

***Kantech System
Specifications Manual
Oracle / MS-SQL HR***

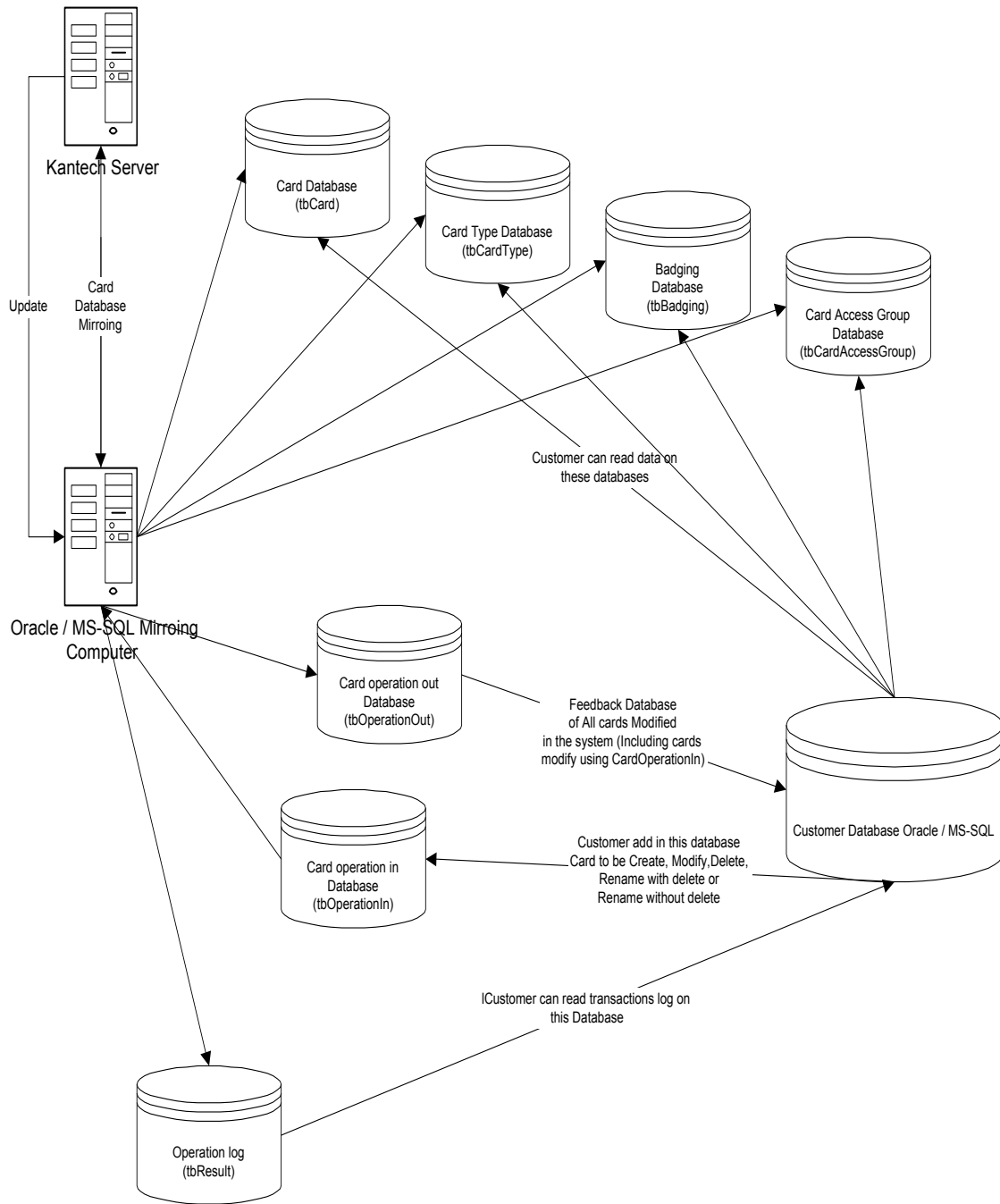
Details and Function

In an access control systems context, the integrity of the database is a main concern. That is why the EntraPass Global and Corporate are not giving a direct access to the system's database. Added to this, the links between each component make it so hard to follow and understand that the concern would be almost impossible for an end-user to do any kind of modifications.

In order to makes things easier, we developed an external interface where the customer will be able to make modifications on the card's database through an Oracle or MS-SQL tables. The interface used is named the Card Gateway, that application may be installed and run on the server's computer.

Please find below the structure schematic.

