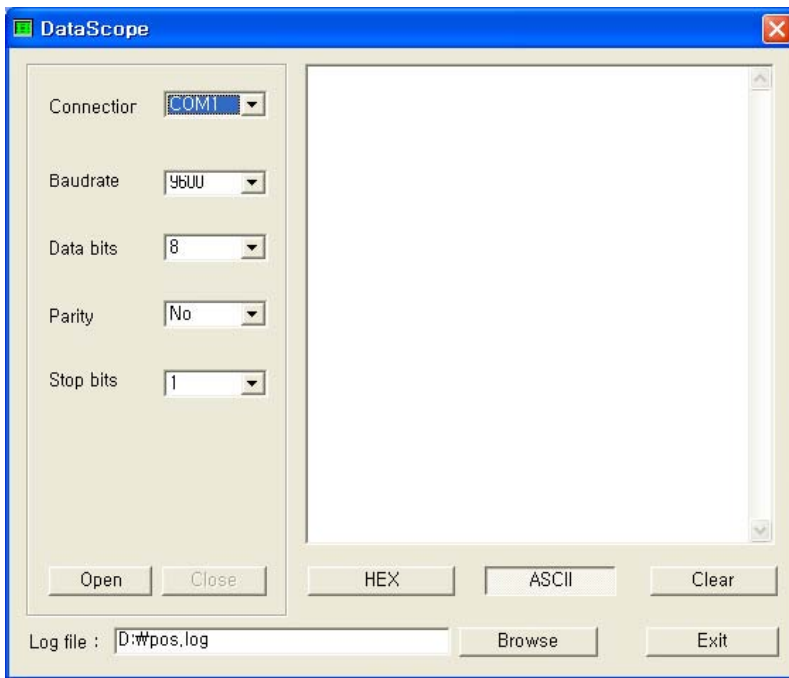


1. POS Protocol Setup

1-1. DataScope

DataScope is a program to capture text data from POS. Captured data is analyzed to make a protocol.



Connection : Choose connection of POS and DVR system.

Baudrate, Data bits, Parity, Stop bits : Setup properties of the connection.

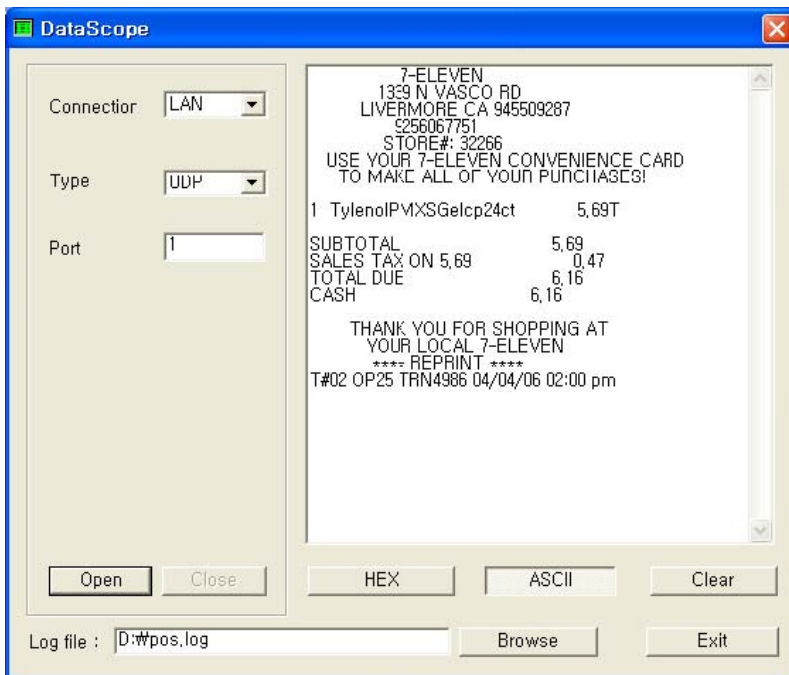
Open : Click Open to capture the data from POS.

