



OPENCBS user guide

Adaptive open source software for microfinance

Updated for 14.11

Preliminary info:

- This guide is the reference for the free core software OPENCBS and is the only document of that type.
- It also gives an introduction to the modules and services the OPENCBS team sells.
- For the first use, we recommend you to follow the given order. The explanations are understandable by anyone, and you will get a complete knowledge of the software rapidly.
- In order to perform a complete implementation and configuration, you will need the annexes.
- The forum opencbs.freeforum.com may give you some information, especially about common troubleshooting. Look at previous threads or pose your question to the community.
- To contact the team, send us a mail at contact@opencbs.com or add us on skype [info.opencbs](https://www.skype.com/en/contacts/info/opencbs) .

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1. Get started

1.1 Download & install OPENCBS

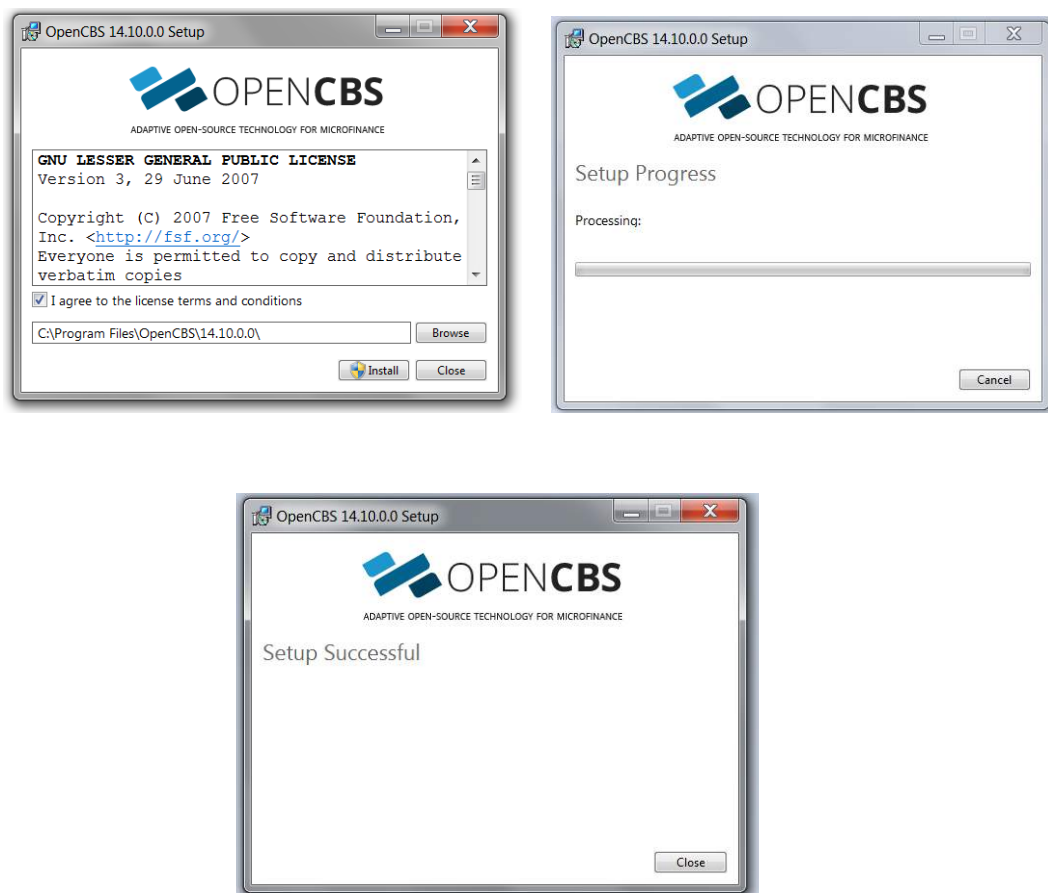
Download the “MSI” file available at the following address:

<http://sourceforge.net/projects/OPENCBS/files/latest/download>.

If you are using a 32 bits machine, please follow this link:

<http://sourceforge.net/projects/opencbs/files/opencbs-14.10/opencbs-14.10.835.e608813-release-x86.exe/download>

Once downloaded, click the .exe to launch the setup and follow the default type installation of the system:



1.2 Download crystal report

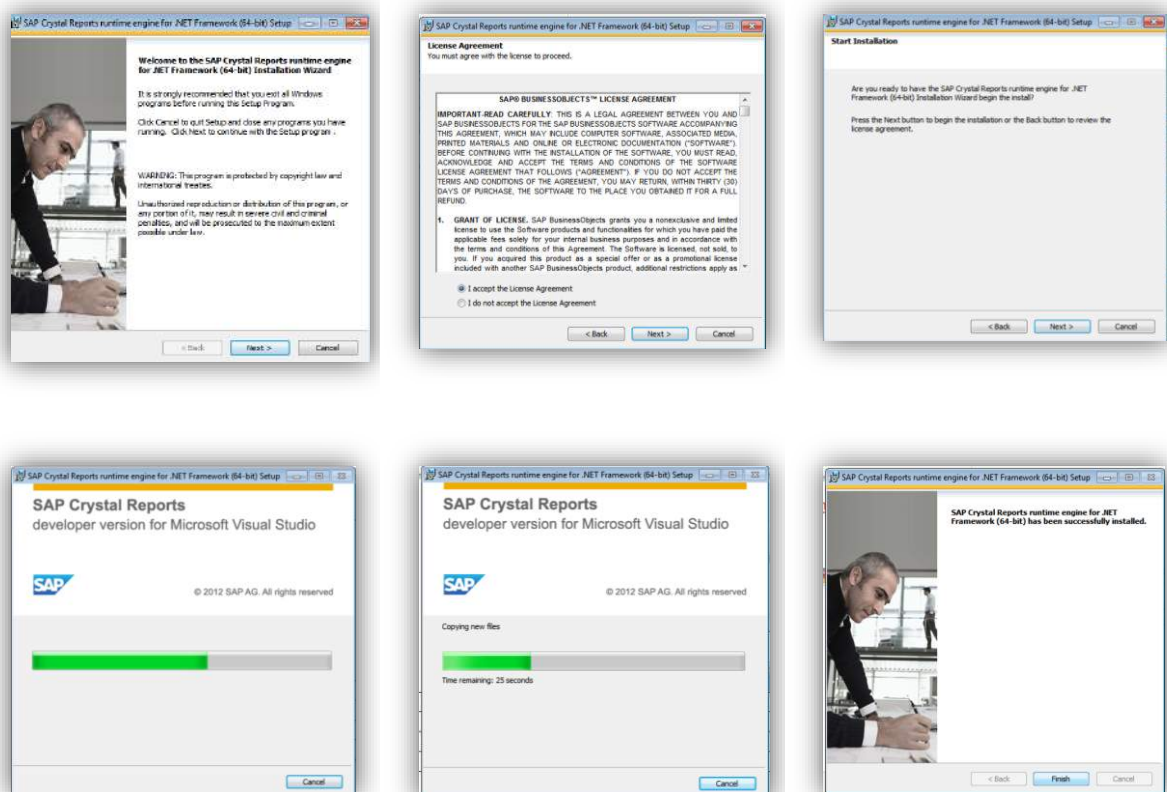
Crystal report is not strictly necessary to run OPENCBS, but it will allow you to export ready-to-print forms and reports. Excel and Word forms and reports are also available. If you don't think you need it now, go to 1.3 Start OPENCBS. Crystal report reader can be downloaded for free at the following address:

[Crystal report viewer 2013 x64](#)

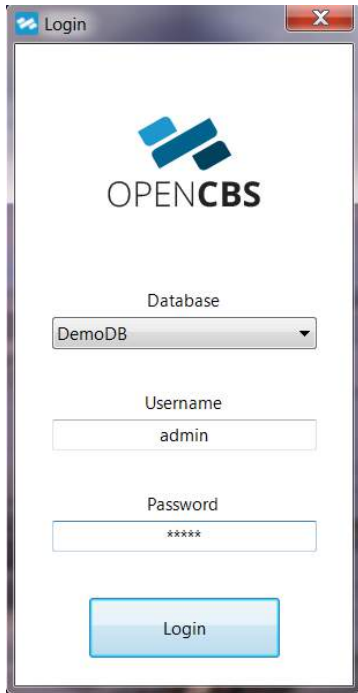
[Crystal report viewer 2013 x86](#)

Make sure you download the version required by your operating system (x64 or x86). Once downloaded, unzip it and launch the setup (click on the .exe) and follow the default type installation of the system (Cf screenshots below). No product ID is required as the software is available for free. However, if you want to create your own reports, you will need Crystal report Creator available at the following address:

<http://www54.sap.com/solution/sme/software/analytics/crystal-reports/index.html>



1.3 Start OPENCBS



Launch OPENCBS. If it is the first time you are launching OPENCBS, it should directly open the DemoDB, a database filled with testing purposed data. If not, open the drop-down list under Database and click on DemoDB.

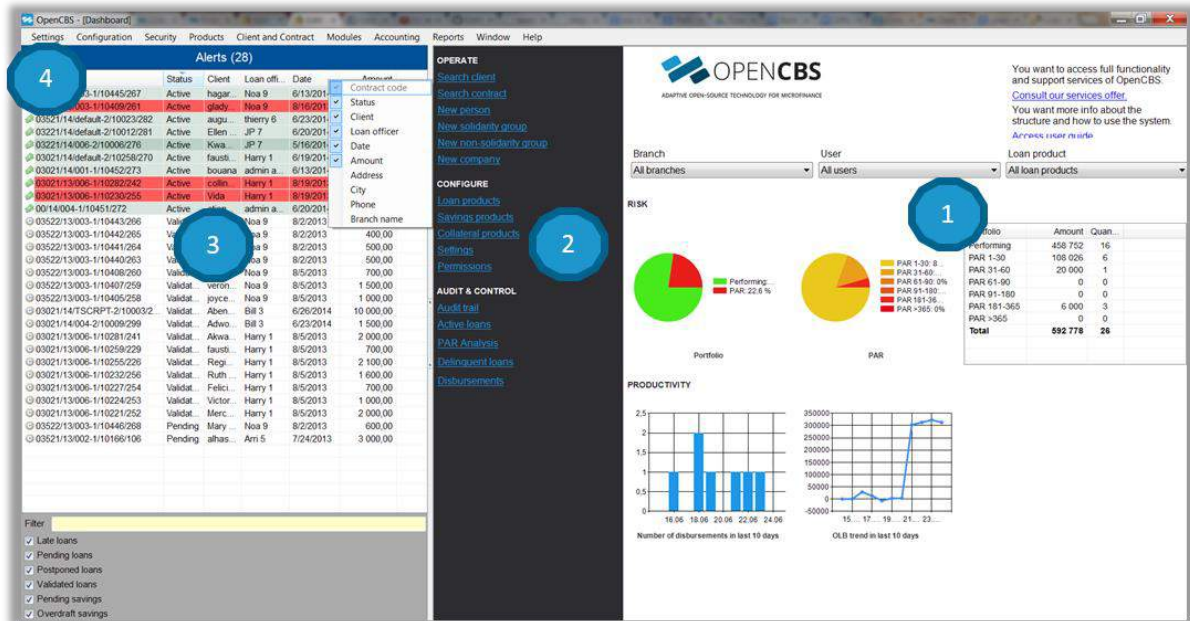
Enter “admin” for username and “admin” for password.

The system has now been launched.

Once you have configured your default database, the process will be the same but you will directly open your work database. The databases can be held locally (like DemoDB) or by a SQL Server instance to be accessible from multiple computers. You can learn more about it at 10.1.3 Database control panel (p73) and 11. SQL Server (p86).

2. First steps

2.1 Interface



1. **Operation Dashboard:** gives key performance indicators on risk and productivity of a chosen section of the loan portfolio.
2. **Fast menu access** with direct links to the most commonly used sections of the system.
3. **Alert window:** displays and gives direct access to all the loans and savings requiring specific attention.
4. **Main upper menu:** gives access to all the functions of the system. These menu items are ordered with the following logic:

- a. **Configuration related tabs:**

- i. **Settings.** Most general parameters of the system, usually configured at the very initial step as per legislation or convention in the country where the company operates. Rarely modified afterwards.
- ii. **Configuration.** Includes parameters more specific to the institution or the specific office using the system.
- iii. **Security.** Where roles and user profiles have to be configured.
- iv. **Products.** Most important step of the configuration of the system. There you will configure your loans, savings and collateral products.

- b. **Client and contract.** The section through which you can create and search for all types of contracts and clients as well as reassign contracts from one user to another.
- c. **Modules.** You can see here all the modules available in the software. In the free version these modules have limitations. Full availability for the modules can be purchased by contacting our commercial team.
- d. **Accounting.** You can configure manually your accounting rules in the free version or access your preconfigured integrated accounting engine if it has been developed for you by our team.

- e. **Reports.** The OPENCBS core system includes standard reports available in both Crystal Report and Excel format.

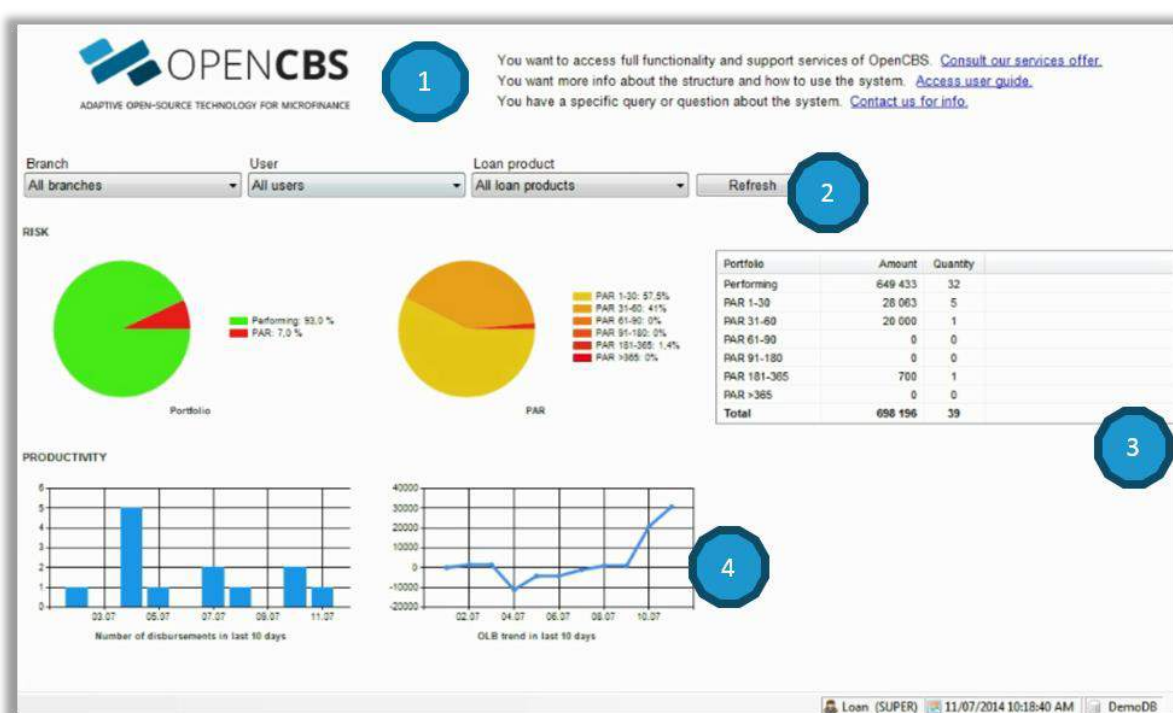
2.2 Dashboard

2.2.1 Objectives

The dashboard's main objective is to give to any credit related employee a straight view on key performance indicators of the loan portfolio that the employee is supervising.

Using filters, it gives the capacity to any supervisor or manager to review rapidly the performance of the different offices, employees or loan products he is supervising.

2.2.2 Description and user guidance



The dashboard includes:

1. **Header.** OPENCBS Logo and direct access to useful services.
2. **Filter.** Filter the data displayed by branch, user and loan products. About how to use this filter:
 - a. After selecting one specific portfolio portion, you should click refresh.
 - b. You can combine the filters, except for *Branch* and *User*, as users are actually not attached to a specific branch.
3. **Risk section.**
 - a. 1st Chart. Gives a view of the proportion (in amount) of the late portfolio (red) in comparison to the performing one (green).
 - b. 2nd Chart. Gives a view of the partition of the late portfolio amount by ranges. Please note that these ranges can be modified at database level upon request (Table Latedaysrange).

- c. Table. Details the amount as per the different delinquency ranges as well as the number of late clients these amounts represent.

4. Productivity section.

- a. 1st Graph. The number of disbursements performed in the previous 10 days for the selected portion of the portfolio. If nothing appears, it means nothing has been disbursed in the last 10 days. In case disbursements did occur, blue bars appear with the height corresponding to the number of disbursements.
- b. 2nd Graph. The evolution of the portfolio size (OLB) in the last 10 days. It starts at 0 and rises or decreases as per the growth or decline of the portfolio size. It concretely calculates (disbursements – capital repaid). In addition to the first graph, it gives a clearer idea on the growth performance of the portfolio, as big institutions can actually disburse a lot while decreasing the size of their portfolio.

2.3 Alert System

2.3.1 Objectives

The objective of the alert system is to make all the contracts which requires specific attention more easily visible and accessible. Details:

- The late loan contracts to be closely followed-up.
- Created loan contracts in a temporary status:
 - Pending
 - Validated
 - Postponed
- Savings contracts created but still pending.
- Overdraft savings to be followed-up closely.

This section should enable operation employees to save significant time in the process of accessing the contracts on which they have to perform actions.

2.3.2 Description and user guidance

The screenshot shows the 'Alerts (40)' window in OpenCBS. The window has a menu bar with options: Settings, Configuration, Security, Products, Client and Contract, Modules, Accounting, Reports, and Window. Below the menu bar is a table of alerts. The table has columns: Contract code, Status, Client, Loan officer, Date, Amount, Address, City, Phone, and Branch name. The table is filtered to show 40 alerts. A dropdown menu is open on the right side of the table, showing the columns that can be selected. The columns are: Contract code, Status, Client, Loan officer, Date, Amount, Address, City, Phone, and Branch name. The dropdown menu is annotated with a blue circle and the number 2. The table is annotated with a blue circle and the number 1. Below the table is a filter section with a yellow background. The filter section has a 'Filter' label and a list of checkboxes: Late loans, Pending loans, Postponed loans, Validated loans, Pending savings, and Overdraft savings. The filter section is annotated with a blue circle and the number 3. The bottom section of the window is annotated with a blue circle and the number 4.

Contract code	Status	Client	Loan officer	Date	Amount	Address	City	Phone	Branch name
BLR0020S	Active	SAMAIKYA COMPO...	Harish B.V	5/20/2014	3 2				
BLR0130S	Active	SAINIK PUBLIC SC...	Harish B.V	5/20/2014	4 3				
BLR0047S	Active	SAINIK PUBLIC SC...	Manjunath N	5/20/2014	6 2				
DWD0124U	Active	RATNA GIRLS ENG...	Praveen Van...	6/16/2014	19 8				
BLR0165U	P	R.V.S STANDARD P...	Harish B.V	1/30/2014	50 0				
BLR0106S	Active	NISARGA HIGH SC...	Harish B.V	5/15/2014	67 8				
BLR0160S	Active	MANASA GANGTHR...	Harish B.V	5/20/2014	3 1				
PUN0316U	Validated	LITTLE ROCK HIG...	Ilyas Shaikh	6/20/2014	30 0				
DWD0229U	Validated	LITTLE ANGELS G...	Praveen Van...	3/24/2014	30 0				
BLR0136U	Active	KIRAN HIGHER P...	Likith Babu	6/16/2014	19 8				
PUN0244S	Validated	KILBIL HIGH SCHO...	Dinesh Dash...	4/18/2014	2 5				
MYS0190U	Active	KAMADHENU CON...	Noel Nagaraju	6/16/2014	1 132,00		Mysore		
MYS0220S	Active	KALA BHARATHI VI...	Noel Nagaraju	6/16/2014	40 580,...		Mysore		
PUN0252U	Validated	JAGADGURU ENG...	Ilyas Shaikh	4/29/2014	500 00...		Pune		
DVG0291U	Validated	GURUKULA RESID...	Usha Nandini	6/19/2014	300 00...		Davanagere		
DVG0313U	Validated	GOLDEN PUBLIC ...	Usha Nandini	6/19/2014	500 00...		Davanagere		
BLR0031S	Active	GENIUS NATIONAL...	Harish B.V	10/21/2013	422 85...		Bangalore		
DWD0233U	Validated	GAJANANA KANNA...	Praveen Van...	3/25/2014	250 00...		Dharwad		
BLR0237U	Active	FLORANCE NIGHTL...	Harish B.V	6/16/2014	7 952,00		Bangalore		
BLR0271U	Validated	BILLY BEARI PRE S...	Usha Nandini	5/16/2014	500 00...		Bangalore		
PUN0286U	Validated	BAL VIKAS ENGLIS...	Rajesh Surve	5/28/2014	500 00...		Pune		
PUN0286U	Active	ADARSHA ENGLIS...	J Santhosh K...	6/16/2014	236,00		Bangalore		

Filter

- ☒ Late loans
- ☐ Pending loans
- ☒ Postponed loans
- ☒ Validated loans
- ☐ Pending savings
- ☒ Overdraft savings

1. The contracts are displayed line by line. By clicking on them you access directly to the details of this loan or savings contract. You can hide or unhide the window by clicking on the small bar on the right side of the window (Blue arrow).
2. You can select the column you want to appear in this list. You have the choice between 10 information fields related to the contracts.
3. The filter located just below the displayed contracts enables you to search by contract code, client name and loan officer name.
4. Eventually, the section below filters the type of contracts you want to see, tick or un-tick these contracts as you wish.

2.4 Configuration overview

The configuration step is really important, but it also takes quite a long time, so we suggest you to have a global overview of the system first before going for a full configuration. The demoDB is already configured. Even if you are trying the software with an empty database, you can directly use the software because all parameters are set to a default state.

To perform full configuration, see 10. System configuration (p69).

Here is the table of contents for 10. System configuration, so you can see what is configurable:

10. Annex: System Configuration	Erreur ! Signet non défini.
10.1 Settings	Erreur ! Signet non défini.
10.1.1 General settings	Erreur ! Signet non défini.
10.1.2 Other settings	Erreur ! Signet non défini.
10.1.3 Database control Panel	Erreur ! Signet non défini.
10.1.4 Change application date	Erreur ! Signet non défini.
10.1.5 Language	Erreur ! Signet non défini.
10.2 Configurations	Erreur ! Signet non défini.
10.2.1 Configure branches	Erreur ! Signet non défini.
10.2.2 Economic activity	Erreur ! Signet non défini.
10.2.3 Region, District, Cities	Erreur ! Signet non défini.
10.2.4 Funding lines	Erreur ! Signet non défini.
10.2.5 Installment periodicity	Erreur ! Signet non défini.
10.2.6 Exchange Rate	Erreur ! Signet non défini.
10.2.7 Currencies	Erreur ! Signet non défini.
10.2.8 Contract Code	Erreur ! Signet non défini.
10.3 Security Management	Erreur ! Signet non défini.
10.3.1 Roles, Users and Subordination	Erreur ! Signet non défini.
10.3.2 Roles Definition	Erreur ! Signet non défini.
10.3.3 Users definition	Erreur ! Signet non défini.
10.3.4 Audit Trail	Erreur ! Signet non défini.
10.3.5 Change Password	Erreur ! Signet non défini.

The settings you might want to look at first may include: 10.1.3 Database control Panel, 10.1.4 Change application date and 10.1.5 Language, as these are useful settings for testing purposes (p73).

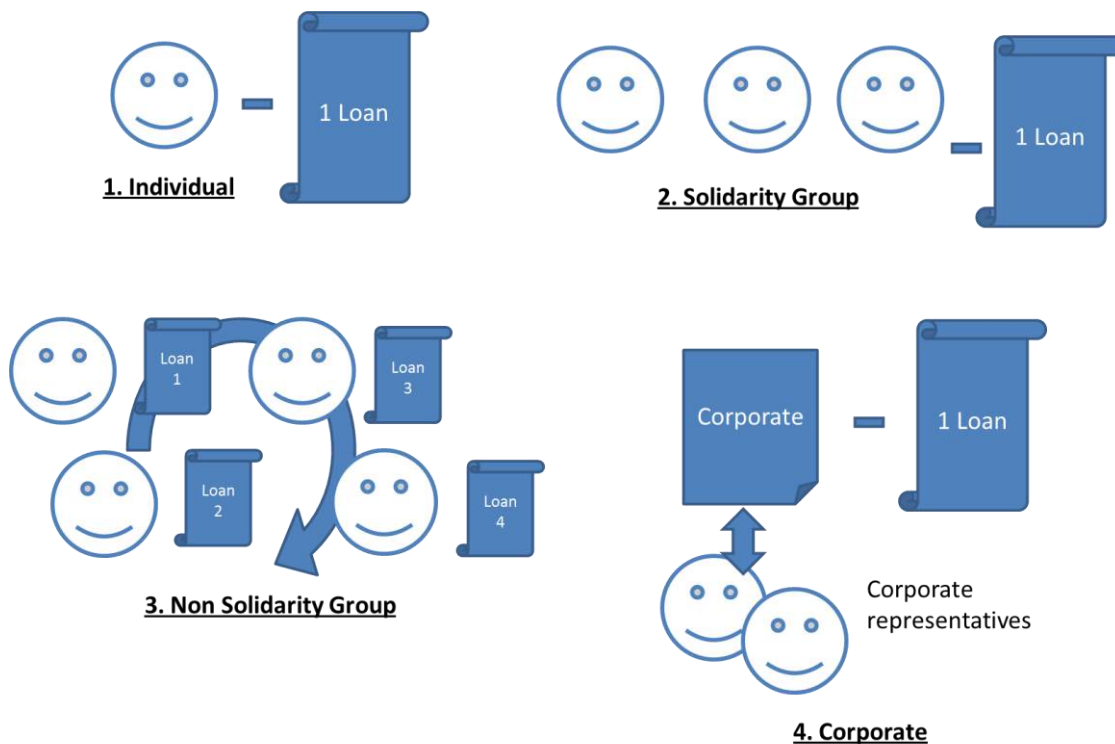
3. Know-Your-Customer

3.1 Individual, Group, NSG and Corporate

You can access to client data through the main upper menu: “Client and contract”, or from the left side Dashboard menu. Options are: create client/group and search client.

OPENCBS can track 4 different types of client:

1. **Individual clients.** One physical person to whom you are affecting loan and saving products.
2. **Solidarity group.** A group of individuals to whom you are affecting products. The contracts are not affected to specific members of the group, but to the group as whole. For example for loans, repayments are always done in the name of the whole group. It is however possible to mention what portion of the product is affected to which member.
3. **Non solidarity group.** A group of individuals bound together by agreement, but still receiving products individually. This section can be described as a batch contract management section.
4. **Corporate.** The products are affected to a legal entity. The legal entity is connected to individuals who are the corporate representatives of the legal entity.



3.2 Data fields

Each type of clients has different data fields available by default:

3.2.1 Individual clients

The screenshot displays the OpenCBS software interface for an individual client profile. The client's name is Ruth ASHEFIA, with ID number 03021/13/006-1/10232/256. The profile includes fields for personal information, loan details, and address. A table below the profile lists groups, and a map shows the client's location. The interface is numbered 1 through 6, corresponding to the list of default data fields provided.

Individual client default data fields include:

1. Client profile data fields
 - First name
 - Last Name
 - Date of birth
 - Gender
 - ID Number
 - Economic activity
 - Loan Cycle (Automatically calculated)
 - Head of house hold. (Yes/No)
 - Place of birth
 - Father's name
 - Citizenship
 - Branch
2. 2 Pictures
3. Primary and secondary addresses fields
 - Province, District, City, Address
 - Zip code
 - Home type
 - Home phone
 - Personal phone
 - Email
4. Group this individual is belonging to
5. Client location (See X.A Client location for reporting)
6. Capacity to print client personal information which is a one pager gathering all this information

Mandatory fields are marked with a star. Click the save/update button to save recorded information. After saving the contract tab appears at the top of the page and enables you to affect product to this individual.