Structure schematic Of Oracle / MS-SQL CardGateway



Relation between tables in the Database :

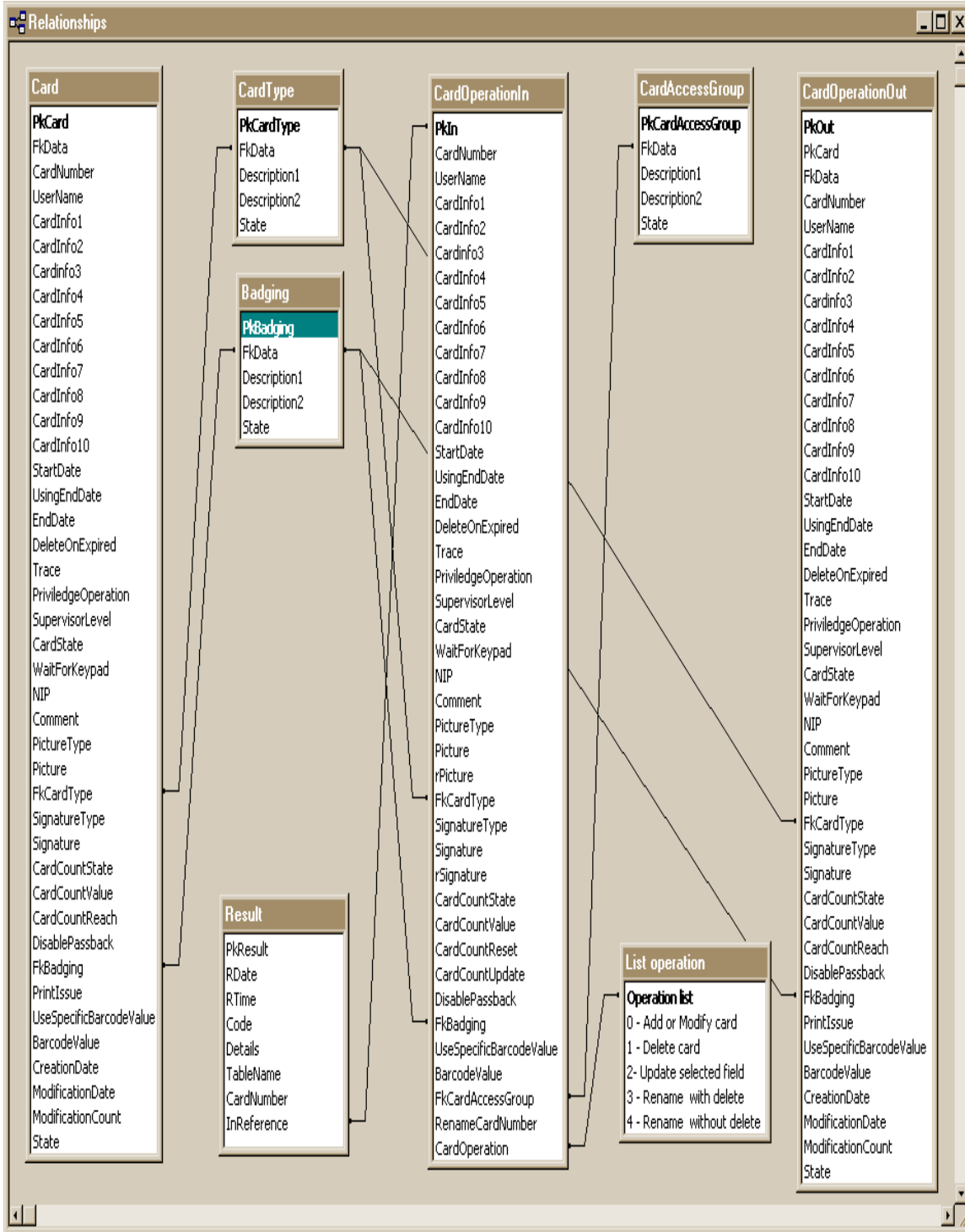
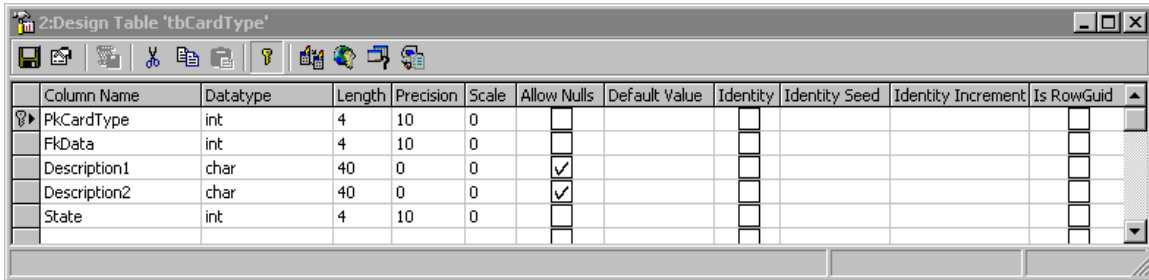