HEX, ASCII : Choose form of the data from POS. (HEX or ASCII)

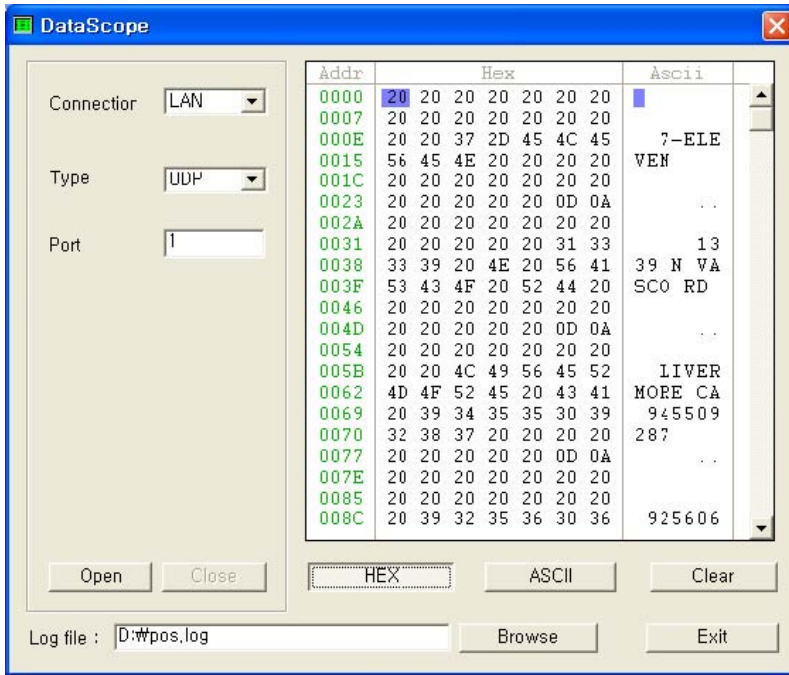
Clear : Clear the screen.

Log file : Give a folder to save the log file.(Log file is only saved in ASCII.)

Device Setup User guide



Screen shot of captured data in ASCII.



Screen shot of captured data in HEX.

```

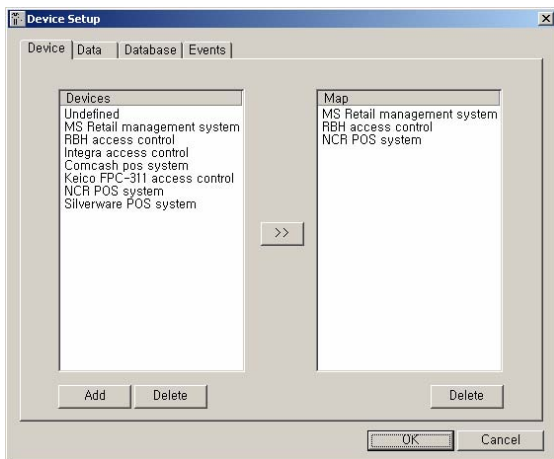
[12/08 204302]          7-ELEVEN
[12/08 204302]          1339 N UASCO RD
[12/08 204303]          LIVERMORE CA 945509287
[12/08 204303]          9256067751
[12/08 204303]          STORE#: 32266
[12/08 204303]          USE YOUR 7-ELEVEN CONVENIENCE CARD
[12/08 204303]          TO MAKE ALL OF YOUR PURCHASES!
[12/08 204304]
[12/08 204304]----- RETURN TRANSACTION -----
[12/08 204304]1 TylenolPMXSGelcp24ct          -5.69T
[12/08 204304]
[12/08 204304]SUBTOTAL          -5.69
[12/08 204305]SALES TAX ON -5.69          -0.47
[12/08 204305]REFUND DUE          -6.16
[12/08 204305]CASH          -6.16
[12/08 204305]
[12/08 204305]          THANK YOU FOR SHOPPING AT
[12/08 204306]          YOUR LOCAL 7-ELEVEN
[12/08 204306]          **** REPRINT ****
[12/08 204306]T#02 OP25 TRN4987 04/04/06 02:00 pm
[12/08 204309]          7-ELEVEN
[12/08 204310]          1339 N UASCO RD
[12/08 204310]          LIVERMORE CA 945509287
[12/08 204310]          9256067751
[12/08 204310]          STORE#: 32266
[12/08 204310]          USE YOUR 7-ELEVEN CONVENIENCE CARD
[12/08 204311]          TO MAK          7-ELEVEN
[12/08 204311]          1339 N UASCO RD
[12/08 204311]          LIVERMORE CA 945509287
[12/08 204311]          9256067751
[12/08 204311]          STORE#: 32266