3.2.2 Solidarity Group

Solidarity group - (0)

Details

General Name*: Solidarity group

Meeting day: Tuesday ☒ Select meeting day

Date of establishment: 4/15/2014

Group cycle: 0

Branch: HEADQUARTERS

Addresses

Home address*
Province*: Ashanti Region
District*: Amambae
City*: ...
Address: ...
ZIP Code: ...
Home type: ...
Home phone: ...
Personal phone: ...
E-mail: ...

Business address
Province*: All...
District*: Select a district...
City*: ...

Members

Name	Passport N°	Date of birth	Sex	Head of household	Cycle	Dependents	Join...	Bad client
Abena Domaile	10003	4/22/1968	F	No	0		4/1...	False
Prisca	10001	12/15/1980	F	No	0		4/1...	False
Joyce Okyere	10005	4/23/1968	F	No	0		4/1...	False

History

Name	Passport N°	Date of birth	Sex	Head of household	Dependents	Joined date	Left date
Prisca	10001	12/15/1980	F	No		4/15/2014	4/15/2014
Adwoa Maabea	10009	8/5/1946	F	No		4/15/2014	4/15/2014

Buttons: Print, Save, Cancel

Buttons: Search existing, Add new, Remove from group, View member

1. Group profile data fields
 - General Name
 - Meeting day
 - Date of establishment
 - Economic activity
 - Group Cycle
 - Branch
2. 2 Pictures
3. Home and secondary business address fields
 - Province, District, City, Address
4. Zip code
5. Home type
6. Home phone
7. Personal phone
8. Email
4. Members of the group with the leader marked in green
5. History sheet. List of individuals who used to be in the group
6. Print button can be used to print internal forms

New individual or already existing individuals can be added to the group. After saving the group the contract tab appears at the top of the page.

3.2.3 Non Solidarity Groups

[PAN/JLG-118/Wed]

Details

Name: PAN/JLG-118/Wed

Date of establishment: 7/12/2009

Group officer: prakash pan

Meeting day: Wednesday ☒ Set meeting day

Branch: Panruti

Print Update Cancel

Address Members Loans Savings Meetings New Customfields Client Monitoring

Address

Province*: Tamil Nadu

District*: Panruti

City*: THIRUKURAL STREET

Address: melapalayam road, panruti munik 607106, panruti(t.k)cuddalore,

ZIP Code:

Members

Name	Loan Cycle	Passport	Status	Join date	Left date
A. meenikristina G. enoke	9	19	Active	12/1/2012	
A. sumathi Arumugam	9	14	Active	12/1/2012	
Arulmozhi Ramesh	6	5694	Active	1/8/2013	
G. selvi Murugan	9	16	Active	12/1/2012	
K. rajeshwari Kumar	9	15	Active	12/1/2012	
M. jothilakshmi Munusami	10	12	Active	12/1/2012	
R. jarinabegam K. rajmugmed	9	21	Active	12/1/2012	
R. Sasikala Ramesh	1	10226	Active	1/22/2014	
S. shithakujalamhal & eriniscan	4	22	Inactive	12/1/2012	

Loans

Client's name	Loan product	Code	Status	Amount	OLR	Currency	Interest Date	Installment time	Address	Members	Loans	Savings	Meetings	New Customfields	Client Monitoring
M. jothilakshmi	JLG-Rs 1	IMF/PAN/01/00012/2	Active	15 000	8 76	INR									
M. jothilakshmi	Top up lo	IMF/PAN/01/00013/3	Active	8 000	6 00	INR									
S. vanantha Sa...	JLG-Rs 150	IMF/PAN/01/00012/2	Active	15 000	8 76	INR									
S. vanantha Sa...	Top up loan	IMF/PAN/01/00013/3	Active	8 000	6 00	INR									
A. sumathi Aru...	JLG-Rs 1	IMF/PAN/01/00012/2	Active	15 000	8 76	INR									
K. rajeshwari Ku...	JLG-Rs 1	IMF/PAN/01/00012/2	Active	15 000	8 76	INR									
G. selvi Murugan	JLG-Rs 1	IMF/PAN/01/00012/2	Active	15 000	8 76	INR									
G. selvi Murugan	Top up lo	IMF/PAN/01/00013/3	Active	8 000	6 00	INR									
A. meenikristina	JLG-Rs 1	IMF/PAN/01/00012/2	Active	15 000	8 76	INR									
A. meenikristina	Top up lo	IMF/PAN/01/00013/3	Active	8 000	6 00	INR									
R. jarinabegam	JLG-Rs	IMF/PAN/01/00012/2	Active	15 000	8 76	INR									
R. jarinabegam	Top up lo	IMF/PAN/01/00013/3	Active	8 000	6 00	INR									
S. chitra S. sent...	JLG-Rs	IMF/PAN/01/00012/2	Active	15 000	8 76	INR									
S. chitra S. sent...	Top up lo	IMF/PAN/01/00013/3	Active	8 000	6 00	INR									

Meetings

Attendee name	Attended	Comment
M. jothilakshmi Munusami	<input type="checkbox"/>	
S. vanantha Sampathkumar	<input type="checkbox"/>	
A. sumathi Arumugam	<input type="checkbox"/>	
G. selvi Murugan	<input type="checkbox"/>	
A. meenikristina G. enoke	<input checked="" type="checkbox"/>	
R. jarinabegam K. rajmugmed	<input type="checkbox"/>	
S. chitra S. senthikumar	<input type="checkbox"/>	
Arulmozhi Ramesh	<input type="checkbox"/>	
R. Sasikala Ramesh	<input type="checkbox"/>	
M. jothilakshmi Munusami	<input checked="" type="checkbox"/>	
S. vanantha Sampathkumar	<input type="checkbox"/>	
A. sumathi Arumugam	<input type="checkbox"/>	
K. rajeshwari Kumar	<input type="checkbox"/>	
G. selvi Murugan	<input type="checkbox"/>	
A. meenikristina G. enoke	<input type="checkbox"/>	
R. jarinabegam K. rajmugmed	<input type="checkbox"/>	

Meeting date: 7/9/2014

Update

admin (SUPER) 16/04/2014 2:23:21 PM Nitin

1. Group profile data fields

- General Name
- Date of establishment
- Group Officer
- Meeting day
- Branch
- 2 Pictures

- Personal phone

- Email

2. Members of the group with the leader marked in green

3. Loan sheet with all the loans received by group members

- Primary address
 - Province, District, City, Address
 - Zip code
 - Home type
 - Home phone
- 4. Savings sheet with all the savings received by group members
 - 5. Meetings. Attendance to the meetings of the group members
 - 6. Print button to print reports on the NSG activity

Note: Loans and saving tabs enable as well to manage products affected to NSG members in batch using the tabs loans and savings. This is one of the main advantage of the NSG type of client.

3.2.4 Corporate

1. Corporate profile data fields
 - General Name
 - Date of establishment
 - Abb
 - Short name
 - Corporate cycle
 - Branch
 - Economic activity
2. 2 Pictures
 - Personal phone
 - Email
4. Contacts of the corporate. Individual to be chosen in database or added
5. Print button for reports with corporate information

3. Primary address
 - Province, District, City, Address
 - Zip code
 - Home type
 - Home phone

3.3 Additional fields

In addition to data fields available in the free version, we have the capacity to add any type of additional data to be tracked for any type of client. Please find here a few examples of additional data fields created:

The screenshot shows the 'Co-Applicant 1' tab of a form. The fields are organized into two columns:

- Left Column:** First Name*, Last Name*, Father Name, Date of Birth* (4/16/2014), Place of Birth*, Gender* (Female), Citizenship, Economic Activity*.
- Right Column:** Branch, Residence Type*, Email ID, ID Proof*, Address Proof*, Sign Proof, Educational Qualification*, Caste*.

At the bottom right, the status bar shows 'admin (SUPER)', the date '16/04/2014 3:53:10 PM', and the location 'Varthana'.

Co-Applicant field, simple list of additional fields created to track information on individuals in charge of the loan application for a corporate client.

The screenshot shows the 'Client Monitoring' tab with a table of client visits. The table has the following data:

Date:	Purpose:	Monitor:	Comment:
2014-04-16 00...	delinquency	Prakash prakash	good
2014-03-17 00...	check inventory	Partha Sarathi	ok
2014-04-16 00...	check goods	Kavi kumar	ok
2014-04-16 00...	predisbursement check	Kavi kumar	ok

On the right side of the table, there are three buttons: 'Add...', 'Edit...', and 'Delete'. At the bottom right, the status bar shows 'admin (SUPER)', the date '16/04/2014 3:56:53 PM', and the location 'Nitin'.

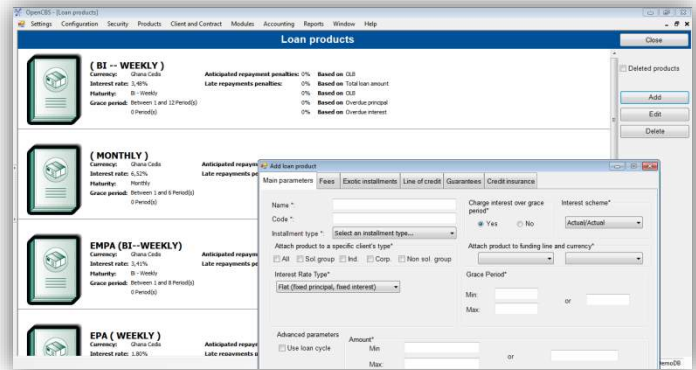
Client Monitoring tab, created to track the visits to clients done by operations staffs.

You can use these functions (with limitations) through the modules Custom Events and Custom fields (See Additional modules).

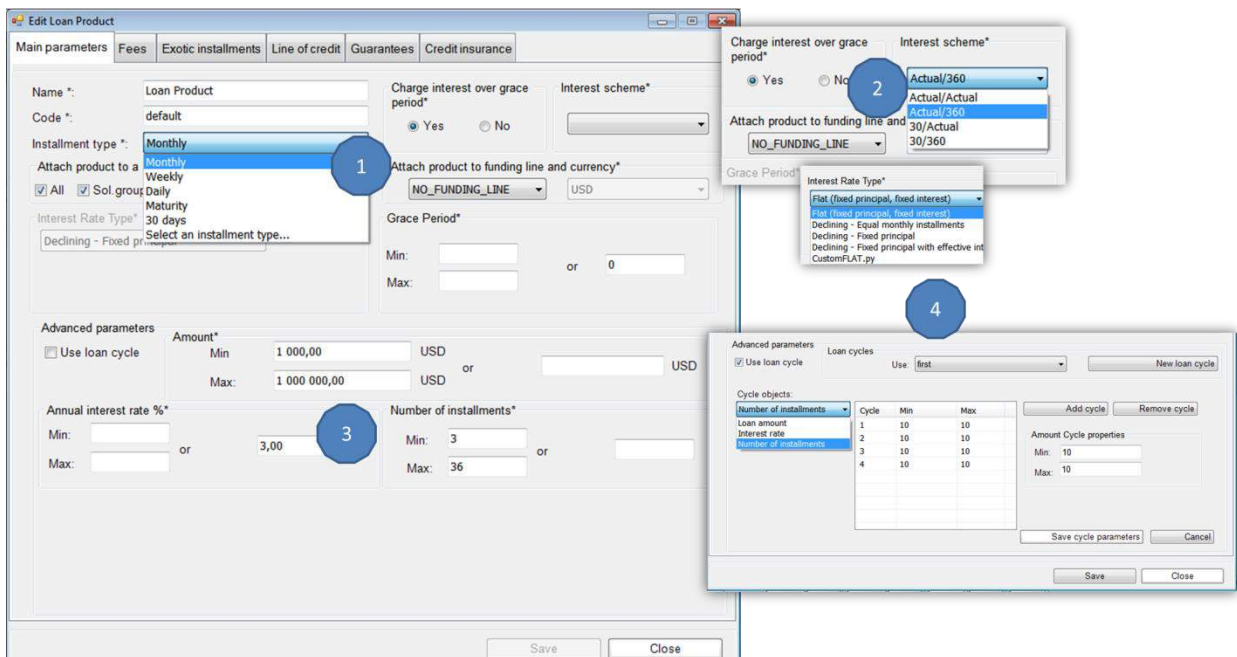
4. Loan Management

4.1 Product definition

To add a new loan product or edit an existing one, click the upper main menu item called "Products" and select "Loan products". You reach the page hereby, where you can see all products existing in the database. Click "add" for adding a new product, select the product you want to edit and click the button edit to modify an existing product. In both cases the product edition window appears. It contains 6 tabs. Their content is detailed in following parts



4.1.1 Main parameters



Product main info

1. Define in this section the following product parameters:

- **Name.** Name of the product, which can be displayed at report level.
- **Code.** Can appear in contract code
- **Installment type.** As per the way they have been defined in the section Configurations->Installments periodicity.
- **Funding line.** Choose the funding line to which you want to attach your product. Choose "no funding line" if you are not using funding line for this product.

- **Grace Period.** Define here how many installments without principal repayment can be set at the beginning of the loan cycle. You can either define either a range of value which can then be chosen at loan definition level by using the min/max cells. If you one to define one value as grace period for all loans of this type fill the field located after the mention “or”.

Note, what is grace period. Grace period, is a period of time defined by a certain number of installments during which the clients won't have to repay principal and in some cases he won't even have to repay interest. This practice is usually used for businesses which need a bit of time for their initial investment to start generating revenues.

Repayment schedule						Events
N°	Date	Expected interests	Expected principal	Installment total	OLB	Pai
1	5/23/2014	98,63	0,00	98,63	10 000,00	
2	6/23/2014	101,92	0,00	101,92	10 000,00	
3	7/23/2014	98,63	1 250,00	1 348,63	8 750,00	
4	8/22/2014	89,18	1 250,00	1 339,18	7 500,00	
5	9/23/2014	76,44	1 250,00	1 326,44	6 250,00	
6	10/23/2014	61,64	1 250,00	1 311,64	5 000,00	
7	11/21/2014	50,96	1 250,00	1 300,96	3 750,00	
8	12/23/2014	36,99	1 250,00	1 286,99	2 500,00	
9	1/23/2015	25,48	1 250,00	1 275,48	1 250,00	
10	2/23/2015	12,74	1 250,00	1 262,74	0,00	

Loan schedule with 2 months grace period on principal

Interest

This section enables you to define 3 things:

- **Interest rate type.** This section gives you the choice between at least 3 mode of distribution of the interest and principal over the repayment schedule:
 - **Flat (Fixed Principal, Fixed Interest).** The interest and the principal to be paid over the schedule are the same for each installment. The principal is equal to the amount disbursed divided by the number of installments and the interest is equal to the amount disbursed multiplied by the defined interest rate. As such a flat interest rate is always equivalent in term of cost for client to a higher declining interest rate.

Installments						New Custom field
N°	Date	Interest payment	Principal repayment	Installment Total	OLB	
1	5/2/2014	200.00	1 000.00	1 200.00	9 000.00	
2	5/9/2014	200.00	1 000.00	1 200.00	8 000.00	
3	5/16/2014	200.00	1 000.00	1 200.00	7 000.00	
4	5/23/2014	200.00	1 000.00	1 200.00	6 000.00	
5	5/30/2014	200.00	1 000.00	1 200.00	5 000.00	
6	6/6/2014	200.00	1 000.00	1 200.00	4 000.00	
7	6/13/2014	200.00	1 000.00	1 200.00	3 000.00	
8	6/20/2014	200.00	1 000.00	1 200.00	2 000.00	
9	6/27/2014	200.00	1 000.00	1 200.00	1 000.00	
10	7/4/2014	200.00	1 000.00	1 200.00	0.00	
		2 000.00	10 000.00	12 000.00		

Schedule Flat (Fixed Interest, fixed principal)

- **Declining - Fixed Principal.** The client is paying the same principal on every installment, but the interest is declining as per the principal declining through the loan. The client will in total pay less at the end of his cycle than at the beginning.

Repayment schedule		Events			
N°	Date	Expected interests	Expected principal	Installment total	OLB
1	5/23/2014	92,05	1 000,00	1 092,05	9 000,00
2	6/25/2014	91,73	1 000,00	1 091,73	8 000,00
3	7/25/2014	78,90	1 000,00	1 078,90	7 000,00
4	8/25/2014	71,34	1 000,00	1 071,34	6 000,00
5	9/25/2014	61,15	1 000,00	1 061,15	5 000,00
6	10/24/2014	49,32	1 000,00	1 049,32	4 000,00
7	11/25/2014	40,77	1 000,00	1 040,77	3 000,00
8	12/25/2014	29,59	1 000,00	1 029,59	2 000,00
9	1/23/2015	20,38	1 000,00	1 020,38	1 000,00
10	2/25/2015	10,19	1 000,00	1 010,19	0,00

Schedule Declining - Fixed Principal

- **Declining – Equal monthly installments.** The client is paying less principal at the beginning than at the end to compensate the fact interest are declining as the OLB is progressively decreasing through the cycle.

Repayment schedule		Events			
N°	Date	Expected interests	Expected principal	Installment total	OLB
1	5/23/2014	13,03	28,30	41,33	171,70
2	6/25/2014	11,19	30,14	41,33	141,56
3	7/25/2014	9,22	32,11	41,33	109,45
4	8/25/2014	7,13	34,20	41,33	75,25
5	9/25/2014	4,90	36,43	41,33	38,82
6	10/24/2014	2,53	38,82	41,35	0,00

Declining – Equal monthly Installments

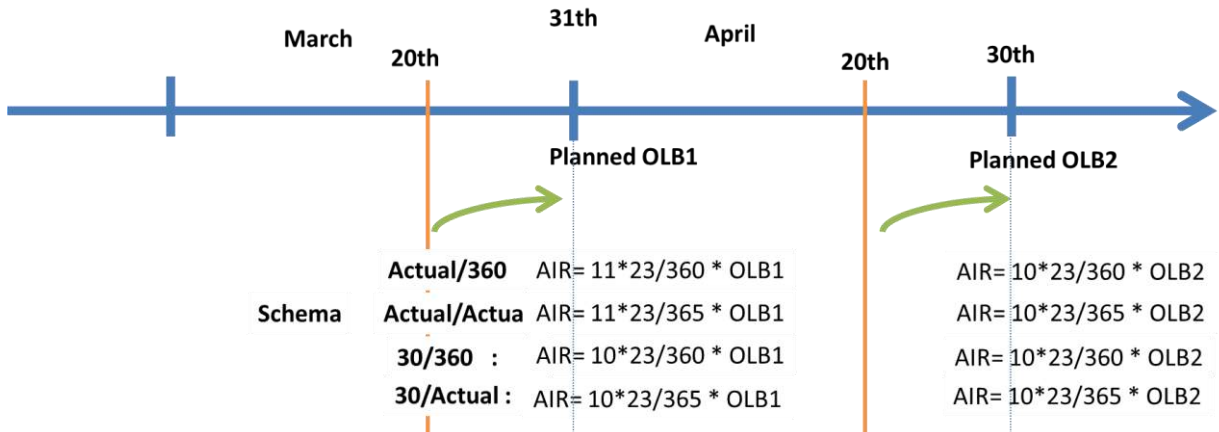
- **Customized schedule.** If your type of schedule doesn't enter in one of the above categories, contact us and we will create the type of schedule you need. For example here below a flat schedule with installment dates systematically on last Sunday of the month.

Installments		Loan Info		Monitoring	
N°	Date	Interest payment	Principal repayment	Interest Rate Type*	
1	5/25/2014	100,00	1 000,00	Flat (fixed principal, fixed interest)	
2	6/22/2014	100,00	1 000,00	Flat (fixed principal, fixed interest)	
3	7/27/2014	100,00	1 000,00	Declining - Fixed principal	
4	8/24/2014	100,00	1 000,00	Declining - Equal monthly installments	
5	9/28/2014	100,00	1 000,00	Declining - Fixed principal with effective int	
6	10/26/2014	100,00	1 000,00	CustomFLAT.py	
7	11/23/2014	100,00	1 000,00	OdedDecliningEquallyMonthlyInstallment.py	
8	12/28/2014	100,00	1 000,00		
9	1/25/2015	100,00	1 000,00		
10	2/22/2015	100,00	1 000,00		
		1 000,00	10 000,00		
					11 000,00

Customized schedule type

- **Interest scheme.** First to activate this section, the "Accounting_Process" option in general setting should be defined as accrual. This section asks you to choose which type of interest accrual you want to

use in your loan product. 4 types of calculation are available: Actual/360, Actual/Actual, 30/360 or 30/Actual. The schema below explains the difference between these 4 types:



This schema details the process of calculation of accrued interest as per the different available schemes in the case of loan with monthly repayments on the 20th of each month.

- In Actual/360, the interests are accrued considering the real number of days in month and 360 days in the year. Meaning that in our case the accruals between 20th of March date of last repayment and end of month would be the real number of days (here 11) divided by the number of day in a year (360 in this model), multiplied by the yearly interest rate (here 23%) and then multiplied by the OLB at that time (OLB1). In April we would take 10 days instead of 11 as the month is shorter and the OLB taken would be the OLB2.
- In Actual/Actual, we consider the real number of days for both months and years. The difference with previous system is that we divide by 365 and not by 360.
- In 30/360, we consider always 30 as the number of days in the month. As such no matter if there are 30 or 31 days in the month, we would always consider 30 days. In this example we accrue 10 days for both months.
- 30/Actual, we consider 30 days in every month but the real number of days during the year.
- **Interest over grace period.** You can decide whether you want to accrue interest over grace period or if you don't. In case you don't the client would not pay anything during grace period neither interest nor principal

Advanced parameters

In this section you are choosing the following characteristics for your product:

- **Amount.** The unique value or the range of value inside which the loan amount to be disbursed will have to be.
- **Interest Rate.** The unique value or range of value the interest rate can have for this type of loan product.
Important! The interest rate mentioned here is the interest per year.
- **Number of installments.** The number of repayment in which the client will have to repay his loan.

Loan Cycle usage

By clicking the button on the left of the advanced parameters you can define specific advanced parameters as per the cycle of the client. Many institutions apply some policies to give more flexibility on the products to the clients having already been through a certain number of loan cycles.

Advanced parameters

☒ Use loan cycle

Loan cycles

Use: Special (1)

New loan cycle

Cycle objects:

Loan amount (3)

Interest rate

Number of installments

Cycle	Min	Max
1	5000	10000
2	5000	15000
3	5000	20000

Add cycle (2)

Remove cycle

Cycle properties

Min:

Max:

Save cycle parameters (4)

Cancel

Save

Close

Loan advanced parameters as per loan cycle

Once activated an additional window appears. You can define parameters specific by loan cycles as follow:

If it is the first time you are using this section, you should click on “new loan cycle” to create a new loan cycle configuration (1).

You then have to configure the 3 objects Loan amount, Interest rate and Number of installments as per loan cycles. (2 & 3) You need to have at least the loan cycle one defined for all 3 objects to be able to save a configuration (4).

Please note that to be able to save a configuration you need to have at least the cycle 1 configured for all the objects.

You are configuring the loan cycle from 1 and up. The properties related to the highest cycle number you define will apply as well for all upper cycles. For example on the image above, all loans with a loan cycle equal or above 3 will be applied a loan amount range between 5000 and 20000.

4.1.2 Fees

Edit Loan Product

Main parameters | **Fees** | Exotic installments | Line of credit | Guarantees | Credit insurance

Entry fees (up to 10 items)

☒ Use loan cycle Loan cycle: 1 From 2

Name	Min	Max	Value	Rate
Starting fee			300	False
Admin Fee			500	False

Late fees (% of base per day)

on total loan amount*

Min: or value: 0 on OLB* Min: or value: 0

Max: Max:

on Overdue principal* on Overdue interest*

Min: or value: 0,1 Min: or value: 0,1

Max: Max:

Grace period of late fees *: 0

Anticipated Total Repayment (ATR) and Anticipated Partial Repayment (APR) Fees

ATR fees* Base for ATR fees*

Min: or value: 0 ☒ % on OLB ☐ % on interest

Max: ☐ % on prepaid principal

APR fees* Base for APR fees*

Min: or value: 0 ☒ % on OLB ☐ % on interest

Max: ☐ % on prepaid principal

Loan product fee definition

Through this section you define the fee structure of the loan product. 3 types of fee can be configured here:

1. **Entry Fees.** They are applied to the loan at the disbursement level. You give these fees a name and affect them either a range of possible value or a fixe value like for previous parameters. In addition the column "rate" enables you to define these fees either as a fixed value (rate=false) either as a percentage of the disbursed amount (rate=true). These fees like advanced parameters can be configured as per loan cycles. For example in the screen shot above, we see that all loans with a loan cycle of 2 will be applied 1 starting fee of 300 and one admin fee of 500.
2. **Late fees.** The fees are applied to clients coming late for repayment and are accrued on daily basis as a percentage of some key parameters of the loan. These parameters are the following:
 - Total loan amount
 - OLB
 - Overdue Principal
 - Overdue Interest

Like for previous parameters the user can defined either a range of value either a fixed value.

The global late fee consists in the sum of the four previous fees.

3. **Fee grace period.** In addition you can define grace period during which the client will not be applied penalty. In example, this one is defined at 3, meaning that a client coming 1,2 or 3 days after planned repayment date will not be applied penalty, but from 4 days he will directly be applied 4 days of penalties
4. **Anticipated repayments.** In case of payment done before the expected date the system can as well charge additional commission to the client. These are to be defined at the bottom of the window:

Anticipated Total Repayment (ATR) and Anticipated Partial Repayment (APR) Fees

ATR fees*

Min: or value :

Max:

Base for ATR fees*

☒ % on OLB
☐ % on interest

APR fees*

Min: or value :

Max:

Base for APR fees*

☐ % on OLB ☒ % on prepaid principal
☐ % on interest

- **Anticipated total repayment.** Amount charged in case the client is paying off his full loan before the expected date. The commission is defined as a percentage of OLB closed off or as a percentage of the % not paid. In this example the client is charge 1% of all remaining OLB

Repayment

Details

Contract Code: DEF/14/default-4/103/879

Name of the client: Hensley Spaulding

Installment number: 1

Date: 7/2014 ☒ Total repayment

Payment method: Cash

Amount

Min: 0 Max: 1 020,49

[Amount to go back normal 10,49](#)

Type of repayment:

☐ Keep schedule ☒ Do not keep schedule

Event

Principal: 1 000,00 JMD

Interest: 10,49 JMD

☐ Disable automatic calculation

Penalties: 0,00 JMD

Commissions: 10,00 JMD

☐ Disable automatic calculation

Comment: (optional)

- **Anticipated partial repayment.** The client is repaying only one portion of the principal still expected to be paid. A commission is applied as a percentage of the OLB at the moment of prepayment, as a percentage of the prepaid principal or as a % of the interest which should have been paid. In the example here below the client is being charged 1% on the prepaid principal.

Important note: If the system of fee you are using doesn't correspond to one of the system described above, OPENCBS can customize it for you. Contact us to get full details.

4.1.3 Exotic Installments

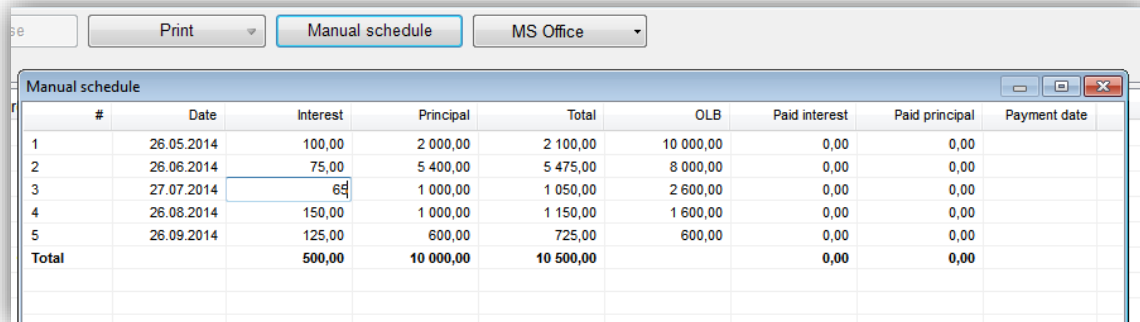
In next tab the user has capacity to define more "exotic schedule". By selecting "use exotic schedule" you can define the loan schedule by defining yourself how much of total interest and total principal have to be collected at each installment of the loan.