Table Structure

Structure : Card's table

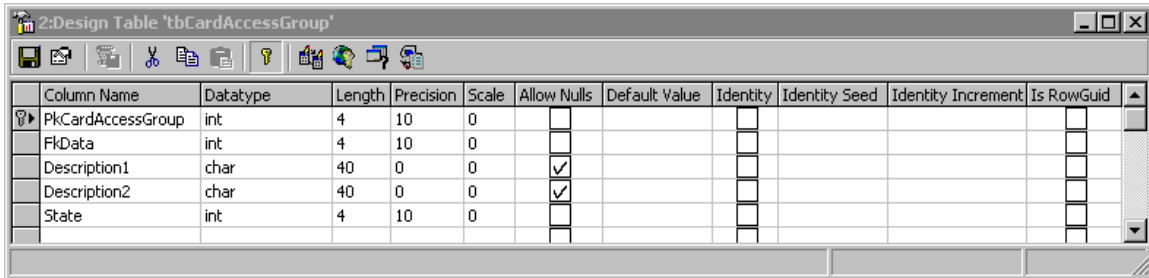
Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid
PkCard	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkData	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardNumber	char	16	0	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UserName	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo1	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo2	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo3	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo4	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo5	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo6	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo7	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo8	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo9	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo10	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
StartDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UsingEndDate	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
EndDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
DeleteOnExpired	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Trace	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PrivilegeOperation	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
SupervisorLevel	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardState	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
WaitForKeypad	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
NIP	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Comment	text	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PictureType	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Picture	image	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkCardType	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
SignatureType	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Signature	image	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountState	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountValue	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountReach	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
DisablePassback	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkBadging	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PrintIssue	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UseSpecificBarcodeVa	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
BarcodeValue	char	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CreationDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
ModificationDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
ModificationCount	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
State	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>

Structure : Card type table



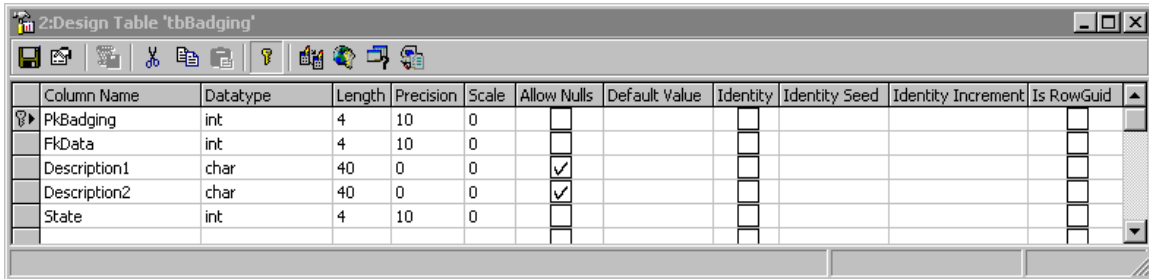
Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid
PkCardType	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkData	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Description1	char	40	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Description2	char	40	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
State	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>

Structure : Access level group table



Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid
PkCardAccessGroup	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkData	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Description1	char	40	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Description2	char	40	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
State	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>

Structure : Badging table



Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid
PkBadging	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkData	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Description1	char	40	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Description2	char	40	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
State	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>

Those four tables are updated in real-time. They contain the same information as system tables.

Structure : Table to add, delete or modify a card(Operation on cards)

2:Design Table 'tbOperationIn'

Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid
PKIn	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardNumber	char	16	0	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UserName	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo1	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo2	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo3	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo4	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo5	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo6	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo7	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo8	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo9	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo10	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
StartDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UsingEndDate	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
EndDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
DeleteOnExpired	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Trace	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PrivilegeOperation	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
SupervisorLevel	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardState	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
WaitForKeypad	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
NIP	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardComment	text	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PictureType	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Picture	image	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkCardType	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
SignatureType	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Signature	image	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountState	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountValue	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountReset	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountUpdate	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
DisablePassback	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkBadging	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UseSpecificBarcodeVa	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
BarcodeValue	char	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkCardAccessGroup	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
RenameCardNumber	char	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardOperation	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>