```

Log file is another useful source to see the captured data.

- . Another way to see and analyze the data is to print the log file.
- . To create the protocol, run Device Setup program. Usage of Device Setup program is described in section 2-2 and 2-3.

1-2. Device section



[Figure 1]

Add a new device or make a map list from registered device list. List in left side is the registered devices and list in left side is the devices that are going to be used and it is called 'Map list'

Adding a new device

Click 'Add', then a 'New Device' will appear in the left section. Click 'New Device' once then you can rename it.

1. Deleting registered device

Select a device in the 'Devices' and click 'Delete'

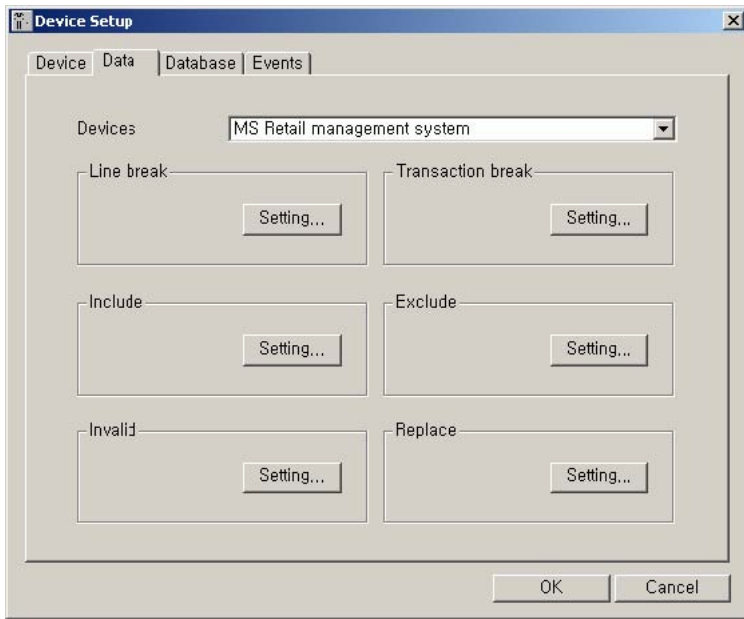
2. Adding Map list

From 'Devices' section, select a device. Click '>>' button then the device will appear in 'Map'

3. Deleting device from Map list

Select a device that you wish to delete from 'Map'. Click 'Delete' (under map section)

1-3. Data

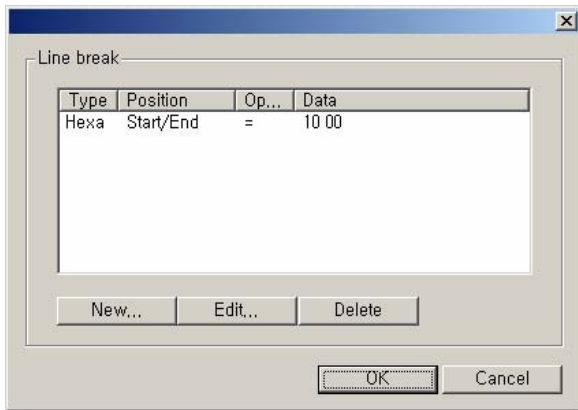


[Figure 2]