N°	Principal (%)	Interest (%)
1	20	20
2	54	15
3	10	10
4	10	30
5	6	25

N°	Date	Interest payment	Principal repayment	Installment Total	OLB
1	5/26/2014	100,00	2 000,00	2 100,00	8 000,00
2	6/26/2014	75,00	5 400,00	5 475,00	2 600,00
3	7/27/2014	50,00	1 000,00	1 050,00	1 600,00
4	8/26/2014	150,00	1 000,00	1 150,00	600,00
5	9/26/2014	125,00	600,00	725,00	0,00
		500,00	10 000,00	10 500,00	

In the example above we select a type of schedule called Special 5 installments which has its specific partition of payment through 5 installments. The schedule is then generated as per this rule. This type of product can be especially useful for institutions working with agriculture workers with very specific seasonality of their activity.

If you select the option "Allow flexible schedule" you will have capacity before disbursement to perform manual adjustment of the schedule like you would do in an excel sheet.

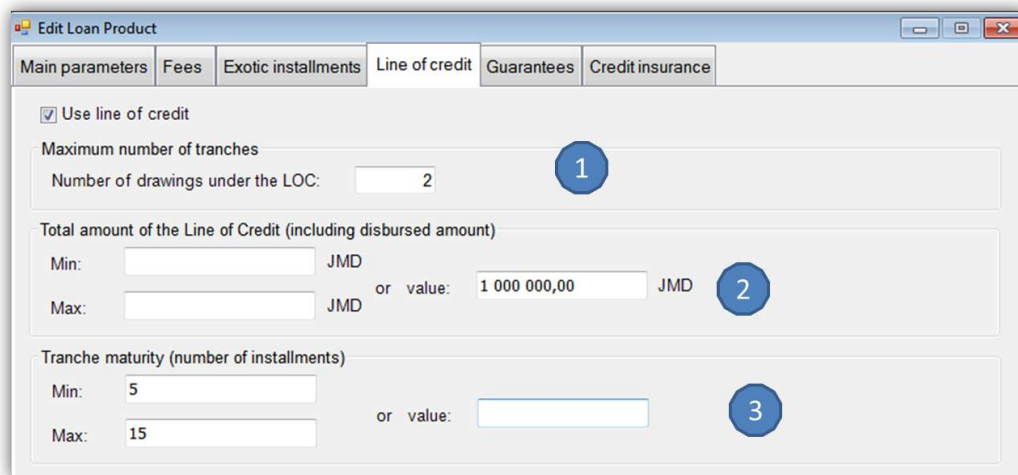


#	Date	Interest	Principal	Total	OLB	Paid interest	Paid principal	Payment date
1	26.05.2014	100,00	2 000,00	2 100,00	10 000,00	0,00	0,00	
2	26.06.2014	75,00	5 400,00	5 475,00	8 000,00	0,00	0,00	
3	27.07.2014	69,00	1 000,00	1 050,00	2 600,00	0,00	0,00	
4	26.08.2014	150,00	1 000,00	1 150,00	1 600,00	0,00	0,00	
5	26.09.2014	125,00	600,00	725,00	600,00	0,00	0,00	
Total		500,00	10 000,00	10 500,00		0,00	0,00	

4.1.4 Line of credit

The line of credit option enables you to disburse money to your clients in several tranches. If you select this option you should define the following 3 parameters:

1. **Maximum number of tranches.** In addition to the initial disbursement the number of type you will be allowed to disburse additional money to your client. In our example 2 time.
2. **TOTAL amount of the line of credit.** Define the range of amounts or a fixed value of what will be the amount of your whole line of credit.
3. **Tranche maturity.** Allowed maturity of the additional tranches disbursed to the loan.



Edit Loan Product

Line of credit

☒ Use line of credit

Maximum number of tranches

Number of drawings under the LOC: 1

Total amount of the Line of Credit (including disbursed amount)

Min: JMD or value: JMD 2

Max: JMD

Tranche maturity (number of installments)

Min: or value: 3

Max:

Then at loan level you have capacity to add tranches to the loan through the repayment window.

N°	Date	Interest	Principal	Total	Paid principal	Payment date
1	26.05.2014	2 600,00	0,00	2 600,00	0,00	
2	26.06.2014	2 600,00	0,00	2 600,00	0,00	
3	27.07.2014	2 600,00	32 500,00	35 100,00	0,00	
4	26.08.2014	2 600,00	32 500,00	35 100,00	0,00	
5	26.09.2014	2 600,00	32 500,00	35 100,00	0,00	
6	26.10.2014	2 600,00	32 500,00	35 100,00	0,00	
7	26.11.2014	2 600,00	32 500,00	35 100,00	0,00	
8	26.12.2014	2 600,00	32 500,00	35 100,00	0,00	
9	26.01.2015	2 600,00	32 500,00	35 100,00	0,00	
10	26.02.2015	2 600,00	32 500,00	35 100,00	0,00	

4.1.5 Guarantees

You define here if you want to require from your clients to have additional guarantees. These guarantees can be of 3 types:

- **Guarantor.** An individual registered inside the database and guaranteeing the client at a certain amount level. In case of non-repayment this person would have to help the client repay.
- **Collateral.** A physical object (Car, house, gold etc...) put as guarantee by the client. In case of non-repayment, this asset could be sold to repay the loan.
- **Mandatory savings.** The client must have spared a certain amount of money before being able to receive a loan.

In this window you will define requirements in term of guarantees as follow:

☒ Use guarantors and collaterals

Total

Minimum percentage of guarantors + collaterals: % of a loan amount **1**

☒ Set separate values for guarantors and collaterals

Separate

Minimum percentage for guarantors: % of a loan amount **2**

Minimum percentage for collaterals: % of a loan amount

Note: Put '0' value if you do not want to use guarantors or collaterals.

☒ Use compulsory savings

Compulsory saving amount

Type: ☐ Flat ☒ Rate **3**

Min: or value:

Max:

1. The client should use guarantor or collateral to cover a certain percentage of the loan amount disbursed. The client has choice but this should be covered.

- The client should cover X percent of his loan amount with a guarantor and Y percent with a collateral. In our example (50% and 50%), you don't leave choice to the client, he needs both.
- You require a mandatory saving of your client as a percentage of the loan amount disbursement or as a fixed value.

4.1.6 Credit Insurance

Last option, you can define a credit insurance to be paid by the client at the time of disbursement. You define a range of percentage on disbursed amount possible and this amount will be taken as a commission at the time of disbursement.

Edit Loan Product

Min: 1,00 %

Max: 3,00 %

HORACE FORBES - DEF/14/test-2/102/886

Date	Entry date	Type	Principal	Interest	Commissions	Penalties	Overdue principal	Overdue days	Cancelable	User	Exported date	K
4/26/2014 2:48:3...	4/26/2014	LOVE	-	-	-	-	-	-	True	admin admin	-	1
4/26/2014 2:48:4...	4/26/2014	LODE	10 000...	-	0,00	-	-	-	True	admin admin	-	1
4/26/2014 2:48:4...	4/26/2014	LOIE	0,00	-	200,00	-	-	-	True	admin admin	-	1

4.2 Loan Disbursement process

4.2.1 Choose client and loan product

Start by opening the profile of the client you want to disburse a loan to. Go to the tab called contract and used the "add loan" button located on the right of your screen. You will see all available product appear. Select the one you want to give to your client.

Person [DAMANE MALCOLM]

Type	Code	Status	Amount	OLB	Curren...	Interest rate	Installment type	Number of installments	Creation Date	Start date	Close
C	DEF/1...	Closed	20 000,00	0,00	JMD	5,00	Monthly	6	2/26/2013	2/26/2013	4/2/2013

4.2.2 Define loan details

At this step you have to define the precise parameters of the loan to be disbursed to your client. These parameters are conditioned by the loan product parameters.

The screenshot shows the 'Person [DAMANE MALCOLM]' window with the 'Loan details' tab selected. The form contains the following fields and values:

- Loan Type: test
- Contract code: (empty)
- Amount: 10 000,00 (Min: 10000,00, Max: 100000,00)
- Interest rate per period: 1,00 (Min: 1,00, Max: 1,00)
- Grace period: 0
- Number of installments: 10 (Min: 10, Max: 10)
- Installment type: Monthly
- Loan officer: Marco Brown
- Disbursement date: 4/26/2014
- Preferred first installment date: 5/26/2014 (Monday)
- Funding line: DEFAULT_FUNDING_LINE
- Economic activity*: Merchandising
- Loan purpose: Buy a car

Buttons at the bottom include Save (8), Preview (5), Disburse, Print, Manual schedule, and MS Office. Below the form is a table of installments:

N°	Date	Interest payment	Principal repayment	Installment Total	OLB
1	5/26/2014	100,00	1 000,00	1 100,00	9 000,00
2	6/26/2014	100,00	1 000,00	1 100,00	8 000,00
3	7/27/2014	100,00	1 000,00	1 100,00	7 000,00
4	8/26/2014	100,00	1 000,00	1 100,00	6 000,00
5	9/26/2014	100,00	1 000,00	1 100,00	5 000,00
6	10/26/2014	100,00	1 000,00	1 100,00	4 000,00
7	11/26/2014	100,00	1 000,00	1 100,00	3 000,00
8	12/26/2014	100,00	1 000,00	1 100,00	2 000,00
9	1/26/2015	100,00	1 000,00	1 100,00	1 000,00
10	2/26/2015	100,00	1 000,00	1 100,00	0,00
		1 000,00	10 000,00	11 000,00	

You should define:

1. The main parameters: amount, Interest rate, grace period, number of installments.
2. You should define which loan officer is in charge of this loan.
3. Choose the disbursement date as well as the preferred first installment date. In case of declining schedule the interest payment will be impacted accordingly.
4. Affect the loan to a funding line, choose the type of activity this loan is dedicated to and add a comment if required.
5. Click on preview to see the schedule appear.
6. Make sure that the schedule match exactly with what you are expecting.
7. Make sure that in other tabs you have been filling all the mandatory custom field you may have defined.
8. Click on the save button.

Note: If you enabled it at product level you can do some manual adjustment on the schedule by using the button manual schedule. In this section you can modify the expected interests the way you want as well as the expected principal provided the total amount remains equal to the disbursed amount.

#	Date	Interest	Principal	Total	OLB	Paid interest	Paid principal	Payment date
1	26.05.2014	100,00	1 000,00	1 100,00	10 000,00	0,00	0,00	
2	26.06.2014	100,00	1 000,00	1 100,00	9 000,00	0,00	0,00	
3	27.07.2014	100,00	1 000,00	1 100,00	8 000,00	0,00	0,00	
4	26.08.2014	100,00	1 000,00	1 100,00	7 000,00	0,00	0,00	
5	26.09.2014	100,00	1 000,00	1 100,00	6 000,00	0,00	0,00	
6	26.10.2014	100,00	900,00	1 000,00	5 000,00	0,00	0,00	
7	26.11.2014	100,00	1 000,00	1 100,00	4 100,00	0,00	0,00	
8	26.12.2014	100,00	1 000,00	1 100,00	3 100,00	0,00	0,00	
9	26.01.2015	100,00	1 000,00	1 100,00	2 100,00	0,00	0,00	
10	26.02.2015	100,00	1 000,00	1 100,00	1 100,00	0,00	0,00	
Total		1 000,00	9 900,00	10 900,00		0,00	0,00	

4.2.3 Define Advance settings

Here have to be defined complementary parameters of the loan to be disbursed provided they have been enabled at product definition level. If these parameters can be adjusted, they will appear in white background, if they have been fixed at product level their cells will be greyed.

OpenCBS - [Person [JASON CHAMBERS]]

Settings Configuration Security Products Client and Contract Fast Repayment Modules Accounting Reports Window Help

Person [JASON CHAMBERS] Close

Details Contracts Loan details **Advanced settings** Guarantors and collaterals

LOC amount 1 000 000,00 Min: 1000000,00 JMD Max: 1000000,00 JMD Credit insurance: 2 Min: 1,00 % Max: 3,00 %

Early fees

ATR 0 % of OLB

APR 0 % of OLB

Late Fees - Grace Period (0)

Total loan amount 0 OLB 1

Overdue principal 0 Overdue interest 0

Entry fees

Name	Value	% / JMD	Amount
Entry Fee	2,00	%	200,00
Admin Fee	200,00	JMD	200,00
Total			400,00 JMD

Compulsory savings

Amount 0

Link to savings account Not selected Details

Comments

Good potential client. Recommended to loan committee.

Save

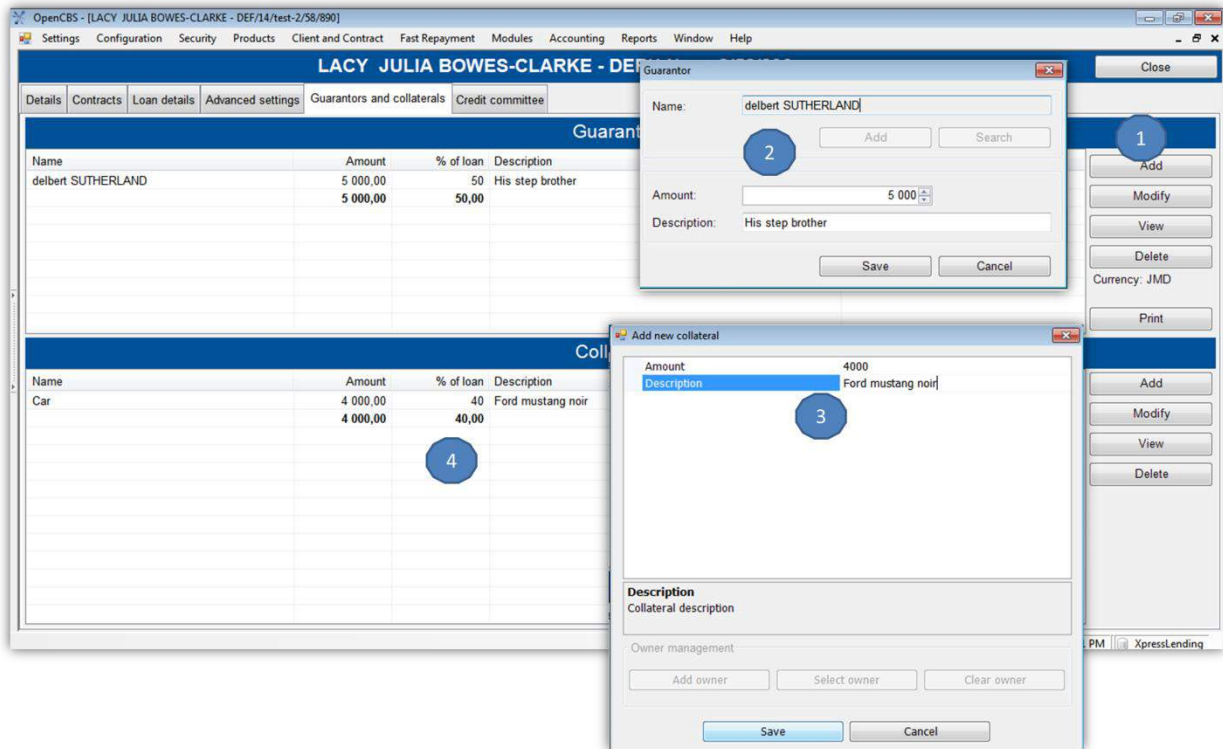
The following parameters can be adjusted:

1. The amount of the line of credit available for the client and the percentage of credit insurance which will have to be paid by client at disbursement level. In our example just the credit insurance can be changed in a range from 1% to 3%. The LOC amount is fixed at 1 million.
2. The early fees and late fees for this loan.
3. The entry fees defined for this loan. Please note that in our case they can be modified.

4. In case compulsory savings is required, the system will propose you here to select the saving account belonging to the client which will be attached to this loan
5. A comment section for the credit agent to add any additional comment to be transmitted to the managers in charge of taking decision on the loan.
6. Click save to go to next step.

4.2.4 Add Guarantors and collaterals

If this product requires either guarantor or collateral, you will have to define here what these guarantees are for the client:



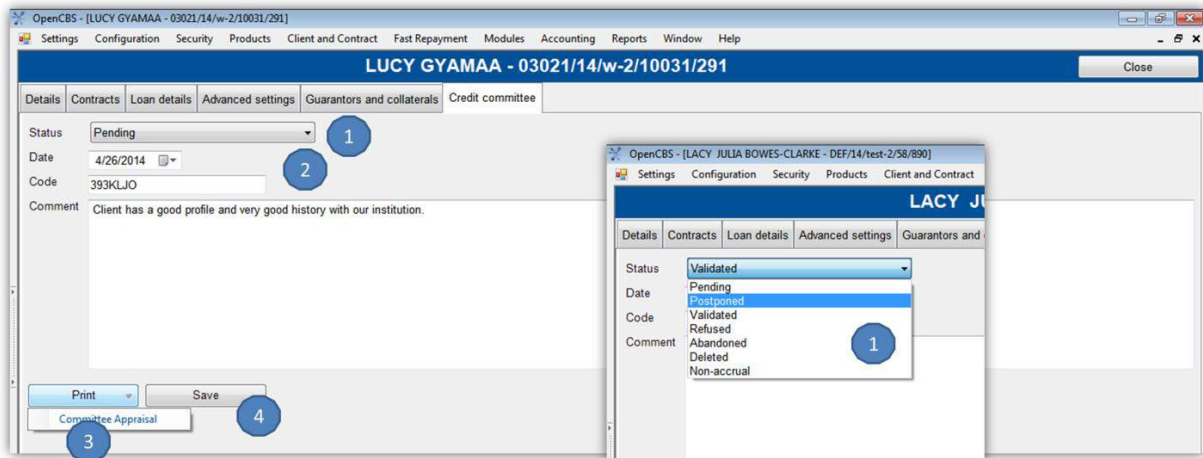
Proceed as follow:

9. Use the right side menu to add, modify, view or delete this item. The view option is to be used by users who want to see the information of the guarantee but don't have right to modify this information.
10. To affect a guarantor to the loan, you can either select an individual already existing in the database by choosing the option "search" in the menu item or adding a new individual by clicking on "add". In addition you will have to define what amount this individual guarantee and you can as well add a description to understand what the relation the guarantor has with the client.
11. For collaterals, you simply have to fill the collateral indicators as they were defined in collateral product section.
12. You can then see the guarantees appear in the table with the percentage of the total loan amount they can cover. You should make sure these percentages are enough to cover the loans as per the requirements defined at product level.

Once this is completed you can click on credit committee tab.

4.2.5 Credit Committee tab

The loan now has to be validated by the loan committee. This section gathers info about this step.



13. At start the status of the loan is set on “pending”. From the discussion held during committee, this one will have to change the loan status to one of the following:
 - **Postponed.** Will not be disbursed now, but might be in the future.
 - **Validated.** Loan ready for disbursement. Go back to loan details tab to confirm.
 - **Refused.** The committee decided not to disburse the loan.
 - **Abandoned.** The loan will not be disbursed for another reason not related to Credit committee decision, for example the client eventually decided he doesn’t need a loan anymore.
 - **Deleted.** The loan was just a test, we don’t want it to appear in any report.
14. You have to define here date of loan committee, which cannot be after the date of planned disbursement, the code of the committee and comments to explain decision of the committee.
15. A committee appraisal or any custom report related to credit committee can be printed here.
16. Once everything is clear, you save the decision of the loan committee.

Note: If the committee is changing his decision, the status can be changed again by clicking the button update replacing “save” after the decision has been saved once.

4.2.6 Disbursement process

To disburse you should get back on the loan details tab.

The screenshot displays the OpenCBS software interface for loan management. The main window is titled "LACY JULIA BOWES-CLARKE - DEF/14/test-2/58/890". The "Loan details" tab is selected. A "Disbursement" dialog box is open, showing the following fields:

- Disbursement method: **Cash** (highlighted with a blue circle 2)
- Contract Code: DEF/14/test-2/58/890
- Funding line: DEFAULT_FUNDING_LINE
- Amount: 10 000.00 JMD (highlighted with a blue circle 3)
- Entry fees: 400.00 JMD
- Comment: Ready to go. (highlighted with a blue circle 5)

Numbered callouts indicate the following steps:

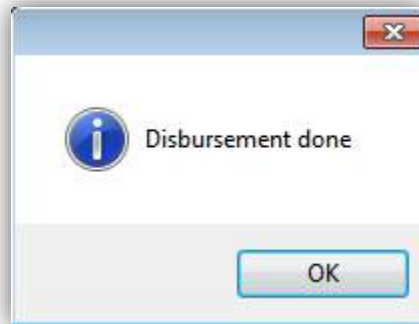
1. Click on the "Disburse" button in the main window.
2. Select the "Disbursement method" (Cash).
3. Enter the "Amount" (10 000.00 JMD).
4. Check the "Disable entry fees" checkbox.
5. Add a "Comment" (Ready to go.).
6. Click on the "Print" button in the dialog box.

Other windows shown include:

- Disbursement Cash Receipt:** A receipt showing the amount received (10,000.00) and the client name (LACY GYAMAA).
- Individual loan agreement:** A document titled "Individual loan agreement" with contract code DEF/14/test-2/58/890, detailing the loan terms and conditions.
- Contract History:** A table showing the contract history for 03021/14/w-2/10031/291, including client name, amount, and schedule.

Proceed as follow to confirm the disbursement:

1. Click on disbursement button, for the disbursement window to appear.
2. Start by defining the method used to disburse the loan between cash, cheque, direct debit, wire transfer, debit card, voucher or savings.
3. You find below a preview of contract code, Funding line, amount and early fee to be charged. Ensure that all these parameters are matching with your expectations.
4. If you are authorized you can disable the entry fee for this loan.
5. Add a comment on the disbursement process.
6. Before confirming you can disburse a schedule, you can print a disbursement receipt and a standard contract format for the client. These documents can be customized upon request, contact us for getting quote.
7. Click on ok to confirm the disbursement.



4.3 Loan cycle management

After disbursement an additional tab called loan repayment appears. In order to test the loan cycle management by projecting the software in the software, you can go to Settings (upper left menu)>Change application date.

4.3.1 Repayment Schedule

OpenCBS - [LACY JULIA BOWES-CLARKE - DEF/14/test-2/58/890]

Settings Configuration Security Products Client and Contract Fast Repayment Modules Accounting Reports Window Help

LACY JULIA BOWES-CLARKE - DEF/14/test-2/58/890 Close

Details Contracts Loan details Advanced settings Guarantors and collaterals Credit committee **Loan repayment**

Status
Currency: JMD
OLB: 8 000.00
Interests due: 800.00

Repayment schedule Events

N°	Date	Expected interests	Expected principal	Installment total	OLB	Paid interests	Paid principal	Paid date	Late days	Comment
1	5/26/2014	100.00	1 000.00	0.00	9 000.00	100.00	1 000.00	4/26/2014	-	
2	6/26/2014	100.00	1 000.00	0.00	8 000.00	100.00	1 000.00	4/26/2014	-	
3	7/27/2014	100.00	1 000.00	1 100.00	7 000.00	-	-	-	-	
4	8/26/2014	100.00	1 000.00	1 100.00	6 000.00	-	-	-	-	
5	9/26/2014	100.00	1 000.00	1 100.00	5 000.00	-	-	-	-	
6	10/26/2014	100.00	1 000.00	1 100.00	4 000.00	-	-	-	-	
7	11/26/2014	100.00	1 000.00	1 100.00	3 000.00	-	-	-	-	
8	12/26/2014	100.00	1 000.00	1 100.00	2 000.00	-	-	-	-	
9	1/26/2015	100.00	1 000.00	1 100.00	1 000.00	-	-	-	-	
10	2/26/2015	100.00	1 000.00	1 100.00	0.00	-	-	-	-	

Repay Reschedule Manual schedule Add tranche Write off Print

admin (SUPER) 26/04/2014 3:12:31 PM XpressLending

In this section you see:

1. The current status of the loan with its currency, the current OLB and the remaining interests due.
2. The loan schedule as it is today, with the repaid installment highlighted in green, with information on paid interests, paid principal, paid date, late days and comments, all this information being filled at repayment level.
3. Buttons enabling to perform repayments and other special operations

4.3.2 Repayments

Clicking Repay the following window is appearing.

Repayment Details

Contract Code: DEF/14/test-2/58/890

Name of the client: LACY JULIA BOWES-CLARKE

Installment number: 4

Date: 4/26/2014 ☐ Total repayment

Payment method: Voucher

Amount: 2 000,00 (Min: 0, Max: 7 700,00)

Amount to go back normal 0,00

Type of repayment: ☒ Keep schedule ☐ Do not keep schedule

Event

Principal: 2 000,00 JMD

Interest: 0,00 JMD

Disable automatic calculation ☐

Penalties: 0,00 JMD

Commissions: 0,00 JMD

Disable automatic calculation ☐

Comment: (optional) Prepay, because will be out next week.

N°	Date	Interest repayment	Principal repayment	Installment total	OLB	Paid interest	Paid principal	Paid date
1	5/26/2014	100,00	1 000,00	0,00	9 000,00	100,00	1 000,00	4/26/2014
2	6/26/2014	100,00	1 000,00	0,00	8 000,00	100,00	1 000,00	4/26/2014
3	7/27/2014	100,00	1 000,00	0,00	7 000,00	100,00	1 000,00	4/26/2014
4	8/26/2014	50,00	714,29	764,29	4 285,71	0,00	0,00	4/26/2014
5	9/26/2014	50,00	714,29	764,29	3 571,42	0,00	0,00	-
6	10/26/2014	50,00	714,29	764,29	2 857,13	0,00	0,00	-
7	11/26/2014	50,00	714,29	764,29	2 142,84	0,00	0,00	-
8	12/26/2014	50,00	714,29	764,29	1 428,55	0,00	0,00	-
9	1/26/2015							
10	2/26/2015							

Type of repayment: ☒ Keep schedule ☐ Do not keep schedule

Comment: (optional)

OK Cancel

To perform a repayment, follow the steps:

1. Make sure that contract code, name of client, installment number and date are correct. Please note that you can fully repay the loan by simply clicking the option "total repayment". Choose as well the payment method used by the client.
2. Enter the amount the client is about to repay. A link below the field enables you to get automatically the amount the client has to pay to bring his loan back "to normal" in case the client was late in his repayments.
3. Here you have to decide whether the system should recalculate the interest to be paid as per the decreased OLB or if the schedule should remain the same. This is to be used for flat schedule and in case of prepayment for loans with declining interests. See above the 2 examples.
4. Here you see the distribution of the repayment amount between principal, interests, penalties and commissions. The system will suggest automatically amount as per the parameters predefined at product level. In case you have authorization, this automated calculation can be disabled and you can enter the amount manually. In case your method of partition of the amount between these categories

is not covered by default by our system, contact OPENCBS team and we will customize the repayment logic for you.

5. Add additional comments if required.
6. The schedule as it would be after disbursement is available as a preview. Once you are sure everything is all right click ok to confirm the repayment.

4.3.3 Events

The events tab enables the back office to check in details history of operations performed on the loan.

The screenshot shows the OPENCBS software interface. The main window is titled "LACY JULIA BOWES-CLARKE - DEF/14/test-2/58/890". The "Events" tab is selected, displaying a table of loan events. The table has columns: Date, Entry date, Type, Principal, Interest, Commissions, Penalties, Overdue principal, Overdue days, Cancelable, User, and Exported date. A confirmation dialog box is open, asking "Do you confirm you want to come back to this state?". The dialog contains a table with columns: N°, Date, Interest repayment, Principal repayment, Paid interest, Paid principal, and Paid date. The dialog also has a "Comment" field with the text "Mistake of manipulation" and "Show current installments" checkbox. The "Confirm" and "Cancel" buttons are at the bottom.