Structure : table that gives a return on any card modification

2:Design Table 'tbOperationOut'

Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid
PkOut	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PkCard	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkData	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardNumber	char	16	0	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UserName	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo1	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo2	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo3	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo4	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo5	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo6	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo7	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo8	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo9	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo10	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
StartDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UsingEndDate	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
EndDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
DeleteOnExpired	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Trace	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PrivilegeOperation	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
SupervisorLevel	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardState	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
WaitForKeypad	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
NIP	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardComment	text	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PictureType	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Picture	image	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkCardType	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
SignatureType	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Signature	image	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountState	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountValue	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountReach	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
DisablePassback	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkBadging	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PrintIssue	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UseSpecificBarcodeVa	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
BarcodeValue	char	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CreationDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
ModificationDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
ModificationCount	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
State	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>

Structure : log Table

Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed
PkResult	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>	
RDate	char	10	0	0	<input type="checkbox"/>		<input type="checkbox"/>	
RTime	char	8	0	0	<input type="checkbox"/>		<input type="checkbox"/>	
Code	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>	
Details	text	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
TableName	char	64	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
CardNumber	char	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
InReference	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>	

This table will contain the result of all the transactions in the system. It will allow the administrator of the system to be sure that all transactions were executed correctly. The field InReference point to the fields PkIn in the operation table.

Updating the card table :

Updating cards using cardgateway is based on the field *CardOperation* in table **tbOperationIn**.

The possible values of the field *CardOperation*:

0 : Updating all the fields of the card.

Example :

This operation is realized while specifying the value 0 for the field CardOperation

```
INSERT INTO tbOperationIn (PkIn, CardNumber, UserName, CardInfo1, CardOperation)
VALUES (9999, '11:00001', 'Gerald Lemieux', 'Montreal', 0)
```

This request will allow creating the card 11: 00001 if this one does not exist or to modify this one if the card exists. In the two cases, at the end of the transaction, the card will contain only Information specified in the request .All the previous informations will be deleted.

1 : Deleting existing card

Example :

This operation is realized while specifying the value 1 for the field CardOperation

```
INSERT INTO tbOperationIn (PkIn, CardNumber, CardOperation)
VALUES (12345, '11:00001', 1)
```

This request will allow erasing the card 11: 00001 if this one exists. If it does not exist the system will add a log to indicate that the request of deleting the card failed because the card does not exists.

2 : Selective update of card

Example :

This operation is realized while specifying the value 2 for the field CardOperation

```
INSERT INTO tbOperationIn (PkIn, CardNumber, CardInfo1, CardOperation)
VALUES (3333, '11:00001', 'Montreal, Quebec', 2)
```

This function is comparable with the option 0 with the only difference, fields having a container are updated. In this example only the field CardInfo1 will be changed. If the card does not exist then it will be created.

3 : Changing card number and deletion of the original card.

Example :

This operation is realized while specifying the value 3 for the field CardOperation

```
INSERT INTO tbOperationIn (PkIn, CardNumber, RenameCardNumber, CardOperation)
VALUES (3312, '11:00001', '11:00002', 3)
```

This command will allow creating a card using the information of an existing one. Following the operation, the original card will be deleted. This function acts as the function 2. It will be therefore possible, to update fields using this operation. If the original card does not exist then no action will be taken and the system will generate an error.

4 : Changing card number without erasing the original card.

Example :

This operation is realized while specifying the value 4 for the field CardOperation

```
INSERT INTO tbOperationIn (PkIn, CardNumber, RenameCardNumber, CardOperation)
VALUES (3312, '11:00001', '11:00002', 4)
```

This command will allow creating a card using the information of an existing one. Following the operation, the original card will be preserved intact. This function acts as the function 2. It will be therefore possible, to update fields. If the original card does not exist then no action will be taken and the system will generate an error.

Migration from version < 3.11 to version >=3.11

To execute an easy migration of the version #1 to the version 3 of MS-SQL/Oracle here is the list of the modifications that could have an impact on the application of the customer.