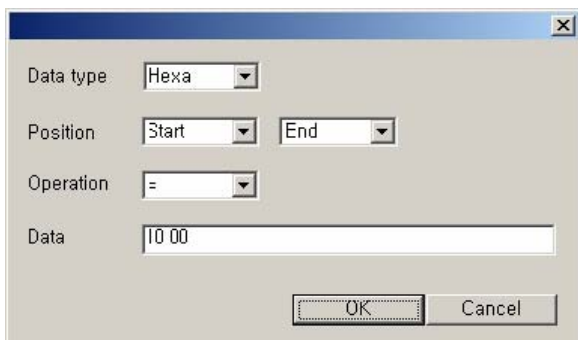
Set rules to analyze data from a device that is in map list Map. Followings are instruction for each section.

1. Line break

Set a rule for separating each line



[Figure 3]



[Figure 4]

To edit the section, click 'Setting...' Rule for line break will appear [Figure 3]. To edit the rule click 'Edit'. Once 'Edit' is clicked [Figure 4] will appear.

Data type : Choose a type of data to input. Data types must be either 'Hexa' or 'Ascii' .

Position : First position : Only used in Transaction break, Include, Exclude, Invalid, Replace. It is used to find Data in line.

Second position : Only used in Line break, Transaction break. For example, in Line break, when this part is set to 'End' and the Data is 10, a line will get cut after 10. (Line is the data that is transferred from POS, They are usually just one line regardless of transaction). Same rule applies to Transaction break. If the position of data does not matter choose 'None' or 'Any'.

Operation : Used when comparing 'Data' with data from POS. These Operators '=/</<=>/>=/~' are available .

Data : Data that will trigger the operation.

1-3-2. Transaction break

Set a rule for separating each Transaction. Edit procedure is same as that of Line Break.

1-3-3. Include

Set a rule for a line with a string or character to be displayed. This rule is superior than Exclude

1-3-4. Exclude

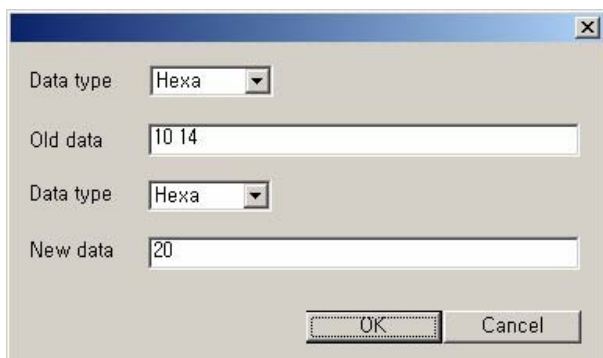
Set a rule for a line with a string or character to be concealed.

1-3-5. Invalid

Set a rule to discard a string or character.

1-3-6. Replace

Set a rule to replace a word or character to another.



[Figure 1]

Data type : Choose a type of data to input. Data types must be either 'Hexa' or 'Ascii'.

Old data : Write data that needs to be replaced.

New data : Write a new data that is going to replace the old Data.