Date	Entry date	Type	Principal	Interest	Commissions	Penalties	Overdue principal	Overdue days	Cancelable	User	Exported date
4/26/2014 3:06:5...	4/26/2014	LOVE	-	-	-	-	-	-	True	admin admin	-
4/26/2014 3:06:5...	4/26/2014	LOVE	-	-	-	-	-	-	True	admin admin	-
4/26/2014 3:08:5...	4/26/2014	LODE	10 000	-	0.00	-	-	-	True	admin admin	-
4/26/2014 3:08:5...	4/26/2014	LEE0	-	-	200.00	-	-	-	True	admin admin	-
4/26/2014 3:08:5...	4/26/2014	LEE1	-	-	200.00	-	-	-	True	admin admin	-
4/26/2014 3:08:5...	4/26/2014	LOIE	0.00	-	100.00	-	-	-	True	admin admin	-
4/26/2014 3:11:45...	4/26/2014	LODE	10 000...	-	0.00	-	-	-	True	admin admin	-
4/26/2014 3:11:45...	4/26/2014	LEE0	-	-	200.00	-	-	-	True	admin admin	-
4/26/2014 3:11:45...	4/26/2014	LEE1	-	-	200.00	-	-	-	True	admin admin	-
4/26/2014 3:11:45...	4/26/2014	LCIE	0.00	-	-	-	-	-	True	admin admin	-
4/26/2014 3:12:2...	4/26/2014	RGLE	1 000.00	100	-	-	-	-	-	-	-
4/26/2014 3:12:3...	4/26/2014	RGLE	1 000.00	100	-	-	-	-	-	-	-
4/26/2014 3:13:5...	4/26/2014	RGLE	1 000.00	100	-	-	-	-	-	-	-

N°	Date	Interest repayment	Principal repayment	Paid interest	Paid principal	Paid date
1	5/26/2014	100.00	1 000.00	100.00	1 000.00	4/26/2014
2	6/26/2014	100.00	1 000.00	100.00	1 000.00	4/26/2014
3	7/27/2014	100.00	1 000.00	-	-	-
4	8/26/2014	100.00	1 000.00	-	-	-
5	9/26/2014	100.00	1 000.00	-	-	-
6	10/26/2014	100.00	1 000.00	-	-	-
7	11/26/2014	100.00	1 000.00	-	-	-
8	12/26/2014	100.00	1 000.00	-	-	-
9	1/26/2015	100.00	1 000.00	-	-	-
10	2/26/2015	100.00	1 000.00	-	-	-

Different back office tasks can be performed through this section:

1. You can see here all events generated by the system with the following indicators: Date&Time, Entry Date, Type, Principal, Interest, Commissions, Penalties, Overdue Principal, Overdue days, Cancelable, User, Exported date, ID of this event, Installment number, Comment, Payment method, deleted. Note that depending of the type of events some fields stay blank as not applicable
2. The events can be of several types. LOVE is disbursement, RGLE regular repayment. For accessing full list of event go to accounting -> accounting rules and click on all to display all the type of events existing.
3. Loans deleted are highlighted in soft green.
4. To delete the last event performed, click on "delete most recent event". An additional window will appear where you can visualize the schedule as it would be after deletion. Add a comment and confirm. You can delete several events if an issue occurred "a few repayments ago". However for more complex schedule fixing contact OPENCBS support desk.

5. You can here as well cancel a penalty. Select the installment on which the penalty have been charged and click on this button. It will delete previous event and create a new one re-affecting penalty amount to the principal or interests.

4.4 Special operations

4.4.1 Reschedule

The rescheduling functionality allows user to change the active part of the repayment schedule according to the new requirements.

The active part is actually the remaining schedule, the installments that are not paid yet. The rescheduling allows you to change interest rate for those remaining installments, to change number of installments, to add grace period and change dates of installments if necessary.

Details	Contracts	Loan details	Advanced settings	Guarantors and collaterals	Credit committee	Loan repayment		
Status								
Currency: USD								
OLB: 7 605,11								
Interests due: 467,23								
Repayment schedule		Events						
N°	Date	Expected intere...	Expected principal	Installment total	OLB	Paid intere...	Paid princi...	Paid d
1	7/25/2014	286,03	2 394,89	0,00	7 605,11	286,03	2 394,89	7/25/2014
2	8/26/2014	232,53	2 458,25	2 690,78	5 146,86	-	-	-
3	9/26/2014	157,37	2 533,41	2 690,78	2 613,45	-	-	-
4	10/24/2014	77,33	2 613,45	2 690,78	0,00	-	-	-
<div><div></div><div>111</div><div></div></div>								
Repay		Reschedule		Manual schedule		Add tranche		Write off
Print								

Click button Reschedule to see the Contract rescheduling window:

#	Date	Interest	Principal	Total	OLB	Paid interest	Paid principal	Payment date
1	25.07.20...	286,03	4 789,78	0,00	10 000,00	286,03	4 789,78	25.07.20...
2	25.08.20...	258,37	0,00	258,37	7 605,11	0,00	0,00	
3	25.09.20...	258,37	2 448,94	2 707,31	7 605,11	0,00	0,00	
4	24.10.20...	169,52	2 537,79	2 707,31	5 156,17	0,00	0,00	
5	25.11.20...	88,95	2 618,38	2 707,33	2 618,38	0,00	0,00	

By default, you see the current repayment schedule and controls you can use to change it. These are the parameters that control the rescheduling operation:

- **New installments.** Defines how many installments have to be in active part of schedule.
- **New interest rate.** Applies new interest rate for the active part of schedule.
- **Grace period.** Number of installments for new grace period.
- **Charge interest during grace period.** Able/disable the charge of interests during the grace period. Not relevant if the grace period is 0.
- **Start date.** Defines the date when the user proceeds rescheduling and means interest calculations and active part of the schedule will react on this option.
- **First repayment date.** Date from which active part the schedule has to start. This option will affect interest calculation for the first active installment, the system will calculate how many days between **Start date** and **First repayment date**.

On the two screenshots above, the loan has been rescheduled from a 3 installment active part at 36% interest rate to a 4 installments active part at 40% interest rate and with one grace period.

4.4.2 Manual Schedule adjustment

If the changes you would like to perform on the schedule are not covered by the above described reschedule function, you can change manually the schedule using this function.

#	Date	Interest	Principal	Total	OLB	Paid interest	Paid principal	Payment date
1	26.05.2014	100,00	1 000,00	1 100,00	10 000,00	0,00	0,00	
2	26.06.2014	100,00	1 000,00	1 100,00	9 000,00	0,00	0,00	
3	27.07.2014	100,00	1 000,00	1 100,00	8 000,00	0,00	0,00	
4	26.08.2014	100,00	1 000,00	1 100,00	7 000,00	0,00	0,00	
5	26.09.2014	100,00	1 000,00	1 100,00	6 000,00	0,00	0,00	
6	26.10.2014	100,00	1 000,00	1 100,00	5 000,00	0,00	0,00	
7	26.11.2014	100,00	1 000,00	1 100,00	4 000,00	0,00	0,00	
8	26.12.2014	100,00	1 000,00	1 100,00	3 000,00	0,00	0,00	
9	26.01.2015	100,00	1 000,00	1 100,00	2 000,00	0,00	0,00	
10	26.02.2015	100,00	1 000,00	1 100,00	1 000,00	0,00	0,00	
Total		1 000,00	10 000,00	11 000,00		0,00	0,00	

You can in this section modify the schedule like in an excel sheet. The only constrain is that you should keep the total of principal to be repaid equal to the total loan amount.

4.4.3 Tranches

This function is enabled only if a credit line has been configured for this product.

#	Date	Interest	Principal	Total	OLB	Paid interest	Paid principal	Payment date
1	26.05.2014	700,00	0,00	700,00	70 000,00	0,00	0,00	
2	26.06.2014	700,00	7 777,78	8 477,78	70 000,00	0,00	0,00	
3	27.07.2014	700,00	7 777,78	8 477,78	62 222,22	0,00	0,00	
4	26.08.2014	700,00	7 777,78	8 477,78	54 444,44	0,00	0,00	
5	26.09.2014	700,00	7 777,78	8 477,78	46 666,66	0,00	0,00	
6	26.10.2014	700,00	7 777,78	8 477,78	38 888,88	0,00	0,00	
7	26.11.2014	700,00	7 777,78	8 477,78	31 111,10	0,00	0,00	
8	26.12.2014	700,00	7 777,78	8 477,78	23 333,32	0,00	0,00	
9	26.01.2015	700,00	7 777,78	8 477,78	15 555,54	0,00	0,00	
10	26.02.2015	700,00	7 777,76	8 477,76	7 777,76	0,00	0,00	

Adding a tranche works nearly like disbursing a new loan:

17. You define the amount of the tranche to be added to the already existing loan. You choose the number of installments and the grace period for the new schedule.
18. You select the interest rate of the tranche to be disbursed. You have the choice to apply this rate to the OLB remaining of previous disbursement or not. If you select this option all the OLB after adding of the tranche will be applied this interest. If not the interests of already disbursed tranches will remain unchanged. Method of payment of the tranche is to be defined here as well.
19. Enter here start date and date of first installment similarly than at disbursement level.
20. You have here a preview of what the schedule would be after adding of the tranche.

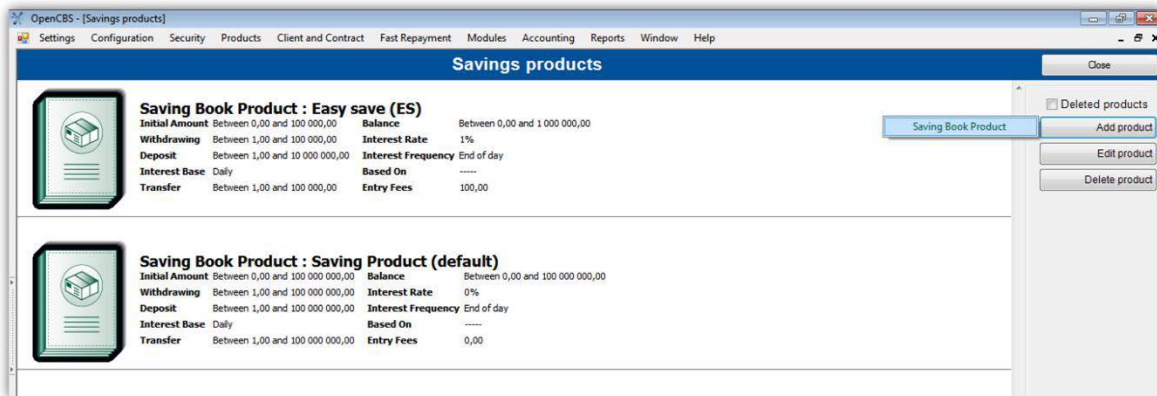
4.4.4 Write-off

The loan can be written off. By default the write off mode is “standard”. If you have specific accounting rules related.

5. Savings Management

5.1 Create/Edit Savings products

To create or edit a savings product go to the top menu section Products and click on “savings products”. You’ll see appear the list of existing savings products. For editing a product select it and click on edit product, for adding a new one click on add and select “Saving Book Product”.



The savings product creation window has 5 tabs with description below.

5.1.1 Main parameters

Savings book product

Main Parameters Transactions Fees Overdraft Term deposit

Name: Easy save Code: ES

Attach product to a specific client type

☒ All ☒ Sol. group ☒ Ind. ☒ Corp. ☒ Non sol. group

Attach product to currency: USD

Initial amount

Min: 0,00 Max: 100 000,00

Balance

Min: 0,00 Max: 1 000 000,00

Interest rate

Min: % Yearly Max: % Yearly or value: 1 365 % Yearly

Frequency

Accrual: Daily Calcul amount based on: Minimal amount

Posting: End of day

Save Close

In this section you define the main parameters of the savings product:

1. Product identity.

- Name of product to appear in reports and contracts;
- Code of product to be mentioned in contract code;
- Type of client this product can be affected to;
- Currency of this product.

2. Savings "size"

- Range of the initial amounts possible for the savings account;
- Range of balances possible for the savings account.

3. Interest

- Percentage of interest to be collected for every frequency period (defined below) and the equivalent in interest rate per year.

4. Frequency

- Frequency of accrual of interest or how often the client earns interest on his savings. Accruals can be daily, weekly or monthly.
- Posting frequency at which the interest collected is posted back in the account. This can be end of day, end of week, end of month or end of year.
- On what the calculation is based.

Note that the posting frequency is relevant only if the term deposit **option is not activated**, otherwise the term deposit rule will be applied.

5.1.2 Transactions

The screenshot shows the 'Savings book product' configuration window with the 'Transactions' tab selected. The window is divided into three main sections: 'Deposit parameters', 'Withdrawing', and 'Transfer'. Each section has a 'Min' and 'Max' input field. The 'Deposit parameters' section also includes a 'Transaction in:' dropdown menu (highlighted with callout 1) and a 'Cash deposit' dropdown menu. The 'Withdrawing' section includes a 'Withdrawal fees' section with 'Type' radio buttons for 'Flat' and 'Rate' (highlighted with callout 2). The 'Transfer' section includes a 'Transfer fees' section with 'Type' radio buttons for 'Flat' and 'Rate', and a dropdown menu for 'Intra-branch transfers' (highlighted with callout 3). The 'Save' and 'Close' buttons are at the bottom right.

In second tab you are defining the specifics of the transactions for this product:

21. Deposits

- You have to define the specifics for both cash and cheque transactions.
- The minimum and maximum amount of cash which can be deposited in one transaction.
- Amount of fee to be charged on deposits.

22. Withdrawing

- Range of amounts allowed to be withdrawn in one transaction.
- Fee amount or percentage charge on money withdrawal.

23. Transfer

- Range of amounts allowed to be transferred to another account in one transaction.
- Transfer fee amount of percentage for both inter-branch and intra-branch transactions.

5.1.3 Fees

Savings book product

Main Parameters Transactions **Fees** Overdraft Term deposit

Entry fees

Type: ☒ Flat ☐ Rate

Min: or value: 100,00

Max:

Reopen fees

Type: ☒ Flat ☐ Rate

Min: 0 or value:

Max: 100

Close fees

Type: ☒ Flat ☐ Rate

Min: or value: 100,00

Max:

Management fees

Type: ☒ Flat ☐ Rate

Min: or value: 100,00 Monthly

Max:

Save Close

Different types of fees to be charged on the savings product:

- **Entry fee.** Charged at creation of the saving product when the first deposit is being done.
- **Reopen fee.** If the product has been closed and required to be reopened, charge taken at reopening.
- **Close fees.** Fee charged to close the account.
- **Management fee.** Regular payment for the maintenance of the account.

5.1.4 Overdraft

The screenshot shows a software window titled "Savings book product" with a tabbed interface. The "Overdraft" tab is selected. It contains two main sections: "Fixed overdraft fees" and "Agio".

Fixed overdraft fees:

- Type: ☒ Flat ☐ Rate
- Min:
- Max:
- or value:

Agio:

- Type: ☐ Flat ☒ Rate
- Min:
- Max:
- or value:
- Frequency:

At the bottom right, there are "Save" and "Close" buttons.

You define here the fees related to overdraft loans:

- **Fixed overdraft fees.** Charged to the client when his account gets into overdraft, meaning from a positive to a negative balance.
- **Agio.** Amount charged daily to the client as a percentage of the negative balance of his account.

5.1.5 Term deposit

In this section you decide whether you want to activate the term deposit option on this product. Term deposit means that funds will not be available on the contract till the end of the term. Here you define the 2 key parameters of term deposit:

- **Number of periods.** After how many periods of interest accrual the term will be over. In this case as the interest period is daily, it means the funds will be available after 30 days.
- **Posting frequency.** How often the interest accrued on the loan will be posted to the designated account.

5.2 Manage savings contracts

5.2.1 Create savings contracts

Savings contracts have to be created through the “Contracts” section of client profile the same way it is done for loans.

Select the type of product you want to affect to the client and the following window will appear.

You will define here the specifics of the contract you want to give.

1. **Main parameters.** As per what has been defined in the product define the specifics of the following parameters:
 - Savings contract code. Automatically generated
 - Initial amount.
 - Entry fees.

- Saving officer. User in charge of the contracts
 - Interest rate
 - Withdrawal fees
2. **Fees and limits.** As per what has been defined in the product define the specifics of the following parameters:
- Transfer fees
 - Cash deposit fees
 - Close fees
 - Management fees
 - Overdraft fees
 - Agio
 - Reopen fees
 - Inter-branch transfer fees
 - Cheque deposit fees

On the right side of this section you find information on the amount ranges allowed for different operations in the system as well as reminder on the type of interest accrual.

3. **Term deposits (In case you activated this option).** You should define the specifics of the term of this contract:
- Duration of the term in number of period.
 - Type of roll over. 2 options are available here:
 - "Principal", at the end of the term, the principal will stay in the balance and accrual will keep on being accrued on it.
 - "Principal and Interest", at the end of the term, the principal and the interest accrued will be reinvested in the account.
 - Transfer to account. In case you select "Principal" for the roll over, you need here to select the saving account into which the interest accrued will be transferred at the end of the term.

When all parameters are defined click on "save".

The contract will be set under “pending” status. You should then click on first deposit and specify the initial amount to be deposited on the account.

It is only after confirming this first deposit that the account is officially open.

5.2.2 Perform operations

Use the button available on the savings contract front page to perform one of the following operations:

- **Deposit.** The client is adding money to the savings account. Following parameters are to be defined:
 - Date.
 - Amount deposited.
 - Transaction fees.
 - Description.

- Type of transaction. What is the method used by client to deposit the money (Cash, cheque, withdrawal, direct debit, wire transfer, debit card).
- **Withdrawal.** The client takes out some money from the savings account.
 - Same parameters than for deposit except that no type of transaction is required as the money is expected to be withdrawn in cash in any case.
- **Transfer.** The client is transferring a certain amount from his savings account to another account.
 - Same parameters than for withdrawal, you just have to choose the saving accounts to which the money will be transferred.
- **Special operation.** This operation has to be predefined in the "standard booking" section (See VIII. 6 standard bookings). It will debit or credit the savings account of a certain amount and perform a specific accounting transaction as per defined "standard booking". You should define here:
 - Date.
 - Amount.
 - Debit or credit.
 - Description.
 - "to account" or the predefined bookings this transaction will perform.

These operations are then displayed in the events tab of the savings contract.

OpenCBS - [Samuel Mbogo Kimiru - kawangware/02/00003/3]

Settings Configuration Security Products Client and Contract Fast Repayment Modules Accounting Reports Window Help

Samuel Mbogo Kimiru - kawangware/02/00003/3

Details Contracts Savings details

Savings Book - Active

Code: kawangware/02/00003/3

Initial amount: 50000 (Min 0.00 USD, Max 100 000.00 USD)

Entry fees: 100 (100.00 USD)

Savings officer: admin admin

Balance: 50 000,00 USD

Available balance: 50 000,00 USD

Interest rate: 1,0000 (1 %)

Withdraw fees: 100 (100.00 USD)

Close Operations Cancel last operation Print

Date	Fees	Debit	Credit	Transfer	Code	Savings method	User	Description	Cancel Date
02/05/2014 10:26:26	100,00		50 000,00		SVIE	Cash	admin admin	First deposit #kawangware/02/00003/3-3	
02/05/2014 10:29:41	100,00		5 000,00		SVDE	Cash	admin admin	Deposit #kawangware/02/00003/3-4	
02/05/2014 10:29:14	100,00	2 000,00			SVWE	Cash	admin admin	Withdrawal #kawangware/02/00003/3-5	
02/05/2014 10:29:54	100,00	2 500,00		to kawangware...	SDTE	-	admin admin	Transfer #kawangware/02/00003/3-6	
02/05/2014 10:34:49	0,00	200,00			SODE	-	admin admin	Special Operation #kawangware/02/00003/3-8	
02/05/2014 10:36:44	0,00	100,00			SODE	-	admin admin	Special Operation #kawangware/02/00003/3-9	

admin (SUPER) 02/05/2014 10:36:53 AM feurg

5.2.3 Interest calculation

To generate interest accrual events as well as overdraft, agios and management fees, accounting closures have to be performed.

In case no term deposit is activated, the system will accrue interest as per the frequency defined above and post it directly back into the same savings account as per the posting frequency defined at product level.

Date	Fees	Debit	Credit	Transfer	Code	Savings method	User	Description	Cancel Date
18/06/2014 11:19:29	0,00		100 000,00		SVIE	Cash	admin admin	First deposit #kawangware/01/00018/4-111	
19/06/2014 11:19:52	0,00		1 000,00		SIPE	-	admin admin	Posting interests for period : 6/18/2014 to 6/1...	
19/06/2014 11:19:52	0,00		1 000,00		SIAE	-	admin admin	kawangware/01/00018/4 #kawangware/01/00...	
20/06/2014 11:19:52	0,00		1 010,00		SIPE	-	admin admin	Posting interests for period : 6/19/2014 to 6/2...	
20/06/2014 11:19:52	0,00		1 010,00		SIAE	-	admin admin	kawangware/01/00018/4 #kawangware/01/00...	
20/06/2014 11:19:52	0,00		0,00		SCLE	-	admin admin	Closure event : kawangware/01/00018/4 #ka...	

In this example the saving amount is 100000 with 1% interest accrued daily and posted daily.

In case term deposit is activated, process will be the same except that the interest accrual would be posted back to another account at the end of the term period.

Date	Fees	D...	Credit	Transfer	Code	Sa...	User	Description	Ca
02/05/2014 07:29:18	0,00		5 000,00		SVIE	Ca...	admin admin	First deposit #kawangware/01/00006/1-1	
02/05/2014 00:00:00	0,00		1 800,00		SBCS	-	admin admin		
02/05/2014 10:29:54	0,00		2 500,00	from kaw...	SCTE	-	admin admin	Transfer #kawangware/01/00006/1-7	
02/05/2014 10:42:35	0,00		0,00		SCLE	-	admin admin	Closure event : kawangware/01/00006/1 #kawangware/01/00006/1-11	
05/05/2014 10:43:48	0,00		0,00		SCLE	-	admin admin	Closure event : kawangware/01/00006/1 #kawangware/01/00006/1-14	
01/06/2014 10:46:35	0,00		15 000,00		SIPE	-	admin admin	Posting interests for period : 5/2/2014 to 6/1/2014 : kawangware/02/00003/3 #kawangware/01/00006/1-20	
18/06/2014 10:46:35	0,00		0,00		SCLE	-	admin admin	Closure event : kawangware/01/00006/1 #kawangware/01/00006/1-21	
20/06/2014 11:19:52	0,00		0,00		SCLE	-	admin admin	Closure event : kawangware/01/00006/1 #kawangware/01/00006/1-112	

In this example, 15000 has been posted on this account on 01/06 as interest accrued on a term deposit account.

5.2.4 Overdraft and “Agio’s” calculation

Overdraft and Agio payments are as well generated through closure and appear in the event tab:

Samuel Mbogo Kimiru - kawangware/01/00003/2

Savings Book : Active

Code: kawangware/01/00003/2

Initial amount: 100 (Min 0.00 USD, Max 100 000.00 USD)

Entry fees: 100 (100.00 USD)

Savings officer: admin admin

Balance: -138,84 USD

Available balance: -138,84 USD

Interest rate: 1,0000 (1 %)

Withdraw fees: 100 (100.00 USD)

Operations: [Close] [Operations] [Cancel last operation] [Print]

Date	Fees	Debit	Credit	Transfer	Code	Savings method	User	Description	Cancel Date
05/05/2014 10:43:48	0,00		0,00		SCLE	-	admin admin	Closure event : kawangware/01/00003/2 #ka...	
02/06/2014 10:43:48	1,00		0,00		SVAE	-	admin admin	Agio of 1 for 01.06.2014 - 02.06.2014 : kawa...	
02/06/2014 10:46:35	1,00		0,00		SOFE	-	admin admin	Overdraft fee event : kawangware/01/00003/2 ...	
02/06/2014 10:46:35	100,00		0,00		SMFE	-	admin admin	Management fee of 100.00 for 02.05.2014 - 0...	
02/06/2014 10:43:48	1,00		0,00		SVAE	-	admin admin	Agio of 1 for 01.06.2014 - 02.06.2014 : kawa...	
02/06/2014 10:46:35	1,00		0,00		SOFE	-	admin admin	Overdraft fee event : kawangware/01/00003/2 ...	
02/06/2014 10:46:35	100,00		0,00		SMFE	-	admin admin	Management fee of 100.00 for 02.05.2014 - 0...	
03/06/2014 10:43:48	1,01		0,00		SVAE	-	admin admin	Agio of 1.01 for 02.06.2014 - 03.06.2014 : ka...	
03/06/2014 10:43:48	1,01		0,00		SVAE	-	admin admin	Agio of 1.01 for 02.06.2014 - 03.06.2014 : ka...	
04/06/2014 10:43:48	1,02		0,00		SVAE	-	admin admin	Agio of 1.0201 for 03.06.2014 - 04.06.2014 : ...	
04/06/2014 10:43:48	1,02		0,00		SVAE	-	admin admin	Agio of 1.0201 for 03.06.2014 - 04.06.2014 : ...	
05/06/2014 10:43:48	1,03		0,00		SVAE	-	admin admin	Agio of 1.0303 for 04.06.2014 - 05.06.2014 : ...	
05/06/2014 10:43:48	1,03		0,00		SVAE	-	admin admin	Agio of 1.0303 for 04.06.2014 - 05.06.2014 : ...	
06/06/2014 10:43:48	1,04		0,00		SVAE	-	admin admin	Agio of 1.0406 for 05.06.2014 - 06.06.2014 : ...	

admin (SUPER) 18/06/2014 10:59:34 AM fourg

In the above example no deposit has been done on the account initially, as such the account went to overdraft when the first management fee of 100 USD had to be paid. The system charged an initial overdraft of 1% and then charges every day an agio of 1% of the negative balance, explaining the events displayed above.

5.2.5 Mandatory savings

In the tab called loan you can see all the loans if there are any which are guaranteed by this saving account as a mandatory savings:

Samuel Mbogo Kimiru - kawangware/02/00003/3

Savings Book : Active

Code: kawangware/02/00003/3

Initial amount: 50000 (Min 0.00 USD, Max 100 000.00 USD)

Entry fees: 100 (100.00 USD)

Savings officer: admin admin

Balance: 50 000,00 USD

Available balance: 45 000,00 USD

Interest rate: 1,0000 (1 %)

Withdraw fees: 100 (100.00 USD)

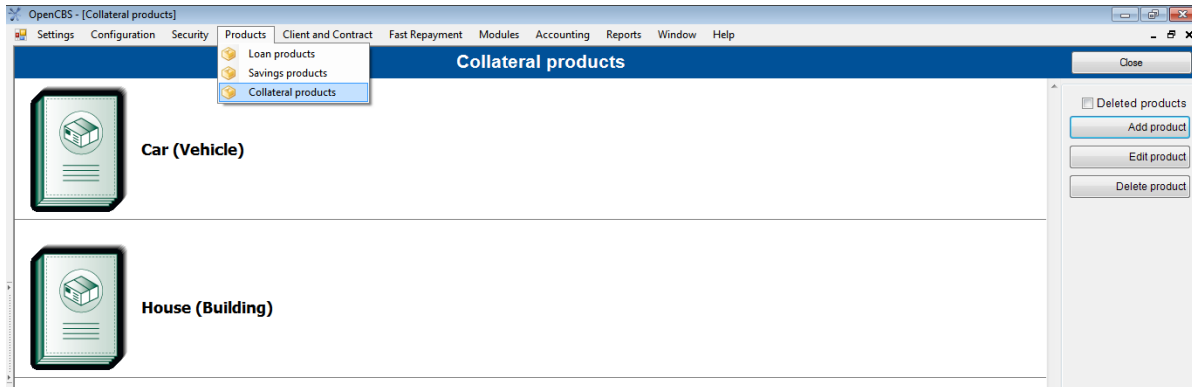
Operations: [Close] [Operations] [Cancel last operation] [Print]

Code	Status	Amount	OLB	Creation date	Start date	Close date
kawangware/14/...	Active	10 000,00	10000,0000	5/2/2014	5/2/2014	5/1/2015

If there is some you will see appear a note “available balance” below the main balance of the account. This is the amount which can actually be used by the client knowing that a certain portion of the money on the account is actually blocked for “mandatory savings purposes”.