Table TransactionIn is now OperationIn

- The primary key of the table OperationIn is PkIn
- The PkIn is nomore an auto-incremental field, the customer has to be sure to put a valid value
- The column Allow Nulls specifies the fields that are nullable or not
- The new fields are identified in green.
- We should use the field RenameCardNumber instead of UserName when we want to make a SaveAs of a card.
- The CardTransaction field is replaced by the CardOperation field
- Functionality of the new fields
 - PriviledgeOperation, Value 0 (No), 1 (Yes), this will replace the functionality associated previously to the access level 16 (only EntraPass Global)
 - NIP, Value 0 to 999999, NIP programmable (Only EntraPass Corporate)
 - SignatureType, Value 0 (No signature), 1 (BMP), 2 (EPS), 3 (GIF), 4 (JPG), 5 (PCX), 6 (PNG), 7 (TGA), 8 (TIF), to identify the format of the signature file
 - Signature, BLOB, file containing picture in relation with the fields SignatureType
 - CardCountState, Value 0 (No), 1 (Yes)
 - CardCountValue, Value 0 to 999999
 - CardCountReset, Value 0 (No), 1 (Yes)
 - CardCountUpdate, Value 0 (No), 1 (Yes), modification or not of CardCountValue value
 - DisablePassback, Value 0 (No), 1 (Yes)
 - FkBadging, Pointer to the field FkData in the table Badging
 - UseSpecificBarcode, CardNumber (0), BarcodeValue (1), CardInfo1 (2), CardInfo2 (3), CardInfo3 (4), CardInfo4 (5), CardInfo5 (6), CardInfo6 (7), CardInfo7 (8), CardInfo8 (9), CardInfo9 (10), CardInfo10 (11)
 - BarcodeValue, character, used if UseSpecificBarcode = 1

2:Design Table 'tbOperationIn'

Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid
PKIn	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardNumber	char	16	0	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UserName	char	50	0	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo1	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo2	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo3	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo4	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo5	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo6	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo7	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo8	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo9	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo10	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
StartDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UsingEndDate	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
EndDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
DeleteOnExpired	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Trace	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PrivilageOperation	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
SupervisorLevel	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardState	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
WaitForKeypad	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
NIP	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardComment	text	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PictureType	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Picture	image	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkCardType	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
SignatureType	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Signature	image	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountState	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountValue	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountReset	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountUpdate	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
DisablePassback	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkBadging	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UseSpecificBarcodeVa	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
BarcodeValue	char	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkCardAccessGroup	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
RenameCardNumber	char	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardOperation	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>

Table TransactionOut is OperationOut

- The primary key of the OperationOut table is PkOut
- The field PkOut is nomore auto-incremental
- The column Allow Nulls specifies the fields are nullable or not
- The new fields are identified in green

2:Design Table 'tbOperationOut'

Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid
PkOut	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PkCard	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkData	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardNumber	char	16	0	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UserName	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo1	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo2	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo3	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo4	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo5	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo6	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo7	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo8	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo9	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardInfo10	char	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
StartDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UsingEndDate	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
EndDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
DeleteOnExpired	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Trace	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PrivilegeOperation	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
SupervisorLevel	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardState	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
WaitForKeypad	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
NIP	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardComment	text	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PictureType	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Picture	image	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkCardType	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
SignatureType	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Signature	image	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountState	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountValue	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CardCountReach	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
DisablePassback	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
FkBadging	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
PrintIssue	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
UseSpecificBarcodeVa	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
BarcodeValue	char	16	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
CreationDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
ModificationDate	datetime	8	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
ModificationCount	smallint	2	5	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
State	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>

Setting for the Card Gateway interface - MSSQL(ORACLE) – is done in 2 steps

1. The configuration of the card gateway setting is done from a workstation.
 - We need to indicate the MS-SQL (oracle) server's name
 - We need to indicate in which manner we will access the MS-SQL (Oracle) server. If the field "Use the SQL administrator's password" is not checked, the customer needs to program a user name = "kantech with the password" = kantech in the SQL server. If it is checked, the customer needs to provide the user name and the password of an existing administrator that have access to the SQL server. This will enable the feature where the Kantech application will enter his own user name "KANTECH" and his own password "KANTECH" in the SQL server.
2. Configuring the MS-SQL server (ORACLE)
 - With the case where the field « use the SQL administrator 's password » is not checked, the customer will need to :
 1. Do a login (as administrator) on his server
 2. Create a database that have the « KANCARD » as a name.
 3. Create a user that have a KANTECH user name and a KANTECH password.
 4. Assign the OWNER user right to that user.
3. If you are using an Oracle database, make sure to select the correct server version from the workstation configuration (V7.3 or V8) as the BDE version will change. ***If the wrong version is selected the interface may not connect to the Oracle database.***

NB :

Once the user of the database is created , the checkbox « use the SQL administrator's password » is useless