1-4, Database

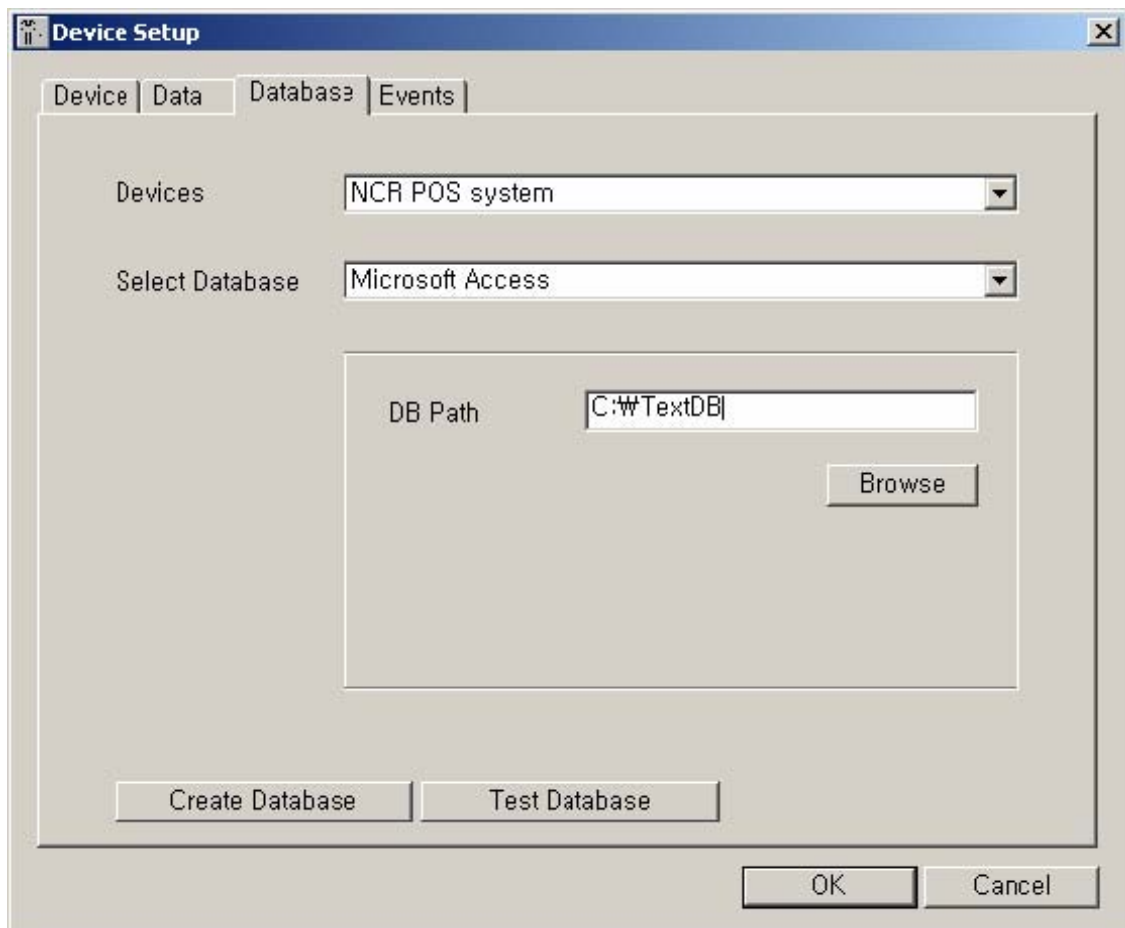


Figure 2

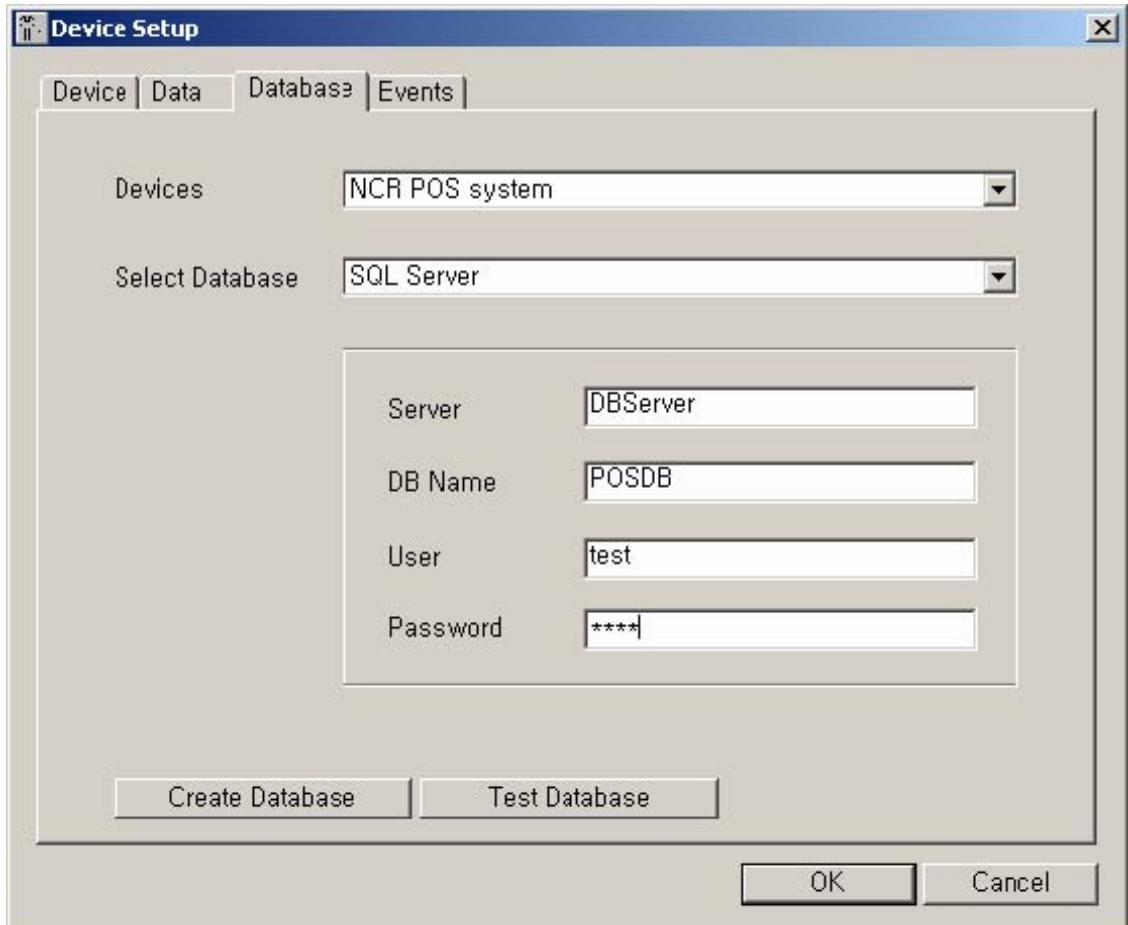
Setup a database for each device in Map list. The type of data bases are Microsoft Access Database and SQL Server. Following are settings for two databases.

1. Microsoft Access

Click 'Browse' to select a folder where a database will be saved. Then click 'Create Database' to make a database (Access file type) in selected folder. After database has been successfully created, hit 'Test Database' to test the database. An error message will show up when database has been

corrupted. In this case, whether DB Path was not legitimate or there could be a problem with database engine.

2. SQL Server



The image shows a 'Device Setup' dialog box with a 'Database' tab selected. The 'Devices' dropdown menu is set to 'NCR POS system' and the 'Select Database' dropdown menu is set to 'SQL Server'. Below these, there is a sub-dialog box with four input fields: 'Server' (DBServer), 'DB Name' (POSDB), 'User' (test), and 'Password' (****). At the bottom of the dialog box, there are two buttons: 'Create Database' and 'Test Database'. At the bottom right, there are 'OK' and 'Cancel' buttons.

Figure 3

In the [Figure 7] these are SQL Server database properties.

- **Server** : name or IP address of a system in which SQL Server is installed.
- **DB Name** : Name a database for selected device in SQL Server.
- **User** : Create a user name for DataBase.
- **Password** : Create a password.

After fill out all the fields click 'Create Database' to create a database. Test the database by clicking 'Test Database'. You will see an error message if the database was not created or failed to make a connection. In this case make sure that SQL server is present in the system. Sometimes network and/or database engine can be cause of the error.