6. Collateral products

To add a collateral product select the item collateral products in the upper menu “products” section. You will see appear the list of collaterals already created. In there to edit a collateral product select it and click “edit product” on the right side of the screen. Click “add product” to create a new one.



You will see appear the window of collateral creation.

You can here define all the characteristics you want to track relatively to this specific type of collateral you want to take as guarantee for loans you are going to disburse.

You should here define:

1. Name of the collateral product and a describing explaining what this product includes.
2. You see here appear the list of parameters track for the collateral product. Please note here that amount and description are mandatory fields which cannot be deleted.
3. In this section you are going to add parameters. You can have 5 type of parameters:
 - Number.
 - String (text).
 - Date.
 - Collection (Multiple choice).
 - Owner or an individual register in the database.

You should use the type you want, choose the name of field and enter as well a description to help people who will be in charge of filling in the information related to the collateral. Once you have completed everything click on "add property". You can as well delete the property.

4. This section is dedicated to defining the multiple choices in case the field added is a collection. Enter the item name and use add and delete item buttons to define the list of possibilities for this field value.
5. Click save to confirm collateral creation.

Please note that collateral reports can be made available upon request. It displays a full list of collaterals registered in the software

7. Forms & reports

OPENCBS includes standard reports. The exportation can go through two software packages. The first one is the Microsoft office package (Word and Excel). Reports and forms made thanks to the office package are simple but changeable on the fly. The second one is crystal report package. Crystal report reader is free so you can download it and use it. See 1.2. Also, OPENCBS exportations through crystal report are ready to print.

7.1 Internal Forms

Internal forms are the operational documents such as receipts, ready for print contracts or for example loan schedule which can be generated by the system in the course of operations. The formats proposed by default in the system are simple and don't include any customization. Customization can be made through crystal report and Word but require some SQL knowledge and customization will not be explained here. OPENCBS team can customize these forms according to your needs for very interesting price. Contact us to get details of our offers.

Internal forms are accessible through "Print" buttons, you can find in the different tabs you will go through while performing everyday operations.

Please find here a few examples of non-customized forms, both crystal report and word, and descriptions:

Client personal information

First name: lydia Gender: F
 Last name: K. BOADI PALMER ID number: 10403
 Father's name: Date of birth: 4/13/1974

Personal address:
 District: Ga East Municipal City: ACCRA
 Address: From Kaneshie Odorkor high way Dansoman Junction, locate Hansoni Ho
 Phone: 0004-922-635

Business address:
 District: Ga Central (New) City: ACCRA
 Address: From Kaneshie Odorkor high way, Dansoman junction, locate Hansoni
 Phone: 0004-922-635

Contract code Status Amount OLB Creation date Start date Close date Group Late days ATR

03221/13/002-1/10403C	Closed	1,000.00	0.00	8/2/2013	8/5/2013	2/28/2014	-	1,392	No
03221/13/002-1/10403C	Pending	1,000.00	0.00	8/2/2013	8/2/2013	1/20/2014	-	2,148	No

Savings code Balance Product name Product code Product type Creation date Closed date

01/03221/10/1/10403294	-950.00	BAYSAVE	100	Savings Book	8/2/2013	
------------------------	---------	---------	-----	--------------	----------	--

Total Page No.: 1 Zoom Factor: 100%

Client Personal information. In Details client tab, displays profile as well as all contracts open and closed of this client (here CR version).

Contract History

Contract Code: 03522/14/TSKRP- Entry Fees: entry_fees
 2/10032/294 No. of Installments: 15
 Start Date: 22/06/2014 Interest rate: 20.00
 Loan: 10000.00
 Currency: Ghana Cedis
 Loan Officer: Noa 9
 Client Name: Joyce DOKUAH
 Pass No.: 10032

Event Type	Event Date	Principal	Interests	Fees	Late Days
LODE	22/06/2014	10000.00	0.00	0.00	0
RGLE	22/07/2014	666.67	14400.00	0.00	0

Number	Capital Repayment	Interest Repayment	Total	Paid Interest	Paid Capital	Expected Date	Paid Date
1	666.67	14400.00	0.00	14400.00	666.67	22/07/2014	22/07/2014
2	666.67	14400.00	15066.67	0.00	0.00	26/08/2014	
3	666.67	14400.00	15066.67	0.00	0.00	23/09/2014	
4	666.67	14400.00	15066.67	0.00	0.00	20/10/2014	
5	666.67	14400.00	15066.67	0.00	0.00	17/11/2014	
6	666.67	14400.00	15066.67	0.00	0.00	14/12/2014	
7	666.67	14400.00	15066.67	0.00	0.00	11/01/2015	
8	666.67	14400.00	15066.67	0.00	0.00	08/02/2015	
9	666.67	14400.00	15066.67	0.00	0.00	05/03/2015	
10	666.67	14400.00	15066.67	0.00	0.00	02/04/2015	
11	666.67	14400.00	15066.67	0.00	0.00	26/05/2015	

Contract History. In Loan details, Display the schedule as well as all the events having occurred on the specific contract (here Word version)

Disbursement Cash Receipt

Beneficiary Name: Joyce DOKUAH **Payment Date:** 22/06/2014

Contract Code: 03522/14/TSRPT- **Entry Fee:** 0 entry fees

2/10032/294 **Insured:** 0,00

Loan Officer Name: Noe 9


Notes:

Disbursement:

Member Name	Loan Share Amount	Identification Data
Joyce DOKUAH	10000.00	10032

Disbursement cash receipt. In Loan details, disbursement information to keep track of the event or/and give to client. (here Word version)

Individual loan agreement



Contract code: J14/006-4/10014/314

THIS AGREEMENT IS MADE the 11.07.2014 BETWEEN:

(1) YOUR MFI (the "Lender"); and
(2) [**Abena Hannah**] (the "Borrower", passport number: 10014)

IT IS HEREBY AGREED as follows:

1. Loan. Subject to and in accordance with this agreement, its terms, conditions and covenants, the Lender agrees to lend the Borrower on the 11.07.2014 (the "Loan Date") the sum of 10000 Ghana Cedis (the "Loan").
2. Note. The Loan shall be evidenced by a Note in the form attached as Exhibit A of this agreement (the "Note") executed by the Borrower and delivered to the Lender on the Loan Date.
3. Interest. Both parties have agreed that the Loan shall not bear interest. However, in the event of a default in payment, interest shall be applied from the date of default at an annual rate of 40.00% per instalment during 10 instalments.
4. Entry fees represent 0.00 Ghana Cedis and should be paid right after the disbursement.
5. Late penalties, in case of non-repayment on time, the borrower will be charged, per each late day, with 0.00 % of the overdue principal.

Signed by the Borrower: _____

Total Page No.: 1 Zoom Factor: 100%

Individual loan agreement. In Loan details, standard contract agreement displaying contract code, interest rate and all other legal information to be shared with client. (Crystal report version)

Also available:

- **Committee Appraisal.** At Committee credit level, displays information related to credit committee to track the reasons of decision taken.
- **Repayment receipt.** In Loan repayment tab, detailed repayment information to be signed by client's and cashier and kept as a proof of the payment performed.
- **Repayment schedule.** In Loan repayment tab, displays updated schedule to be given to client for information.
- **Loan's events.** In Loan events tab, displays full list of events having occurred on this loan.
- **Savings booking agreement.** In Savings details, displays all important legal information to be shared with client.
- **Cash receipt.** In Saving details, displays information on the last transaction performed.
- **Contract status.** In Savings details, display list of all transaction performed on the savings contract.

7.2 Reports

Reports are here to export data from the database in an appropriate way for the management team to be able to analyze that data. You can export the data through crystal report or Excel. Excel gives you more tools to analyze the data, while crystal report usually exports ready-to-print sheets. By default, OPENCBS includes 9 crystal report reports and 7 Excel reports.

Reports are accessible through the upper menu Reports. Please find here a few example:

presse-papiers		Alignement		Nombre		Style		
A2		fx		(BI - WEEKLY)				
	A	B	C	D	E	F	G	H
1	Loan Product	Contracts	Individual	Group	Corporate	Clients	In group	OLB
2	(BI - WEEKLY)	1	1	0	0	1	0	860.45
3	(MONTHLY)	3	2	1	0	6	4	30843.55
4	Easy Loan	5	5	0	0	5	0	856000.38
5	EPA (WEEKLY)	2	2	0	0	2	0	50977.89
6	Loan Product	2	2	0	0	2	0	1887.99
7	MPA (MONTHLY)	4	4	0	0	4	0	30133.36
8	MPA (WEEKLY)	3	3	0	0	3	0	22576.31
9	test script	7	7	0	0	7	0	66300.33
10								
11	Total:	27	26	1	0	30	4	1059580.26
12								
	Loan Product	Activity	District	Currency	Loan officer	Interest rate	...	
Prêt								

Client information

02 EN 2014 - All currencies — Azerbaijan manat

Id	First name	Last name	Type	District	Personal phone	Personal phone 2	Activity
10.000	Lydia		f	Kumasi Metropolitan	0003 372723	0003 372723	Petty Trader
10.002	Prisca		f	Sunyana Municipal	000	0009057957	Petty Trader
10.003	Abeba	DOMALE	f	Kumasi Metropolitan	0008 922619	0008 922619	Petty Trader
10.006	Kwame	Yabosh Yaw	f	Ga Central (New)	0004 660 439	0004 660 439	Petty Trader
10.007	joyce	OKYERE	f	Techiman Municipal	0003586233	0003586233	Petty Trader
10.008	Florence	Ofori Pimporg	f	Sunyana West	000	0009053589	Petty Trader
10.009	Adwoa	Maabea	f	Kumasi Metropolitan	0000 015525	0000 015525	Cloths Seller
10.011	Lydia	Korang	f	Kumasi Metropolitan	0003 372723	0003 372723	Petty Trader
10.012	Ellen Konadu	Agyemang	f	Ga Central (New)	0008 116 074	0008 116 074	Petty Trader
10.015	Adwoa	Ntiriwa	f	Kumasi Metropolitan	0000 015525	0000 015525	Cloths Seller
10.016	joyce	MANU	f	Ga Central (New)	0000 437 651	0000 437 651	Petty Trader
10.017	Roseana	OSEI	f	Sunyana West	0009035369	0009035369	Petty Trader
10.018	Juliana	MAAREBA	f	Kumasi Metropolitan	0007 498177	0007 498177	Cloths Seller

Current Page 1 of 1

Total Page No: 1 of 1

Zoom Factor 100%

Active loans report. Partition of loans by produce, type of business, loan officers, size etc... (Excel version here)

Client information. List of clients with all information available on them. (Crystal report version here)

[illegible]

OLB and LLP. List of all loans with their LLP at a certain moment in time. (Excel)

PAR Analysis										
02 09 2016 - All currencies - Azerbaijan manat										
Source	PAR	PAR 20	OLB	PAR(OLB)	PAR(OLB)	PAR 1-20	PAR 21-60	PAR 61-90	PAR 91-180	PAR 181-360
Central Bank	8,900.00	8,900.00	85,167.00	14.5%	11.5%	2,000.00	0.00	0.00	0.00	8,900.00
Cash	2	1	0	0	0	0	0	0	0	0
Contracts	2	1	0	0	0	0	0	0	0	0
East End Municipal	1,000.00	1,000.00	1,200.00	83.3%	83.3%	0.00	0.00	0.00	0.00	1,000.00
Cash	1	1	2	0	0	0	0	0	0	1
Contracts	1	1	2	0	0	0	0	0	0	1
Komarov Metropolitan	2,100.00	2,100.00	47,300.00	4.4%	4.4%	0.00	0.00	0.00	0.00	2,100.00
Cash	1	1	8	0	0	0	0	0	0	0
Contracts	1	1	8	0	0	0	0	0	0	0
Nuryan Municipal	0.00	0.00	29,000.00	0.0%	0.0%	0.00	0.00	0.00	0.00	0.00
Cash	0	0	2	0	0	0	0	0	0	0
Contracts	0	0	2	0	0	0	0	0	0	0
Nuryan West	1,000.00	0.00	21,521.00	4.6%	0.0%	1,000.00	0.00	0.00	0.00	0.00
Cash	1	0	4	1	0	1	0	0	0	0
Contracts	1	0	4	1	0	1	0	0	0	0
Techiman Municipal	0.00	0.00	34,200.00	0.0%	0.0%	0.00	0.00	0.00	0.00	0.00
Cash	0	0	6	0	0	0	0	0	0	0
Contracts	0	0	6	0	0	0	0	0	0	0
TOTAL	13,000.00	10,000.00	155,480.00	0.7%	0.2%	3,000.00	0.00	0.00	0.00	10,000.00
Cash	6	3	27	0	0	2	0	0	0	3
Contracts	6	3	27	0	0	2	0	0	0	3
Local office	PAR	PAR 20	OLB	PAR(OLB)	PAR(OLB)	PAR 1-20	PAR 21-60	PAR 61-90	PAR 91-180	PAR 181-360
Union Admin	0.00	0.00	30,721.00	0.0%	0.0%	0.00	0.00	0.00	0.00	0.00
Cash	0	0	4	0	0	0	0	0	0	0
Contracts	0	0	4	0	0	0	0	0	0	0
Henry 1	2,100.00	2,100.00	37,300.00	5.6%	5.6%	0.00	0.00	0.00	0.00	2,100.00
Cash	1	1	7	0	0	0	0	0	0	1
Contracts	1	1	7	0	0	0	0	0	0	1
Henry 2	3,000.00	3,000.00	3,000.00	90.0%	71.5%	2,000.00	0.00	0.00	0.00	1,000.00
Cash	1	1	1	0	0	1	0	0	0	0
Contracts	1	1	1	0	0	1	0	0	0	0
Total 6 currencies						Total 6 currencies				

PAR analysis. Statistic of the portfolio at risk by loan officer, branch, product etc... (Crystal Report)

[illegible]

Repayments. List of all repayments performed over a certain period of time. (Cristal report version)

Other reports:

- **Closed contracts.** List of all contracts closed during a certain period
- **Delinquent loans.** All delinquent loans at a certain moment in time
- **Collection sheet.** List of all installments planned to be repaid during a certain period
- **Disbursements.** All disbursement events performed during a certain period

7.3 Customized reports

In addition to this, OPENCBS can develop any additional report you may need. As long as the data is saved somewhere in the system, we have capacity to extract it and process it to display the report you want.

Furthermore, if you have knowledge in crystal report you can directly create the reports you want using SQL Server Management Studio and crystal report designer.

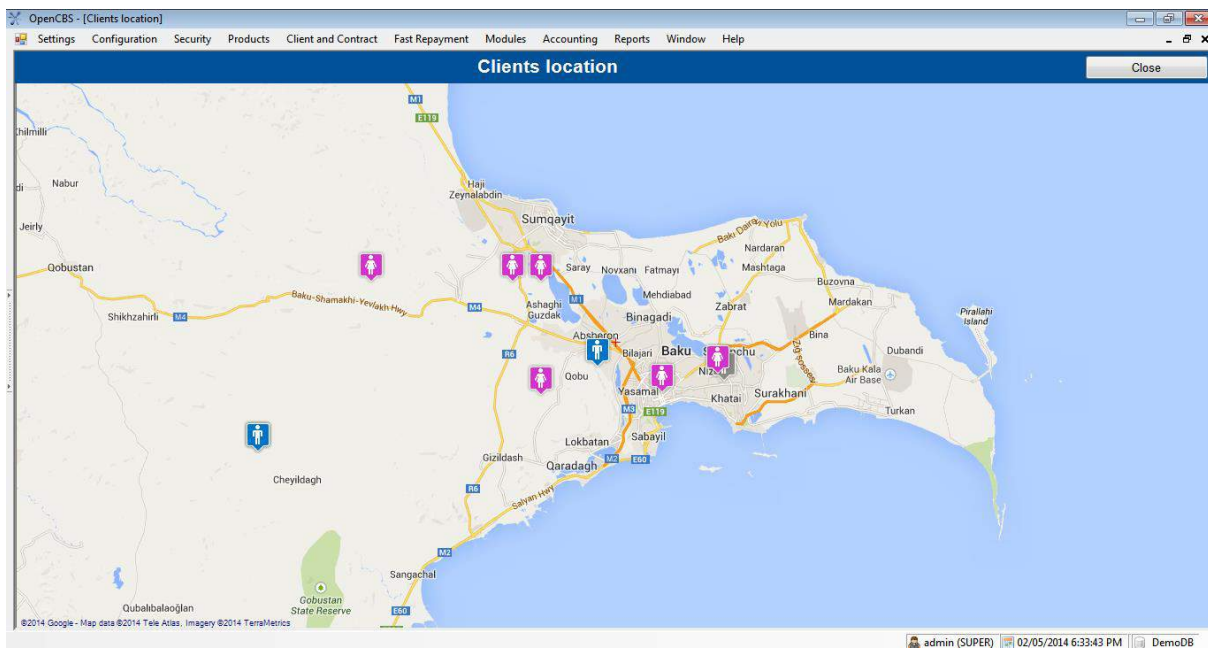
8. Additional Modules

In core version 5 modules are available as a free demo for 30 days and accessible through the “modules” menu item. Modules include: Client geolocation, Custom fields, Custom events, Task management, Delinquency management, Fast Repayment (Batch repayment), Operational accounting, Accounting integration and Document tracking. The last three require configuration by OPENCBS for each client before being usable.

Modules are buyable per month. You can pay for a specific module or you can get access to all modules by subscribing to our standard offer.

8.1 Client location

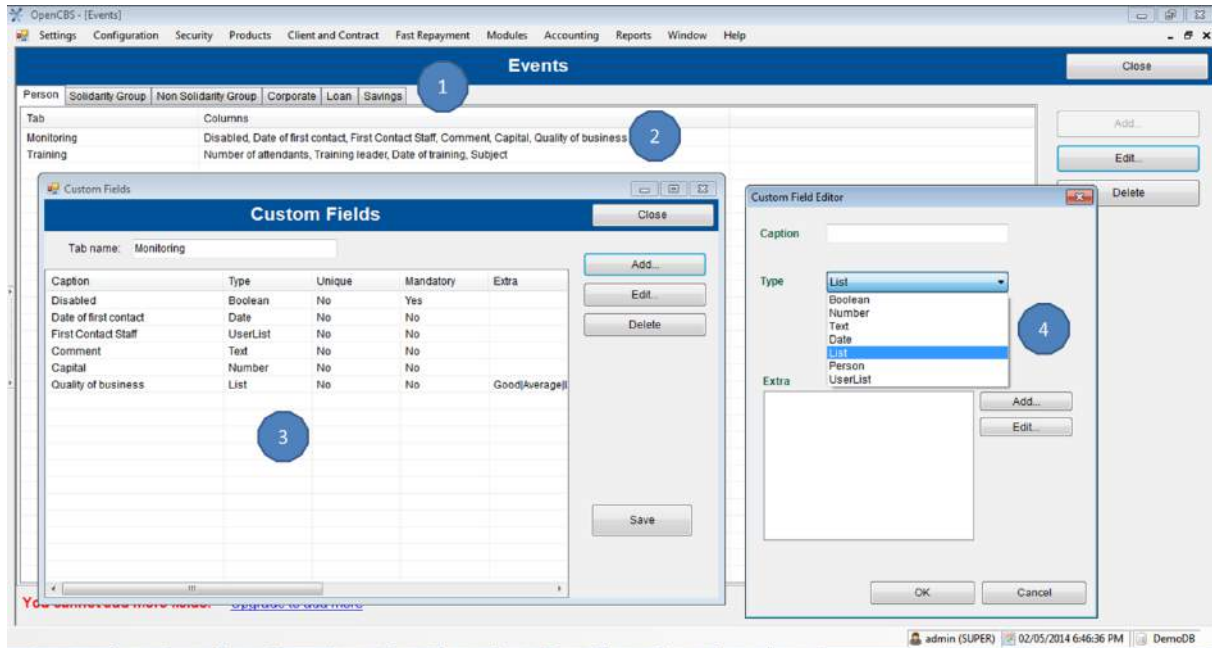
See displayed on a google map all the clients’ locations recorded in the system.



If you want to use more sophisticated maps including for example, filtering by type of product or type of activity or facilities to point out delinquent clients, contact OPENCBS team which will customize the mapping reports to fit your needs.

8.2 Event fields

In many microfinance institutions, regular monitoring or trainings have to be performed by operation staff to ensure a close follow up of their client, control risk and eventually maintain a good quality of portfolio. However enforcing monitoring or training policies is not always easy. OPENCBS event fields give capacity to track these types of event which are not directly related to repayment schedule.



1. Events can be added in any section of the system. Choose the tab you want according to the place where you want your events to be tracked (persons, SG NSG, corporate, loan, savings).
2. You see displayed here the different types of events already created in this section of the software. In this example we are tracking monitoring and training events at client level
3. By selecting the event you want to modify or by adding a new type of event you reach this window where you see the name and parameters specifics to this event. You can add new parameters or edit existing ones.
4. Here you are defining the type of data you want to have as parameter for events. This section works similarly to the custom field section. Consult next part Custom fields for more details.

After creation of these events additional tabs will be available in the selected software section to record events information.

OpenCBS - [Person [Dennis Daniel ANTWIWAA]]

Settings Configuration Security Products Client and Contract Fast Repayment Modules Accounting Reports Window Help

Person [Dennis Daniel ANTWIWAA] Close

Details Contracts

General

First Name*: Dennis Daniel Loan cycle: 1

Last Name*: ANTWIWAA ☒ Head of household

Date of Birth*: 3/ 7/1969 45 years Place of Birth: Kumasi

Gender*: Male Father's name:

ID number*: 10036 Citizenship: Haiti

Economic activity*: Petty Trader Branch: Shivan

Change photo... Change photo...

Print Update Cancel

Address Member of Extra Info Monitoring Training Location

	Number of attendees	Training leader	Date of training	Subject
▶ 3	Bill 3	2014-05-02 00...	Accountancy	
32	bob 5	2014-05-02 00...	Stock management	

Add... Edit... Delete

admin (SUPER) 02/05/2014 6:58:20 PM DemoDB

In this example, we see a tracking of training events at client level.

8.3 Delinquency managements

Delinquency management is key for microfinance institutions. Risky loans have to be followed-up very closely to maintain the overall quality of the portfolio. This module gives capacity to track in a dedicated section the delinquent loans and all the actions performed by the operational team to control this delinquency.

OpenCBS - [Delinquency Management]

Settings Configuration Security Products Client and Contract Fast Repayment Modules Accounting Reports Window Help

Delinquency Management Close

Code	Date	Late amount	Late interest	Late days	Description	Person in charge
03021/13/006-1/10255/226	05/02/2014 19:12	605,0300	26,4800	179	Client repaid sold collateral and repaid most of ...	5 Ari
	05/02/2014 19:10	605,0300	26,4800	179	Client repaid sold collateral and repaid most of ...	5 Ari
	05/02/2014 19:09	1869,1200	262,3900	242	Client's repaid 2 installments	3 IT
	05/02/2014 19:08	2100,0000	373,8600	256	Warning call to the client	2 Finance
	05/02/2014 19:07	2100,0000	373,8600	256	Contract added on: 05/02/2014 19:07:17	1 Harry
03021/14/default-2/10015/271	05/02/2014 19:08	0,0000	0,0000	0	Contract added on: 04/16/2014 09:11:52	1 Harry
	04/16/2014 09:11	0,0000	0,0000	0	Contract added on: 04/16/2014 09:11:52	1 Harry
03221/13/Agn-2/10016/282	05/02/2014 19:07	6900,0000	276,0000	190	Contract added on: 05/02/2014 19:07:33	7 JP
03521/14/w-2/10034/293	05/02/2014 19:06	0,0000	0,0000	0	Contract added on: 05/02/2014 19:06:42	6 thierry
03521/14/default-2/10017/269	04/16/2014 09:12	323,0100	30,5800	13	ryry	0 Isaac
	04/03/2014 12:32	323,0100	30,5800	0	Warning call performed	admin admin
	04/03/2014 12:32	323,0100	30,5800	0	Contract added on: 07/09/2013 12:32:00	6 thierry

Add contract Delete contract

Add event Delete event

Export to excel

You can add 5 more contracts. Upgrade to add more

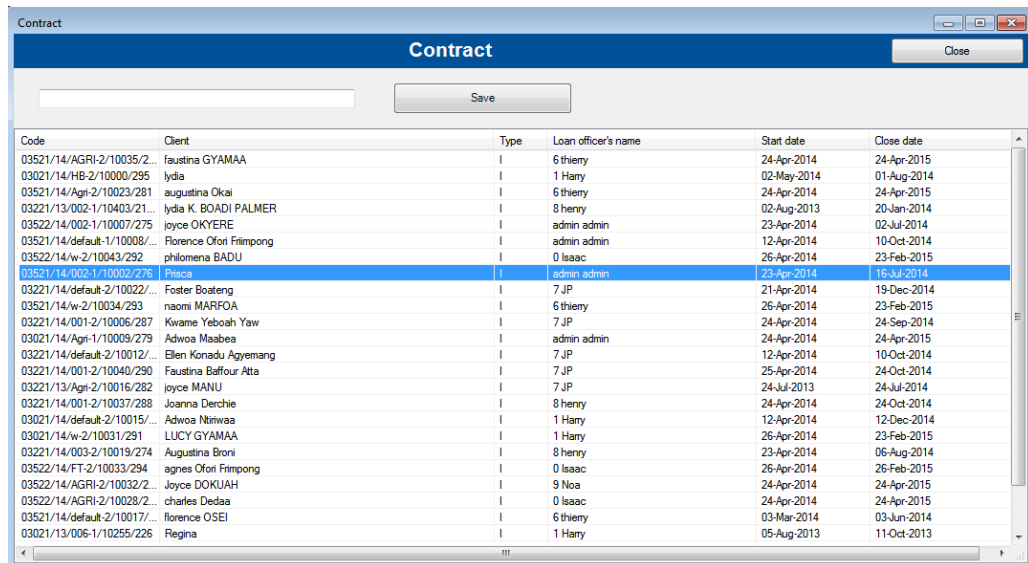
admin (SUPER) 02/05/2014 7:14:59 PM DemoDB

1. In the main section you see the contracts being tracked through this module and all the events that occurred on each of these loans. The contract code appears in the left column, other columns gather information of the events related to this contract code. It includes as parameters:

- Date and time of the event
- Late amount (at the time of the event)
- Late interest (at the time of the event)
- Late days (at the time of the event)
- Description of the event
- Person in charge of the delinquency follow-up

The most recent event appears at the top. You can thus see very easily the evolution of the delinquency as per the actions being performed by employees in charge of delinquency control. You can as well hide the old events by using the small “-” sign on the top of the window

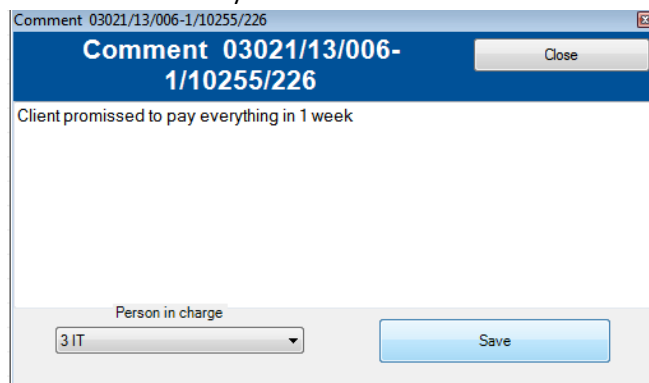
- To add or delete a contract click on these buttons



Code	Client	Type	Loan officer's name	Start date	Close date
03521/14/AGRI-2/10035/2...	faustina GYAMAA	I	6 thieny	24-Apr-2014	24-Apr-2015
03021/14/HB-2/10000/295	lydia	I	1 Hany	02-May-2014	01-Aug-2014
03521/14/Agri-2/10023/281	augustina Okai	I	6 thieny	24-Apr-2014	24-Apr-2015
03221/13/002-1/10403/21...	lydia K. BOADI PALMER	I	8 heny	02-Aug-2013	20-Jan-2014
03522/14/002-1/10007/275	joyce OKYERE	I	admin admin	23-Apr-2014	02-Jul-2014
03521/14/default-1/10008/...	Florence Ofori Frimpong	I	admin admin	12-Apr-2014	10-Oct-2014
03522/14/w-2/10043/292	philomena BADU	I	0 isaac	26-Apr-2014	23-Feb-2015
03521/14/002-1/10002/276	Prisca	I	admin admin	23-Apr-2014	16-Jul-2014
03221/14/default-2/10022/...	Foster Boateng	I	7 JP	21-Apr-2014	19-Dec-2014
03521/14/w-2/10034/293	naomi MARFOA	I	6 thieny	26-Apr-2014	23-Feb-2015
03221/14/001-2/10006/287	Kwame Yeboah Yaw	I	7 JP	24-Apr-2014	24-Sep-2014
03021/14/Agri-1/10009/279	Adwoa Maabea	I	admin admin	24-Apr-2014	24-Apr-2015
03221/14/default-2/10012/...	Ellen Konadu Agyemang	I	7 JP	12-Apr-2014	10-Oct-2014
03221/14/001-2/10040/290	Faustina Balfour Atta	I	7 JP	25-Apr-2014	24-Oct-2014
03221/13/Agri-2/10016/282	joyce MANU	I	7 JP	24-Jul-2013	24-Jul-2014
03221/14/001-2/10037/288	Joanna Derchie	I	8 heny	24-Apr-2014	24-Oct-2014
03021/14/default-2/10015/...	Adwoa Niniwaa	I	1 Hany	12-Apr-2014	12-Dec-2014
03021/14/w-2/10031/291	LUCY GYAMAA	I	1 Hany	26-Apr-2014	23-Feb-2015
03221/14/003-2/10019/274	Augustina Broni	I	8 heny	23-Apr-2014	06-Aug-2014
03522/14/FT-2/10033/294	agnes Ofori Frimpong	I	0 isaac	26-Apr-2014	26-Feb-2015
03522/14/AGRI-2/10032/2...	Joyce DOKUAH	I	9 Noa	24-Apr-2014	24-Apr-2015
03522/14/AGRI-2/10028/2...	charles Dedaa	I	0 isaac	24-Apr-2014	24-Apr-2015
03521/14/default-2/10017/...	florence OSEI	I	6 thieny	03-Mar-2014	03-Jun-2014
03021/13/006-1/10255/226	Regina	I	1 Hany	05-Aug-2013	11-Oct-2013

This list of contracts will appear. You can classify these contracts by name order by clicking on client column. Select the contract you want to add in the module and click on save.