1-5, Event

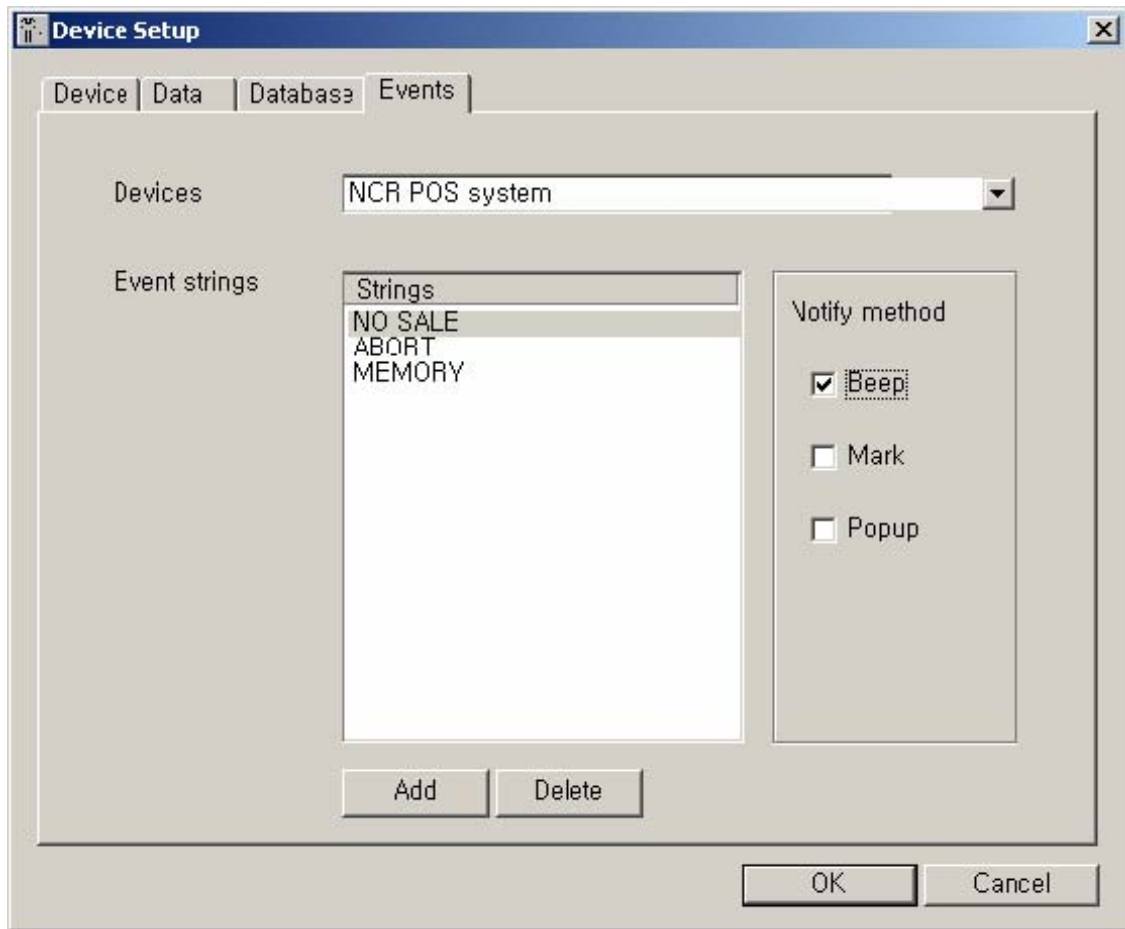


Figure 4

Set up event alarm for a string or special characters in map-list devices.

1. Adding a new event string

Press 'Add' then 'New String' will appear. Click once to rename it.

2. Deleting a event string

Select an event string that you desire to remove and click 'Delete' button.

3. Choosing type of event

First, select an event string then select type of event alarm in the 'Notify method'. Multiple event alarms are possible. Followings describe type of event alarms.

- **Beep** : Sound 'beep' when event string occurs.
- **Mark** : Display a red dot in the right lower corner of the camera screen when event sting occurs.
- **Popup** : Enlarge the camera screen when event string occurs.