- To add event select the contract to which you want to add an event and click on add events.



Comment 03021/13/006-1/10255/226

Comment 03021/13/006-1/10255/226

Client promised to pay everything in 1 week

Person in charge: 3 IT

Save

You enter here the description you want to keep of the actions performed and select the person in charge. Save to add the event to the tracking.

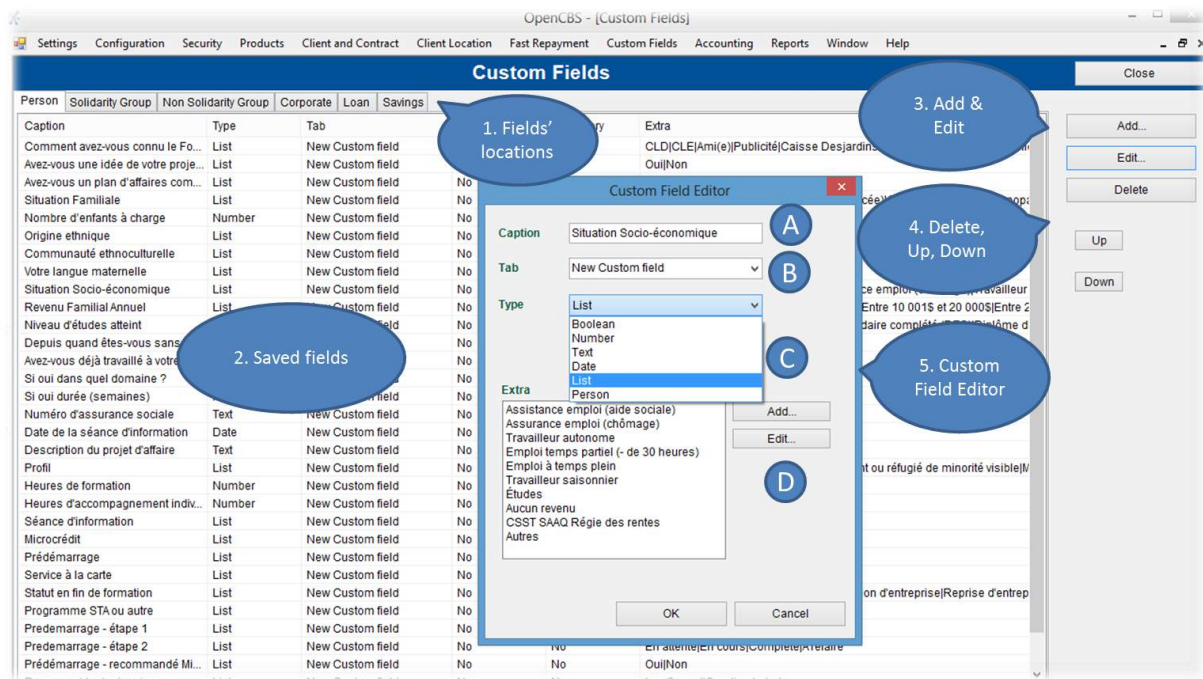
- Use this button to get the data extracted to Excel

	A	B	C	D	E	F	G	H
1								
2	Contract code	Date	Late amount	Late interest	Late days	Description	Person in charge	
3	03521/14/default-2/10017/269	4/16/2014 9:12	323.01	30.58	13	ryry	0 Isaac	
4		4/3/2014 12:32	323.01	30.58	0	Contract added on: 07/09/2013 12:32:00	6 thierry	
5		4/3/2014 12:32	323.01	30.58	0	Warning call performed	admin admin	
6	03521/14/w-2/10034/293	5/2/2014 19:06	0	0	0	Contract added on: 05/02/2014 19:06:42	6 thierry	
7	03221/13/Agri-2/10016/282	5/2/2014 19:07	6900	276	190	Contract added on: 05/02/2014 19:07:33	7 JP	
8	03021/14/default-2/10015/271	5/2/2014 19:08	0	0	0	Contract added on: 04/16/2014 09:11:52	1 Harry	
9		4/16/2014 9:11	0	0	0	Contract added on: 04/16/2014 09:11:52	1 Harry	
10	03021/13/006-1/10255/226	5/2/2014 19:12	605.03	26.48	179	Client repaid sold collateral and repaid most of his loan	5 Arri	
11		5/2/2014 19:07	2100	373.86	256	Contract added on: 05/02/2014 19:07:17	1 Harry	
12		5/2/2014 19:09	2100	373.86	256	Warning call to the client	2 Finance	
13		5/2/2014 19:09	1869.12	262.39	242	Client's repaid 2 installments	3 IT	
14		5/2/2014 19:10	605.03	26.48	179	Client repaid sold collateral and repaid most of his loan	5 Arri	
15								
16								
17								

8.4 Custom fields

Custom fields module enables the user to add any additional field of information to the data fields available by default in the system.

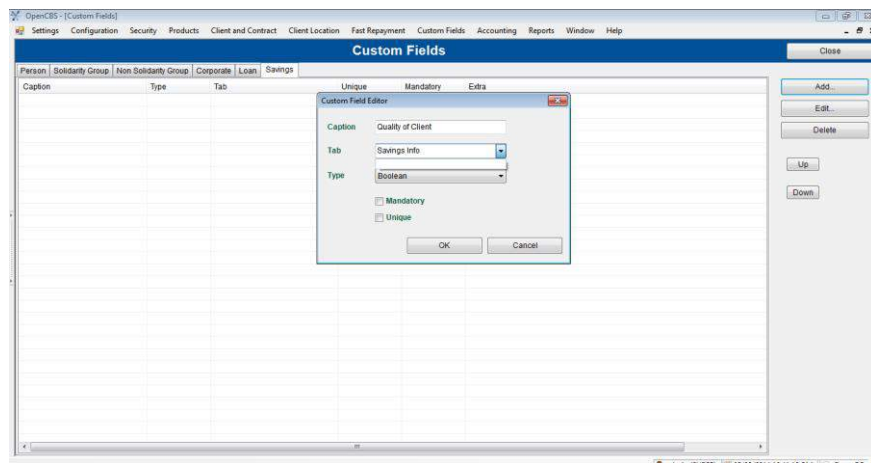
Appearance

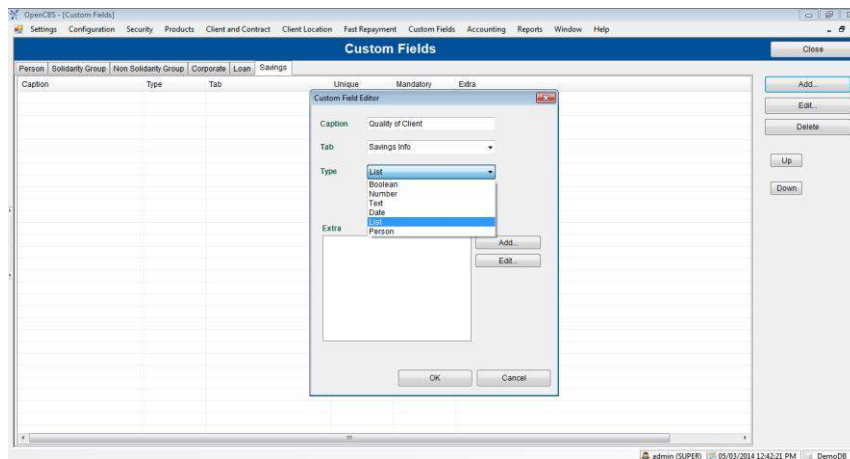


Configuration

- In 1. field location, select the tab corresponding to the level in the software where you want your data field to appear. In our case we want the field to appear in saving section.
- You reach a page with a section 2. Saved Fields empty as no fields have been entered yet.
- Click Add button at the upper right to open the window custom field editor.
- Here you will find 3 to 4 steps of configuration.

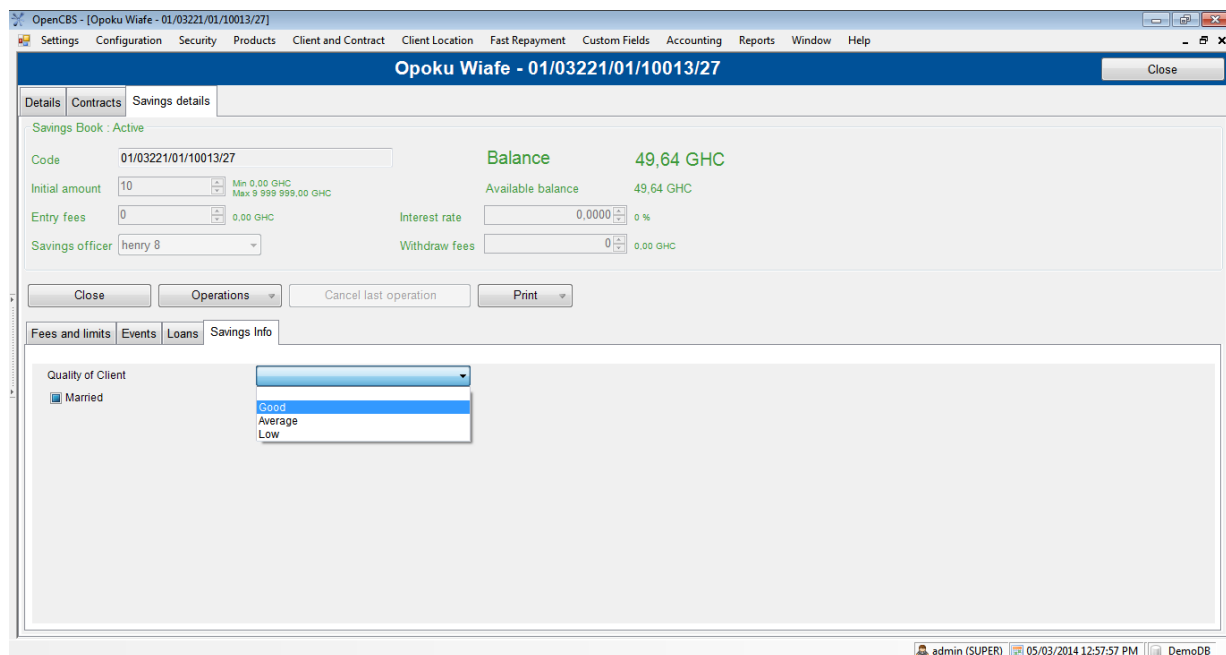
- A. Write the name of the custom field you want to see appear. In our case “quality of client”
- B. Write the tab in which you want to see it appear. If you are using the system for the first time, this will be empty. In that case write here the name under which you want the tab to appear in the system. In our case we choose “savings info”.
- C. Choose the type of info you want to track:
 - Boolean (Yes or No).
 - Number.
 - Text.
 - Date.
 - List (multiple choice).
 - Person (connection to an individual already recorded in the system).
- C'. In case you choose a List, an additional section appears below for you to configure the multiple choices. Use the “add” and “edit” buttons to configure these choices.
- D. You can define the fields either as mandatory or as unique:
 - Mandatory. If the field is not completed the system will prevent you from saving the client, loan, saving or whatever you are currently creating.
 - Unique. The system will prevent you from having 2 clients, savings, loans etc... with the same information for this field.
 - Important: Be cautious before using any of these 2 options as it can be quite restrictive if you want to perform testing on your database without having to enter a multitude of custom fields.
- Click ok to validate the field. It now appears in the list.
- Eventually you can delete a field and move it up or down in the listing by selecting it and using the button available on section 4.Delete, up, down.





Use

You can now access the saving section of your system to see appear an additional tab called “Savings info” with as fields one multiple choice called “quality of client” and one other Boolean called “married”.



You can save here your data and info can be extracted easily from the database through custom reporting.

9. Annex : system requirements

9.1 Hardware requirements

Hardware requirements for installation of OPENCBS are low. OPENCBS can be working on most Windows systems. However as per the use you are having of the system we advise increasing progressively the capacity of your computer. OPENCBS suggests 3 types of configuration:

Parameters	Minimum hardware set-up	Standard hardware set-up	Recommended hardware set-up
# clients	< 5000 clients or 500 groups	< 20000 clients or 2000 groups	Any size
Simultaneous connection	<5	5-15	More than 15
Recommended use	Any computer connecting remotely to the DB or for very small DB hosting	Local Server hosting Database	Central Head-Office server containing all databases of the institution
Requirements	<ul style="list-style-type: none"> •Standard CPU •Operating System: Windows XP / Vista / Windows 2003 Server / Windows 7 / Windows 2008 Server (32bit and 64bit) •At least 1GB of disk space for installation and database •Minimum 1.6 GHz processor (recommended dual core 3 GHz or higher) •RAM: 2GB minimum (3GB recommended) •512kbps minimum network connection 	<ul style="list-style-type: none"> •Standard CPU •Operating System: Windows 2003 Server / Windows 7 / Windows 2008 Server (32bit and 64bit) •At least 5 GB of disk space in 256GB HDD •intel I3 or I5 •RAM: 4 GB •2mbps network connection 	<ul style="list-style-type: none"> •Standard CPU or blades for server setup •Operating System: Windows 7 / Windows 2008 Server (32bit and 64bit) •At least 10 GB of disk space in 256GB SSD •intel I7 •RAM: 8 or 16GB

OPENCBS recommends to choose hardware as per the use which will be done of the system:

If you need only to connect remotely to the server to enter event, you can use the minimum requirements. However your internet or internal server connection should be good enough to enable a smooth use for the operators. (512k recommended)

If you will host the database and potentially will have a few users connecting remotely to the DB, we recommend you to follow at least the minimum requirements.

For a centralized server, on which all your offices will connect to enter transaction, we'd advise you to have at least the standard specs (middle column) or better invest in the recommended specs. (Right-side column)

9.2 Software requirements

To get full potential of OPENCBS, it requires the following system to be installed on your computer:

Database Engine

For a single machine use: nothing, database is handled locally inside the software.

If you need several computers to work on the same database:

Till 1Go of database size: [SQLServer Express](#). It is free.

Both SQLServer Express 2012 and 2008 are fine.

Over 1Go of database side (Not before 100,000 clients). [SQLServer Standard](#). Payable.

Report displayer

[Crystal report viewer 2012](#)

Office Package. (Word and Excel)

Others

.Net Framework 4.0

Windows XP / Vista / Windows 2003 Server / Windows 7 (recommended) / Windows 2008 Server (32bit and 64bit).

[SQLServer Management Studio](#) (Required for database management tasks).

Last Version of [OPENCBS](#) naturally

10. Annex: System Configuration

This section is dedicated to the configuration of the system. It follows the structure of the system explaining one after the other the configuration options available in the tabs "Settings", "Configuration" and "Security"

10.1 Settings

10.1.1 General settings

Settings	Choice	Description
ACCOUNTING_PROCESS	Cash/Accrual	If Cash: the system doesn't accrue any interest or penalty. You just pay what is inside the schedule. If Accrual: the closure section available in accounting menu tab can be used to generate interest and penalty accrual events, custom accrual accounting system can be configured. Accrual events generated can be used at reporting level
ALLOWS_MULTIPLE_GROUPS	True/False	If True: an individual can be in several groups at the same time If False: an individual can be in one and one group only.
ALLOWS_MULTIPLE_LOANS	True/False	If True: individuals, solidarity groups and corporates can have as many loans as possible If False: individuals, solidarity groups and corporates can have one and one single active loan at a time
AUTOMATIC_ID	True/False	If True: at individual client level, when saving the loan, the system automatically affects a unique ID to this client which is a simple number related to its position in the database. If False: the ID number has to be entered by the operator. It can in that case be used to record for example the passport number of the client.
BAD_LOAN_DAYS	Number	Above this number the loan will be categorized as bad. It will generate specific events, which can then be used at accounting level
CALCULATION_LATE_FEES_DURING_PUBLIC_HOLIDAYS	True/False	If True: the system calculates penalties not taking holidays into consideration. If False, the system takes in consideration holidays while calculating penalties. Penalties are then lower than for the above option

CEASE_LAIE_DAYS	Number	The number of late days above which the system stop accruing interest from late loans.
CITY_MANDATORY	True/False	If True: the city information has to be filled If False: the city is not a mandatory field
CLIENT_AGE_MAX	Number	Client with age above this number cannot be saved in the system
CLIENT_AGE_MIN	Number	Client with age below this number cannot be saved in the system
COUNTRY	Name of country	The country where you operate. This info can be used at reporting level.
DONOT_SKIP_WEEKENDS_IN_INSTALLMENTS_DATE	True/False	If True: Schedule calculation doesn't take week-end days in consideration. Installments can be on week-end days If False: In case of week-end days installments are pushed back to the next open day
ENFORCE_ID_PATTERN	True/False	If True: the ID pattern option to be defined below has to be respected If False: You can enter any ID type
GROUP_MAX_MEMBERS	Number	Maximum members in a group
GROUP_MIN_MEMBERS	Number	Minimum members in a group.
ID_PATTERN	[A-Z]{2}[0-9]{7}	You can here define a type of ID information to be entered. This can be used for example if you want to ensure that all your operations staff are entering an ID information as per the standard type of ID number in the country. A-Z}{2}[0-9]{7} means 2 big letters characters followed by 7 figures [0-1]{3} [A-Z]{2}[0-9]{7} would mean 3 figures which could be 0 or 1 only followed by 2 letters followed by 7 figures.
INCREMENTAL_DURING_DAYOFFS	True/False	If True: In case of day off, the planned event is pushed after the off days. If False: In case of day off, the planned event is set before the off days.
INTEREST_RATE_DECIMAL_PLACES	Number	The maximum number of decimal which can be entered for interest rate
INTERESTS_ALSO_CREDITED_IN_FL	True/False	If False: In case of use of funding line, only the principal repaid is credited back to funding line. If True: the interest collected on the financed loans will as well be credited back to the funding line in addition to the principal
LATE_DAYS_AFTER_ACCRUAL_CEASES	Number	The number of days late from which the system will stop accruing interest in case you are using the accrual option for accounting process
MAX_GUARANTOR_AMOUNT	Number	Maximum amount of loans a guarantor can guarantee.
MAX_LOANS_COVERED	Number	Maximum number of loans one single guarantor can guarantee
MAX_NUMBER_INSTALLMENT	Number	The maximum number of installments which can be defined at product level.

MFI_NAME	Name of your institution	The name of your institution. It can then be displayed at report level.
MODIFY_ENTRY_FEE	True/False	If True: the entry fee amount can be modified manually at disbursement level. If False: the amount cannot be modified, it can be either approved either waived provided the user has the right to do so.
NSG_MAX_MEMBERS	Number	Maximum members in non-solidarity groups
NSG_MIN_MEMBERS	Number	Minimum members in non-solidarity groups.
NUMBER_DECIMAL_SEPARATOR	, or .or any other symbol	The symbol you want to have to separate decimals from other figures in displayed numbers
NUMBER_GROUP_SEPARATOR	, or .or any other symbol	The symbol you want to separate the group of figures, like the thousands in European standards
OLB_BEFORE_REPAYMENT	True/False	If True: At schedule level the system displays OLB calculated before repayment If False: At schedule level the system displays OLB calculated after repayment
PENDING_SAVINGS_MODE	Multiple choice	Choose the type of payments which can be set as pending at saving level, before being confirmed
REPORT_TIMEOUT	Number	Maximum time in seconds the system can take to open a report before displaying an error
SAVINGS_CODE_TEMPLATE	IC/BC/CS/ID	Format generated automatically for savings code. Contact OPENCBS team for customization
STOP_WRITEOFF_PENALTY	True/False	If True: Penalties stopped being accrued on written off loans If False: Penalties keep on being accrued on written-off loans
USE_DAILY_ACCRUAL_OF_PENALTY	True/False	If True: the system accrue penalty on a daily basis for late loans using the standard or specific penalty accrual system. If False: no penalty accrual event
USE_MANDATORY_SAVING_ACCOUNT	True/False	If True: A saving account is automatically created for every clients registered in the system. It allows special customization at repayment level, such as automated repayment of loan from saving account or customization of repayment methodology. Consult OPENCBS team for more details. If False: No saving account is generated
VAT_RATE	Number	In case a value added tax is applied, you can use this info at report level
WEEK_END_DAY1	From 0 to 6, 0=Sunday, 6=Saturday	The first day of week end which will be skipped if above options "Do not skip..." is enabled
WEEK_END_DAY2	From 0 to 6, 0=Sunday, 6=Saturday 0	The second day of week end which will be skipped if above options "Do not skip..." is enabled Gen

10.1.2 Other settings

Three other tabs enable configuration of other parameters.

#	Minimum Number of Days Past Due	Maximum Number of Days Past Due	Provisioning of Olb	Provisioning of Interest	Provisioning of P
1	0	0	2	0	0
2	1	30	10	0	0
3	31	60	25	0	0
4	61	90	50	0	0
5	91	180	75	0	0
6	181	365	100	0	0
7	366	99999	100	0	0
8	rescheduled	-	10	0	0

Provisioning rules

The window (1) displays the provisioning rules enabled in the system. These are rules taken into consideration when you are opening the standard report called OLB and LLP. These rules can as well be used inside any custom report. Some provision rules appear by default in the system. The provisioning can be defined on OLB as well as on expected interest and penalties.

To set your own rules, you should first select the lines you want to modify. Then use the fields at the bottom of the window (2) to change parameters. And eventually click "save" to see the rules get updated.

Note: Be cautious about the ranges you are choosing. Make sure there is no overlapping between them. For instance, 30-60 then 61-90 is correct but if you enter 30-60 and 60-90, loans late by 60 days will appear twice in the OLB and LLP report which will give mistaken total.

Holidays

Date	Description
3/6/2013	Independence Day
7/1/2013	Republic Day
9/21/2013	Founder's day
12/25/2013	Xmas day
12/26/2013	Boxing day
1/1/2014	New Year's day

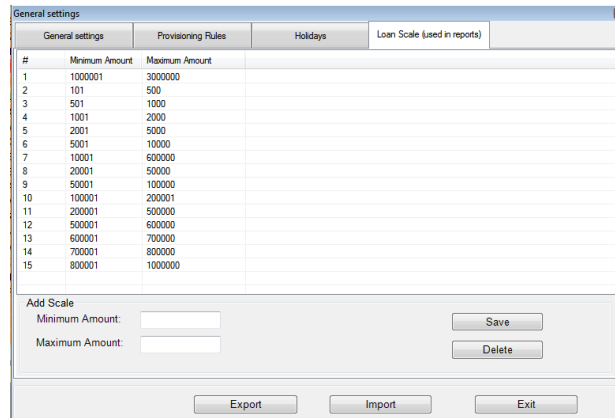
This section displays (1) the public holidays and their dates. These dates will be automatically skipped by the system while generating schedule. In case a holiday is added after contracts are already in the system, the system will automatically move back or forward the installments initially planned on that day.

The section (2) enables to add holidays. Select date, enter your description and validate by clicking save. In case of mistake delete the holiday and reenter it.

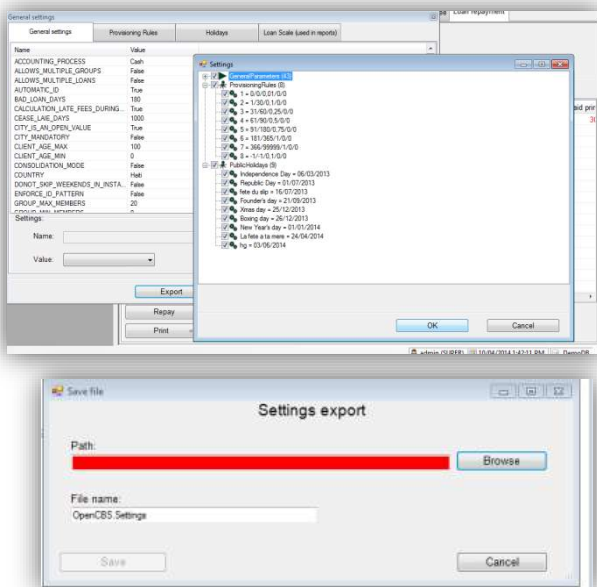
Note: To unexpected schedule changes, we advise you to make these entries before you start operating and make sure that you are updating this list regularly.

Loan Scale

In this tab you define the ranges of loan amount you want to see used to display information about your portfolio at reporting level. Among the 9 standard reports, these ranges will be displayed in the active loan report only. These ranges can be used in any other report you would like OPENCBS team to create for you.



Import/Export general settings



Please note at the bottom of the window the 2 buttons import and export. You can export the settings into a visual studio file and then import it back on another database and thus save significant time in case you have to configure several databases. You should first select the parameters you want to export (1) and then choose the path where you want to export this file (2).

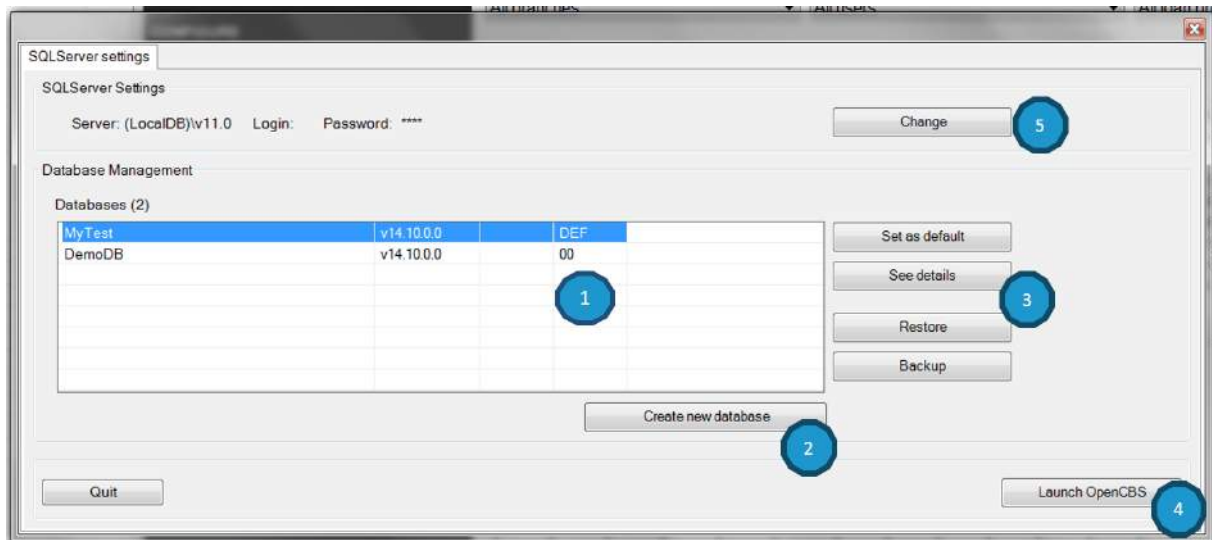
To import, you should select the visual studio file saved on your computer

10.1.3 Database control Panel

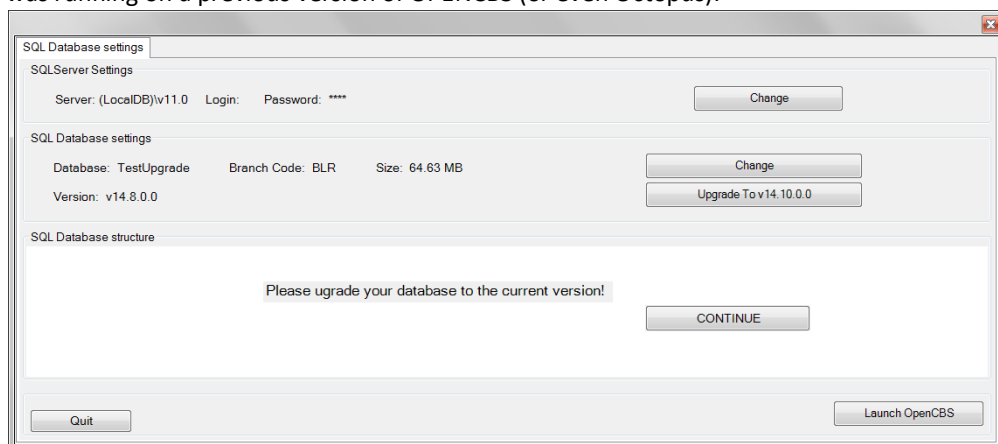
This section is to be used to perform operations related to database such as restoring, creating or upgrading a new database or connecting to another instance of SQLExpress.

Go to Settings>Database Control Panel.

This opens this window:

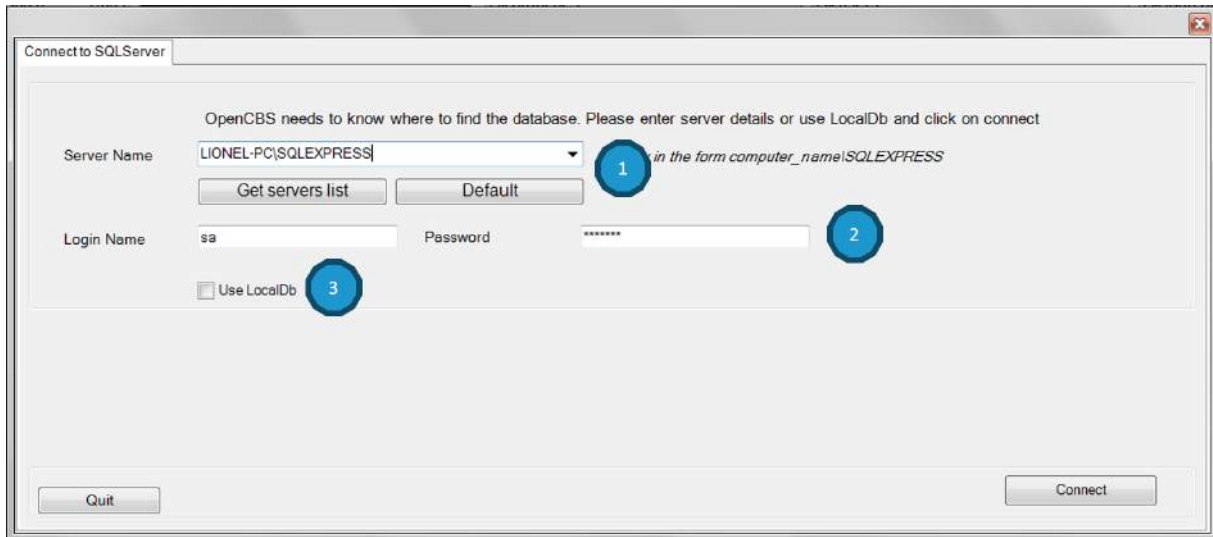


- 1) List of your databases, click to select one.
- 2) Create new database.
- 3) Control buttons:
 1. Set as default. The system will now directly open on the selected database.
 2. See details. To get more information on the characteristics of that database, it gives information and allows you to upgrade databases. This is an operation you need to do if you just restored a database that was running on a previous version of OPENCBS (or even Octopus):



3. Restore. Fill the selected database with data you have previously backed-up (.zip file).
4. Backup. Allows you to save your current data in a .zip file, inside the folder you want.
- 4) Launch OPENCBS. Launches on the selected database.
- 5) Change SQL Server Setting. In that rectangle you see information about your SQL Server. Actually right now, there is no true SQL Server, LocalDB does that role.

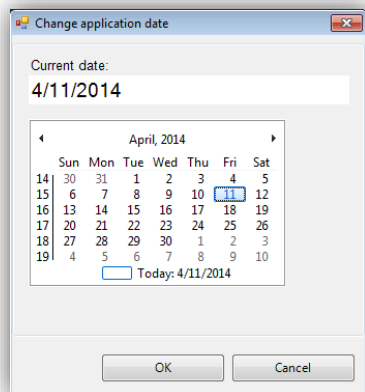
If you click on Change, you will get that window:



1. This is where you have to enter your SQL Server instance name if you want to use one. To learn more about SQL Server installation, please see 11. SQL Server.
2. This is where you have the login and password of your SQL Server instance.
3. Or you can choose LocalDB.

The difference between LocalDB and having a SQL Server is that with LocalDB you cannot connect through network, either local or through internet. You can only work on one machine.

10.1.4 Change application date

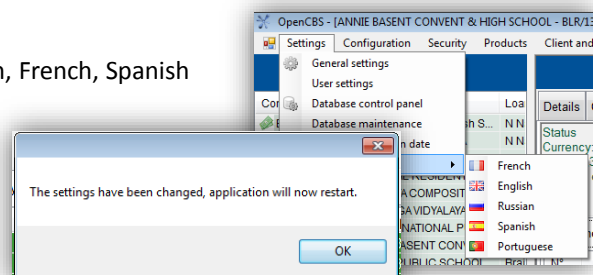


This function enables the user to visualize the data in the system as if the date was different. Select the date and click OK to validate. The alerts get automatically up-dated, refresh the dashboard to visualize the changes there and if you open a loan schedule you will notice that the repayment schedule get displayed taking in consideration only events having occurred before application date.

Note that this a way to manually migrate.

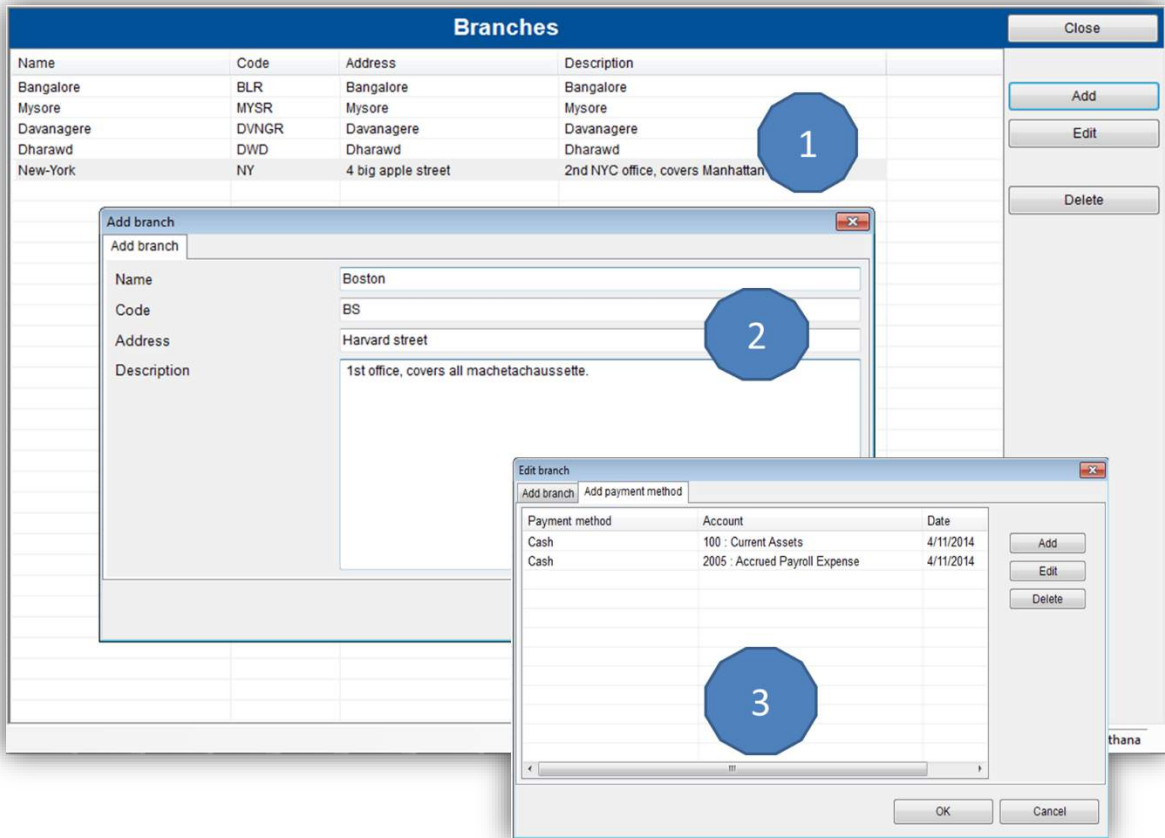
10.1.5 Language

OPENCBS is available in 5 languages: English, Russian, French, Spanish and Portuguese. The user can switch from one language to another by using this menu option. The system is automatically restarting and reopens with the new language.



10.2 Configurations

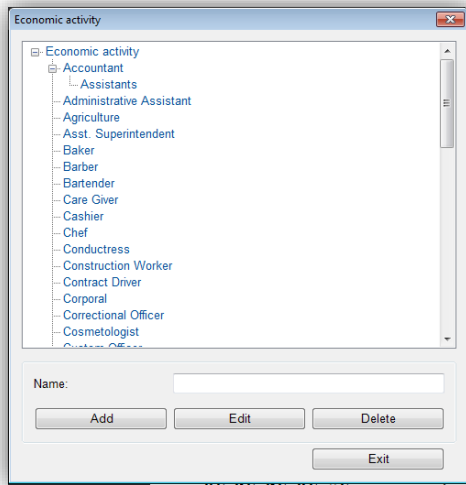
10.2.1 Configure branches



The activity of several offices can be managed in the same database. For this branches have to be configured. You then have capacity to affect the users of the system to the different branches and visualize specific reporting for each of these offices.

1. It displays the branches already entered inside the database. It includes the name of the branch, the branch code which can then be used in the contract code structure. The address of the office, which can as well be used on internal documents such as contracts or receipts and a description field which can be used for any additional information.
2. Clicking on add button on the right side of window, this window appears to allow input of information.
3. After creating a branch, the user has the capacity to preconfigure accounting rules connecting payment method in each branch to a specific account. This enables to define at accounting level different cash desk for different branches.

10.2.2 Economic activity



The next section enables you to define the economic activity of your clients. This information will be attached to the client profile and can then be used at reporting level. You can define categories and sub-categories of activity by selecting one activity before adding a new one.

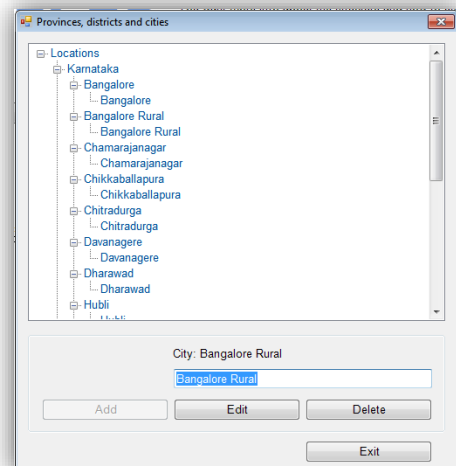
If you are working in a significant number of activities, just contact us and we will help you import automatically your list.

10.2.3 Region, District, Cities

In this section you define the geographic location of your operations. OPENCBS uses by default three level of place definition: Regions (or Provinces), districts and cities.

The window displayed here allows you to add, delete and edit this structure. If your database is empty, the locations you are adding will be first provinces. Then to enter districts, you should first select the province in which you want this district to be recorded. Then to enter cities you should select the districts in which the city has to appear.

If you are working in a significant number of different locations, just contact us and we will help you import automatically your list of cities, districts and provinces.



10.2.4 Funding lines

The funding lines system aims at tracking the origin of the money financing loan activity. This is often required by financiers wanting to track specifically what type of loans they are supporting. This section enables you to define the funding lines, what is their amount and on what period run these funding lines.

Code	Creation date	Amount	Direction	Type
RE_03521/...	4/12/2014	164.33	Credit	Repayment
RE_03521/...	4/12/2014	158.80	Credit	Repayment
RE_03521/...	4/12/2014	155.04	Credit	Repayment
DE_03521/...	4/12/2014	1 000.00	Debit	Disbursement
Commitme...	4/12/2014	1 000.00	Debit	Commitment
DE_03221/...	4/12/2014	50 000.00	Debit	Disbursement

1. Enter the name of your funding line as well as the code of this funding line. The code will appear when you will have to choose a funding line at disbursement level. Both name and code can then be used at reporting level. You have as well to affect a currency to your finding line in case you are using the system in double currency mode.
2. Define here the beginning and ending date of your funding line. This is the period during which loan disbursement will be allowed to be affected to this funding line.
3. You can find here the initial amount of the funding line. Which is the total "external" amount credited to this funding line, meaning that it is only money coming from outside the organization; it doesn't include the repaid amounts credited back to this funding line.
4. Here you can see all the operations credit and debits which occurred on the funding line. These operations can be of the following type:
 - **Entry:** Initial crediting of the funding line.
 - **Commitment:** Amount is promised to be affected to one specific loan.
 - **Disbursement:** The amount has been affected to one specific loan.
 - **Repayment:** The principal or the principal + interest repaid on the loan are coming back to the funding line (configurable through general settings).

The funding line has to be chosen at disbursement level in the section funding line. In case you don't want to affect the loan to any funding line, simply keep the loan on the option "no funding line".

10.2.5 Installment periodicity

Name	Number of months	Number of days
Monthly	1	0
Weekly	0	7
Daily	0	1
Maturity	0	0
Bi - Weekly	0	14

Name: 3 weekly
 Number of months: 0
 Number of days: 21

Buttons: Add, Edit, Delete, Close

Dropdown menu options: Monthly, Weekly, Daily, Bi - Weekly, 1month and 2 days, 3 weekly, Select an installment type...

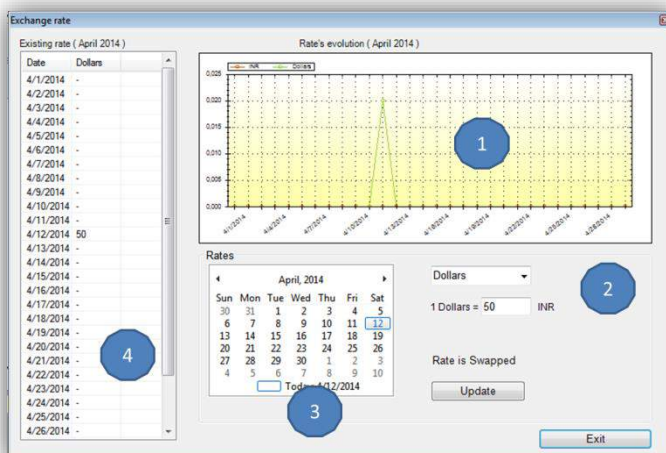
The system includes by default 3 types of periodicity for loan and savings installments: monthly, weekly and daily. This section enables you to add any other type of periodicity you want.

Create the name of your periodicity, choose how many months and days long will be these installments and validate.

These types of installments are then available at loan product creation level.

10.2.6 Exchange Rate

If you use 2 currencies, the exchange rate between these currencies has to be defined for every day on which you would like to display converted amounts. This rate can be defined using the following interface:



1. You can see a graph displaying evolution of the interest rate during the selected time period
2. Where you are defining the exchange rate
3. You can here select the date you want to define exchange rate for
4. A view on existing exchange rate.

OPENCBS proposes as well services of automation of this process for the system to pick-up automatically every-day the exchange rate from a defined source. Contact us for details.

You can then choose your currency when you create a loan or saving product as well as when you are opening a report.

10.2.7 Currencies

OPENCBS allows you to configure 2 currencies. You need to define the following parameters:

1. **Name.** Name of the currency.
2. **Code.** Code of the currency which will be mentioned by the amount in the system and at reporting level.
3. **Pivot.** Additional option used in report.
4. **Swap.** To choose the direction in which you will define your exchange rate. If swap is true for the currency X and false for Y, the exchange rate will be defined as 1 X= how many Y?
5. **Use cents.** Whether cents will be used for this currency.

Name	Code	Pivot	Swapped	Use cents
INR	INR	True	True	False
Dollars	\$	False	False	False

Currencies can be edited after creation using the button update.

10.2.8 Contract Code

By default the system allows you to customize the contract code of your loans adding different fields. By default the contract code is including the Loan cycle, the client ID and the Contract ID. In this section you can add:

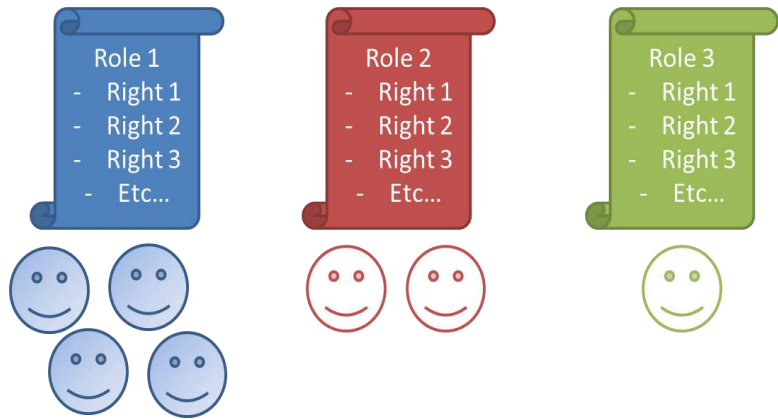
1. The contract code name
2. The Branch code
3. The District name
4. The year of disbursement
5. The loan officer name
6. The product code

If you would like a contract code different from this pattern, OPENCBS team can customize any type of contract code pattern for you. Contact us.

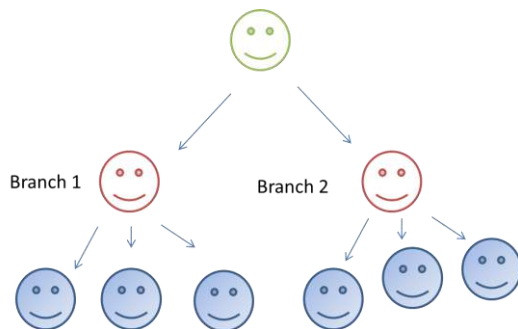
10.3 Security Management

10.3.1 Roles, Users and Subordination

The security management in OPENCBS works on a logic of roles and user definition. In relation to the software, each employee in the company will have a role. This role will be attached to specific rights inside the system rights to access some specific sections of the system or to perform specific type of tasks. These rights have to be defined as per the internal policies of the company using the system and should ensure a strong control on the quality of the data entered in the system.



In a second step for each person who will have to use the system, a user profile will be created. This will include information on the user, his/her credentials and the role this user will have in the system.



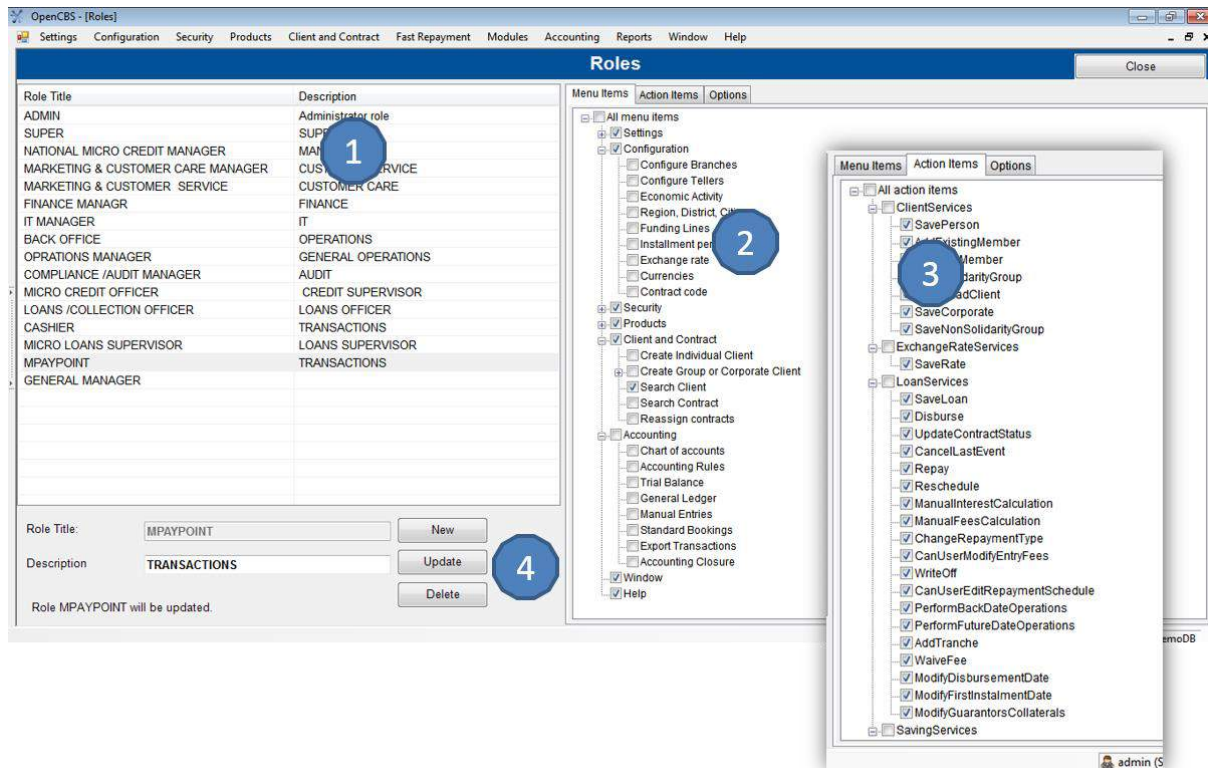
Then for each user you have to define his position in what is called subordination structure. It means you will define which other users are his subordinate and in which branch. This allows each user to see and interact only with the portfolio he has under supervision.

Most institutions define roles as per the position in the company: Cashier, Loan Officer etc...

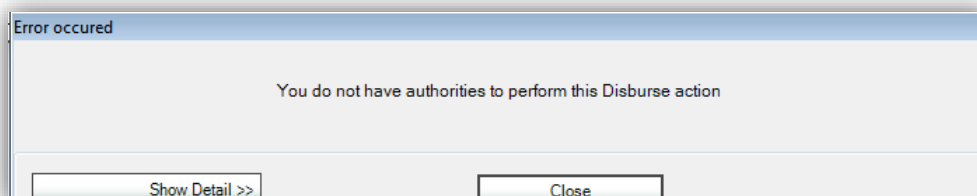
OPENCBS can upon request customize the security system in case of specific needs not covered by this standard system.

10.3.2 Roles Definition

The roles are being defined through the window presented below:



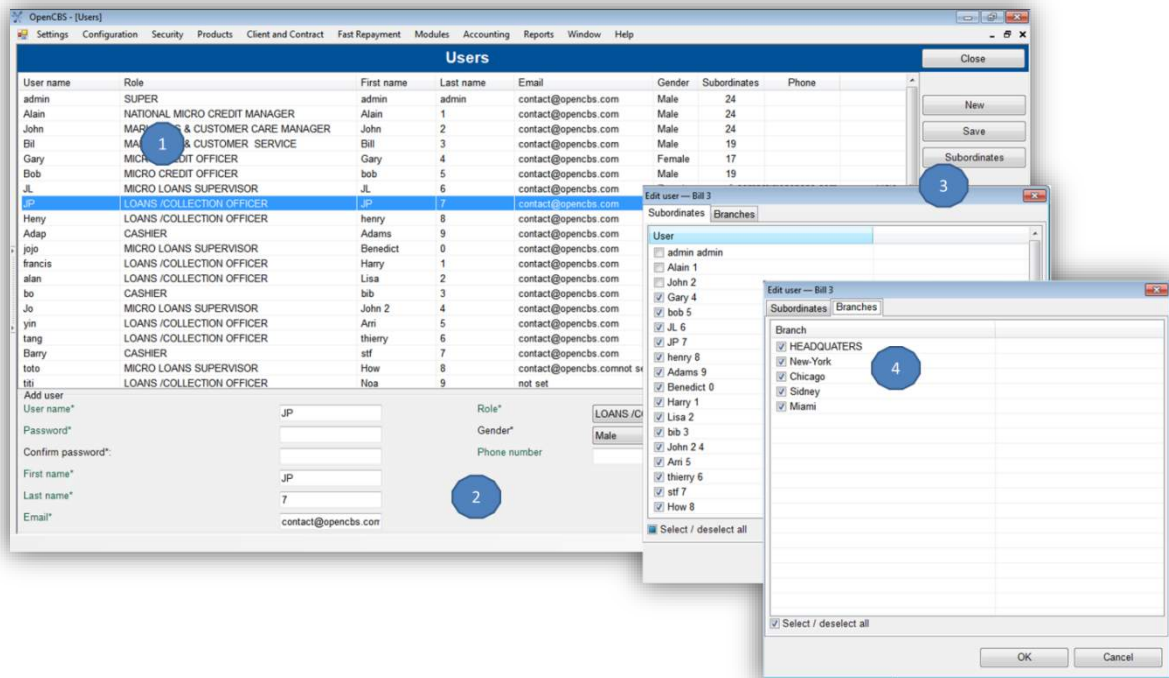
1. This main window displays the existing roles with their description. By default the system includes 5 roles: Admin, Cashier, Loan Officer, Super administrator or visitor, each of them having different level of authorization. You need to select one role to see its authorizations.
2. Authorizations are organized in 2 tabs. In this first tab, you define the access to the different sections of the system. The structure of this menu fits exactly the structure of the upper menu of the software. By un-ticking items in this list you will block access to this role to the related section of the system.
3. In this second tab, you define authorization on actions. You have here gathers most of the existing type of actions which can be performed inside the system. Un-tick or tick the appropriate lines to forbid or allow an action to be performed. In case an action is forbidden for a user, the related button in the system will be disabled or the system will display the following error message:



4. This section below enables you to add or delete existing roles. Be informed that before deleting a role your need to ensure that no user is attached to this role. You enter here the role title and a description of the role.

10.3.3 Users definition

Here is the where to define the users of the system.

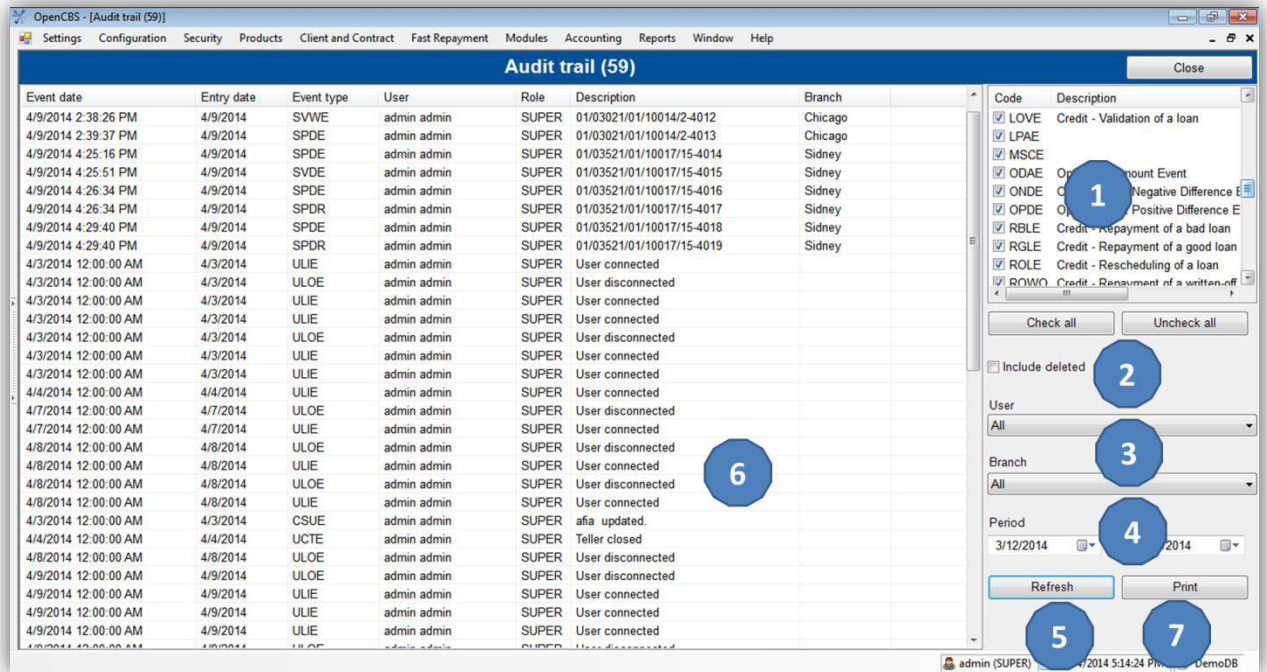


1. In the main window are displayed the user information:
 - User name
 - Role
 - First Name
 - Last Name
 - Email
 - Gender
 - Number of subordinates
 - Phone
2. In this section, the administrator enters user information. A password has as well to be entered for the user. This password can then be changed by the user without having to access this section.
3. To define the subordinate of each user, you have to select the user and click the button Subordinates on the right side of the screen.
4. You'll see appear window with 2 tabs, one called subordinates where you have to select the subordinated users and one called branch where you should select the branch the user has under his supervision.

Important note: For high level management you should select all staff as subordinates and not only the next level of management. For example, for a chief of operations, selecting only branch managers as subordinate will not be enough to visualize all loans, you should as well select the loan officers as subordinate to be able to follow their portfolio.

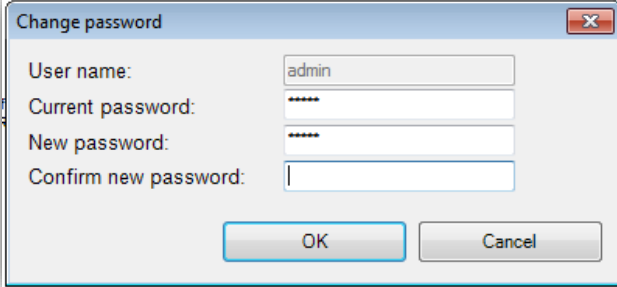
10.3.4 Audit Trail

This section allows you to see all the actions which have been performed in the system over a given period of time and know by which user they have been performed.



1. Select the event you want to see. Use the options "check all" and "uncheck all" to go faster.
2. Include or exclude deleted events.
3. Select only events performed by one specific user or see only events which occurred in one specific branch.
4. Select the period on which you want to display events.
5. Click refresh to display the events related to your selection.
6. All events corresponding to your selection will be displayed in the main window with the following information:
 1. Event date and time
 2. Entry date or when the action has been done in the software
 3. Event Type
 4. User who performed the action
 5. His/her Role
 6. Description of the event to track it in the database if required
 7. Branch where this event occurred
7. Click print to create an extract of the audit trail.

10.3.5 Change Password

A screenshot of a 'Change password' dialog box. The dialog has a title bar with a close button. It contains four text input fields: 'User name:' with the text 'admin', 'Current password:' with six asterisks, 'New password:' with six asterisks, and 'Confirm new password:' which is empty. At the bottom are 'OK' and 'Cancel' buttons.

Change password

User name: admin

Current password: *****

New password: *****

Confirm new password: |

OK Cancel

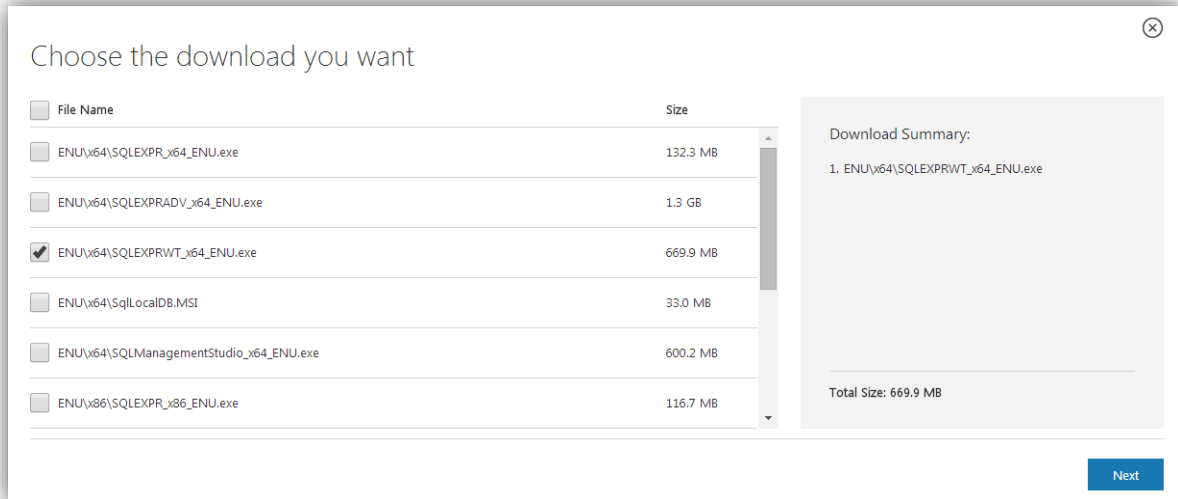
This section allows users not having access to user definition to modify their password. Just enter your current password and twice the new password to confirm it.

11. Annex: SQL Server (network)

11.1 Download SQL Express

If you don't have any database engine yet, please follow the link [SQLServer Express](#).

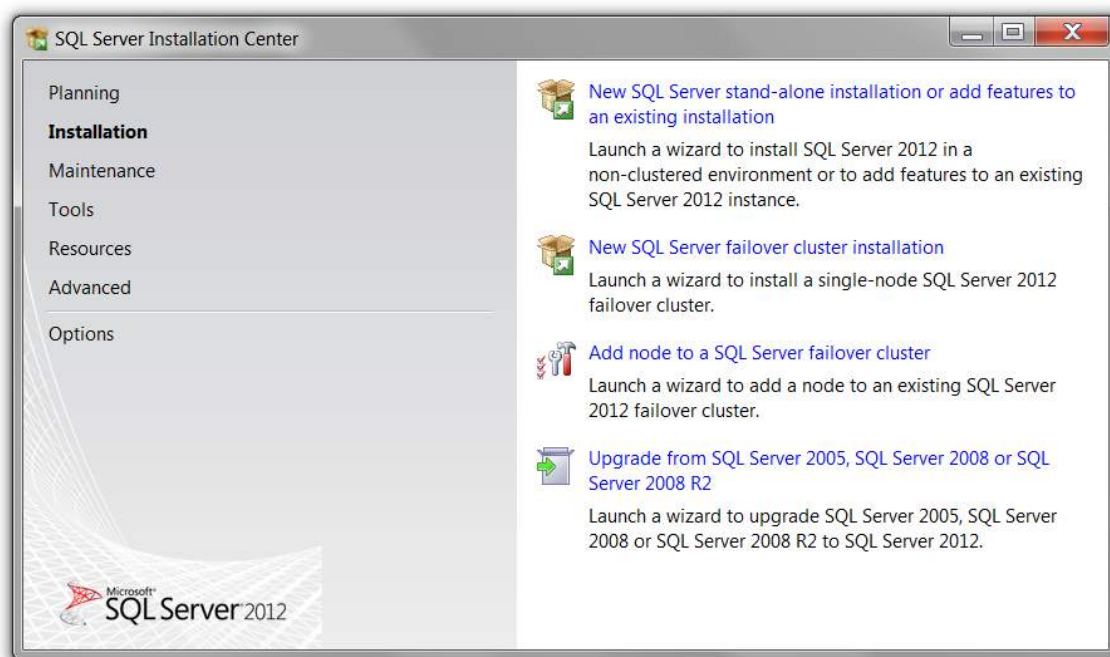
There are about 10 different downloads. We recommend you to download SQLEXPRTW_x64_ENU for 64-bit or SQLEXPRTW_x86_ENU for 32-bit so you can have directly Management Studio. However, the minimum download is SQLEXP simple (the first one on the image below).



11.2 Install your SQL Server

Launch the .exe you just downloaded.

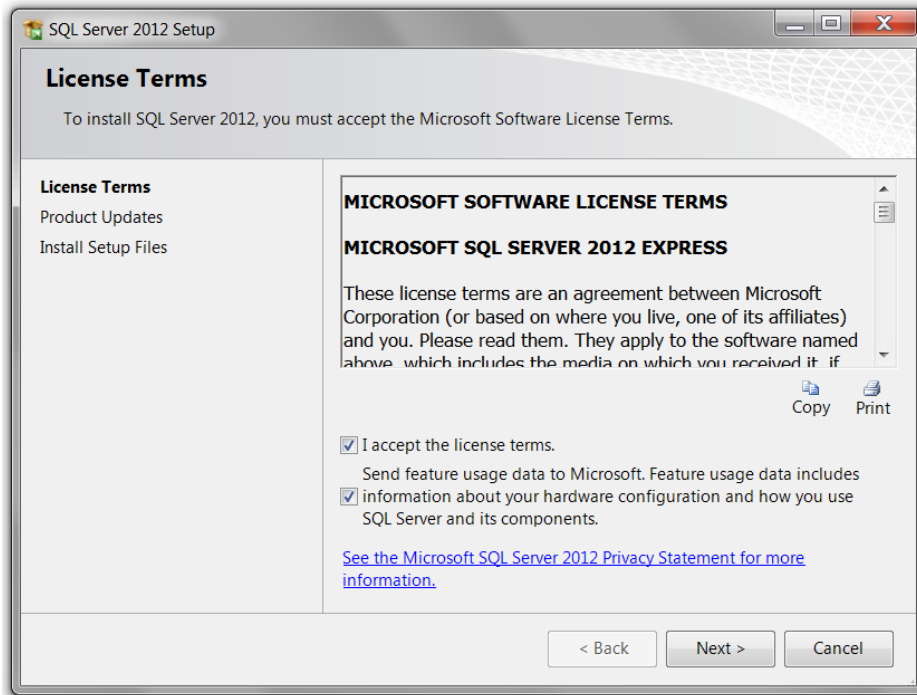
For a classic configuration, we recommend you to follow the installation as explained below. Other configurations are fine, if you need further information do not hesitate to contact us. The steps given below are quite typical but according to the version you downloaded, the process should not be exactly the same.



Within Installation, click “New SQL Server stand-alone installation or add features to an existing installation”.



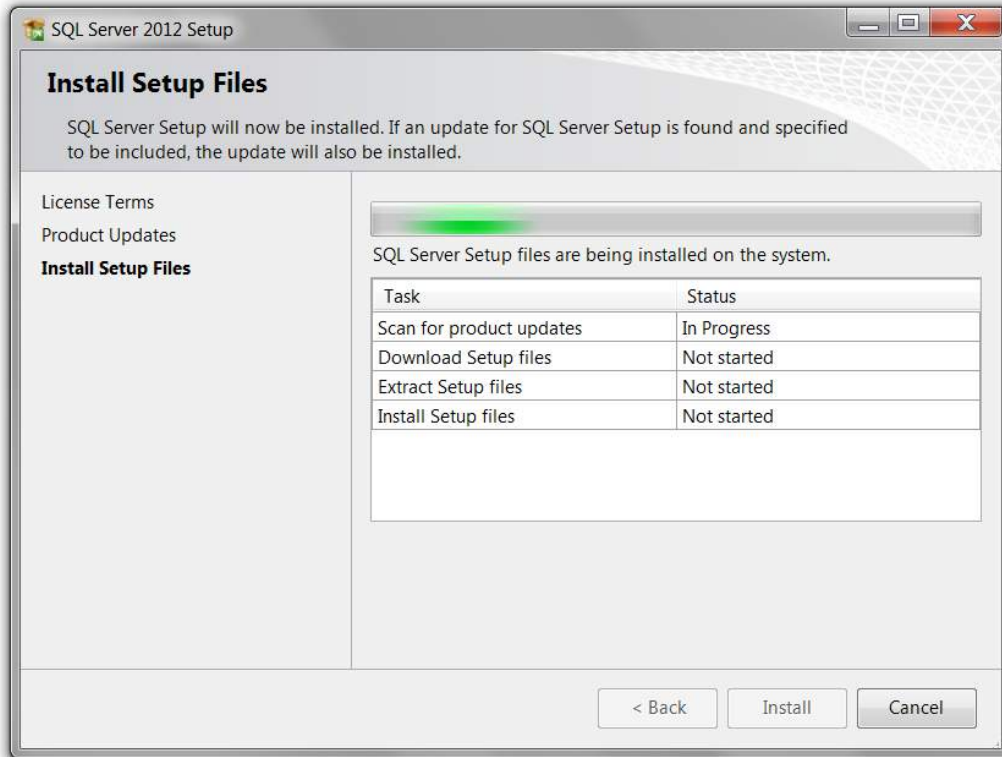
According to the version you are using, a “Product Key” step can appear. If you use SQL Server Express, you should just have to click “Next” as it is free.



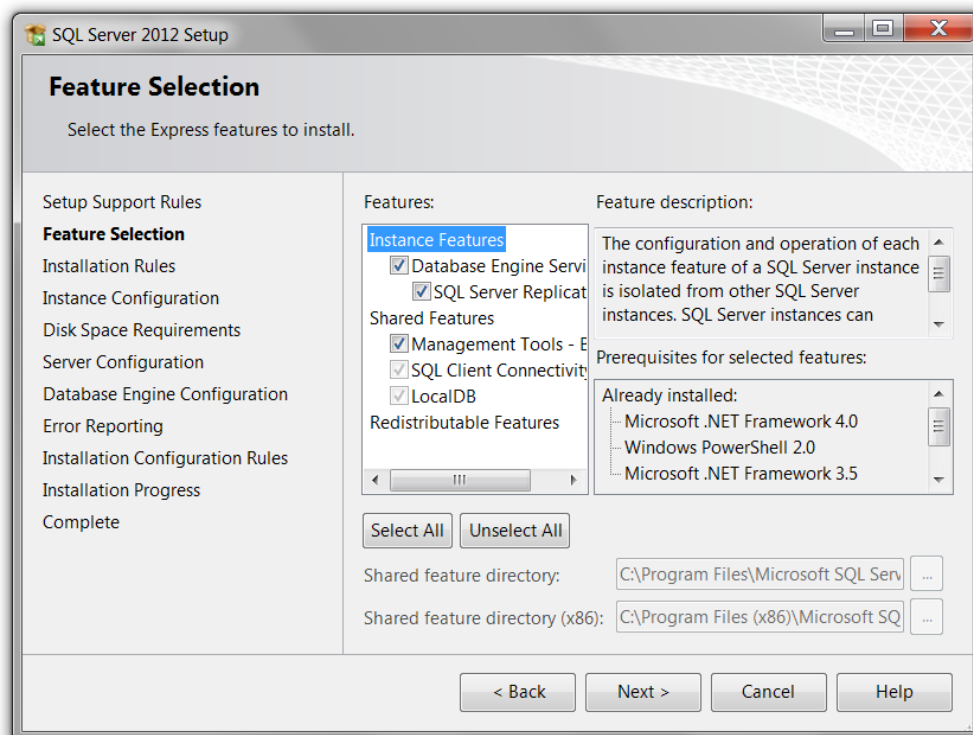
Accept the license terms and click “Next”.



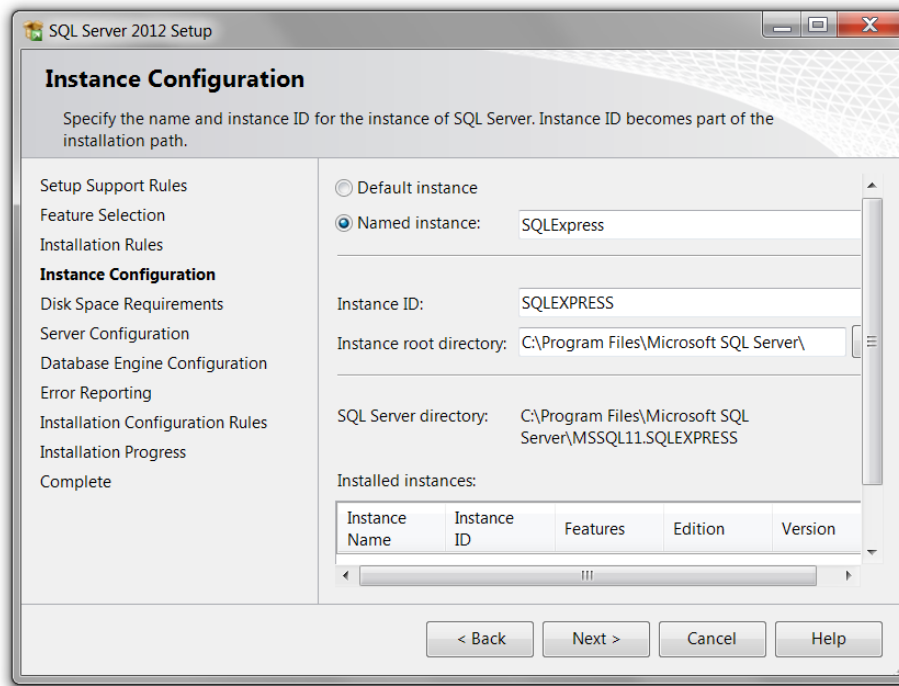
Wait for the checking to finish. Then click “Next”. If the checking doesn’t seem to reach an end, you can still click “Next”.



Wait for the tasks to be completed.



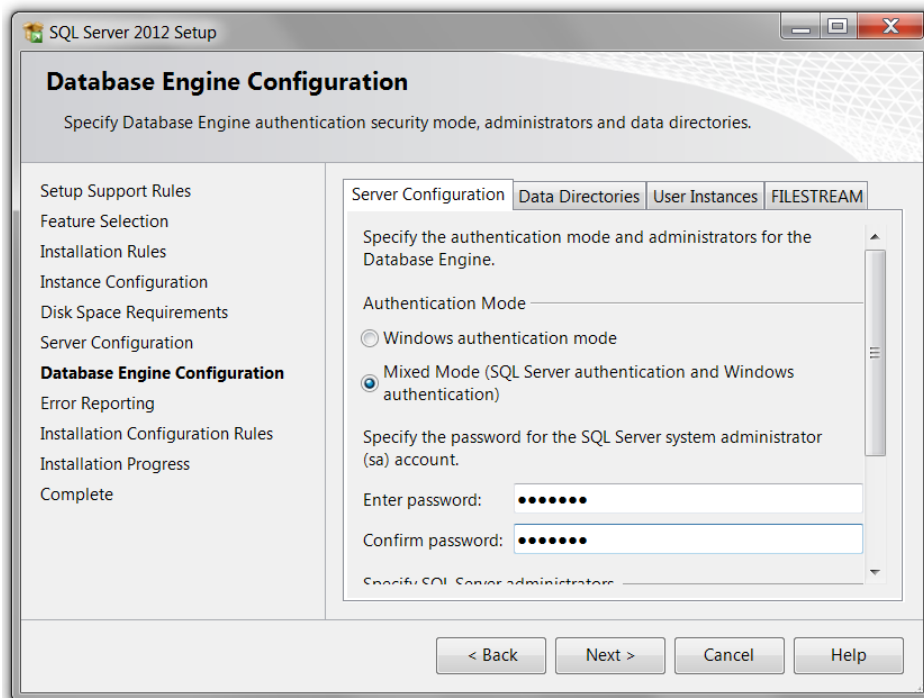
At Feature Selection step, don't forget to take Management Tools if you want to be able to use Management Studio.



Choose a name you will remember as you will need it to connect OPENCBS to your SQL Database. We advise you to name it SQLExpress to make it easy.

If you have enough disk space, you should go through Disk Space Requirements step seamlessly.

At Server Configuration step, the default configuration is for most cases what we need.



At Database Engine Configuration, select Mixed Mode, choose a password and keep it (you will need it to connect OPENCBS to your Database).

At Error Reporting step, click “Next”.

You should go through Installation Configuration Rules step seamlessly.

Wait for the installation Progress.

At Complete step, just click “Close”.

11.3 Plug OPENCBS with your SQL Server

Once you have created your SQL server instance, you need to use it inside OPENCBS.

Open OPENCBS, Go to Settings>Database Control Panel>Change.

You get on that window:

Enter the Server instance name (configured at the step Instance configuration). If you followed our advices, it should be COMPUTER_NAME\SQLEXPRESS. If you created a default instance, just put the name of your computer.

Then Login Name is by default sa, and the password is the one you inputted while creating the server (mixed mode option).

11.4 Use OPENCBS in a local network

To use OPENCBS in a local network, you should activate SQL Server Browser. Also verify that the number of allowed connections is enough in SQL Server Management studio.

If all parameters are set right, the connection through another computer works the same: see previous screenshot.

11.5 Use OPENCBS online

OPENCBS can be used online. Two solutions:

- You can completely host OPENCBS remotely with RDP.
- You can just host the database remotely, then further configuration on your SQL Server instance is necessary. You must enable the adapted protocols. Then you have to make sure your router ports are enabled for SQL Server. Finally you can use your SQL Server remotely through the IP address. You can find more information about the configuration of the SQL Server for online use on the internet or by contacting us.

12. Annex: OPENCBS services

This user guide gives you description and explanations for the core software of OPENCBS. This version includes the minimum functionality required for an institution to operate. We hope this tool will help a maximum of institutions to make their first step inside OPENCBS.

However for a more accurate use of the software and a better impact on activities, OPENCBS team offers payable services and features. The website opencbs.com gives you a good idea of the most common offers we sell.

If you are not connected to internet right now, find here a global explanation on our services:

12.1 Custom developments and configurations

As mentioned several time in this document, we can adjust the system according to your needs by some additional developments and configuration. Among others, we can:

- Configure as many additional data fields as you want;
- Configure system to create exactly the schedule you need or apply exactly the repayment policy you have;
- Configure the system to fit exactly your internal interest and penalty accrual policies;
- Configure schedules, repayments, rescheduling operations.
- Configure accounting system for it to fit exactly your accounting policies;
- Develop extern reports to fit exactly the management needs;
- Customize your internal forms;
- Develop additional modules for your needs;
- Connect the system to your accounting software;
- Connect the system to your local credit bureau office;
- And many others we invite you to know by contacting us at "contact@OPENCBS.com"



12.2 Training and implementation

We can assist you in the implementation of the system. This service usually include the following steps:

- **Preliminary audit mission.** For big size organization, we visit your institution and make a full audit of your organization processes in perspective of an implementation of OPENCBS. From outputs of this mission we build an implementation plan custom made for your organization.
- **Gap assessment.** Detailed review of client's policies, production and validation of detailed function specification document (FSD);
- **Training.** with the following sessions:
 - o *Staff Training.* Teach practically the staff how to use the system. It targets people who will have to perform day to day operations in the software.
 - o *Manager Training.* This one-day session gives an introduction to the management team on the system and on everything they need to know to maximize OPENCBS impact on their operations. Particularly, it focuses on the reporting functions of the system.

- *MIS Manager Training.* Dedicated to the persons who is in charge of the maintenance of the system in the organization. It includes a full training on configuration of the system, an initiation to the database management, a basic troubleshooting training and how to report issues / ask for help to our team, and an introduction on report and form design.
- **User Acceptance phase**
 - Definition with the client of the user acceptance tests to validate;
 - Client is using the system going through the user acceptance tests. OPENCBS team supports the process and performs additional developments as per issues being faced till all acceptance tests are valid. Additional development days are provisioned.
- **"Go-live" phase.** The system starts being used in "live operations" of the institution. At start OPENCBS keeps close support with one staff member on site, and then a dedicated support staff over a period from 1 to 4 weeks.

Share your plans with us at contact@OPENCBS.com and we will draw the perfect implementation plan for your institution.

12.3 Technical support

We support your team in their day to day activity with:

- Off-site technical support via mail, phone and Skype with a guarantee of **a response within a working day for any issue reported;**
- Upgrades of your database to the **most recent version** of the system anytime you request it;
- Fixing of **any bug** you might be facing in the next upgrade of the software (within 3 weeks);
- Consideration of all your requests for additional functions and an adjustment proposal with clear pricing and time frame sent back within 2 weeks.






12.4 Software guarantee

We maintain the system by guaranteeing you we will keep all features you are now using in future releases of the software. We test the upgrade of your database before releasing so we are sure everything is going smoothly.

12.5 Standard offer

In order to have clear offers, we decided to create two packages, standard and enterprise. You can ask us for a particular service, but packages are really cost-efficient. Here is the comparison between using freely OPENCBS and subscribing to a package:

	 CORE	 STANDARD	 ENTERPRISE
Yearly fee	Free	0.25% of Loan Portfolio	0.50% of Loan Portfolio
Modules	On demand	3	6
Technical Support	Forum only	Mail & Skype	Mail, Skype & Phone
Software Guarantee	No	On demand	Yes
Software implementation	No	On demand	Yes
Custom developments	No	On demand	On demand

Please note those offers are subject to changes. Any institution must fulfill conditions to be able to subscribe to one of those packages.

12.6 Contact

You can speak with the team through the following streams:

- By the forum, where the team and other users are present. There is no guarantee of answer but *it is the only free technical support available*.
- By mail contact@opencbs.com.
- By skype [info.opencbs](https://www.skype.com/join/infopencbs).
- By phone, please see the website to get the last telephone number.
- By social networks. GitHub, Facebook, Twitter and LinkedIn.