



Payment kiosk for making
Prints, Copies and Scans
in self-service
(with a compatible server)

User's manual V1.1

cBot



≧ **SAFETY** ≦

This CARTADIS product and supplies are manufactured and certified to strict safety regulations, electromagnetic regulations and established environmental standards.

≧ **WARNING!** ≦

Any unauthorised alteration, which may include the addition of new functions or connection of external devices, may impact the product certification. Please contact your CARTADIS representative for more information.

⇒ **Warning markings**

All warning instructions marked on or supplied with the product should be followed.

⇒ **Electrical supply**

This product shall be operated from the type of electrical supply indicated on the product's data plate label. If you are not sure that your electrical supply meets the requirements, please consult your local power company for advice.

To disconnect all electrical power to the product, the disconnect device is the power cord. Remove the plug from the electrical outlet.



⇒ **Operator accessible areas**

This product has been designed to restrict operator access to safe areas only. Operator access to hazardous areas is restricted with covers or guards which would have to be removed using a tool. Never remove these covers or guards.

⇒ **Maintenance**

Any operator product maintenance procedure will be described in the user documentation supplied with the product. Do not carry out any maintenance on the product which is not described in the customer documentation.

⇒ **Cleaning your product**

Before cleaning this product, unplug the product from the electrical outlet. Always use materials specifically designated for this product. The use of other materials may result in poor performance and may create a hazardous situation. Do not use aerosol cleaners; they may be flammable under certain circumstances.

***For more information on Environment, Health and safety in relation to this CARTADIS product and supplies, please contact the following customer help lines:
Europe: +33 1 48 77 40 60.***



The CE mark applied to this product symbolises CARTADIS declaration of conformity with the following applicable European Union Directives as of the dates indicated:

⇒ **January 1, 1995:**

Council directive 73/23/EEC, amended by Council Directive 93/68/EEC, approximation of the laws of the member states related to low voltage equipment.

⇒ **January 1, 1996:**

Council directive 89/336/EEC, approximation of the laws of the member states related to electromagnetic compatibility.

A full declaration of conformity, defining the relevant directives and referenced standards, can be obtained from your CARTADIS representative.

≧ **WARNING!** ≦

In order to allow this equipment to operate in proximity to Industrial, Scientific and Medical (ISM) equipment, the external radiation from the ISM equipment may have to be limited or special mitigation measures taken.

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1 Introduction

The cBot system is a kiosk equipment designed to pay usage of an MFD (Multi-Functional Device) in self-service. Print, copy and scan can be paid with coins, bills or bank cards according to the chosen optional payment options and from a registered user's account. The cBot kiosk is used with a print management and accounting server (like Gespage).

The available means of payment are:

- Coins: (optional coin changer)
 - The coin mechanism can give back change.
 - Change can be given for coins or bill payments.
 - Coins can be used to pay print, copy or scan or to load money on a user's account.
- Bills: (optional bill reader)
 - Bills can be used to pay print, copy or scan or to load money on a user's account.
 - Money change can be returned to the user in coins.
- Bank card: (optional Nayax reader)
 - Bank cards can be used to pay print, copy or scan or to load money on a user's account.
 - The use of the Nayax card reader requires the subscription to Nayax payment services (contact your sales contact for further information).
- Registered user's account:
 - If a user has a server account loaded with sufficient money, this account can be used to pay the MFD services.

The main features of the cBot are:

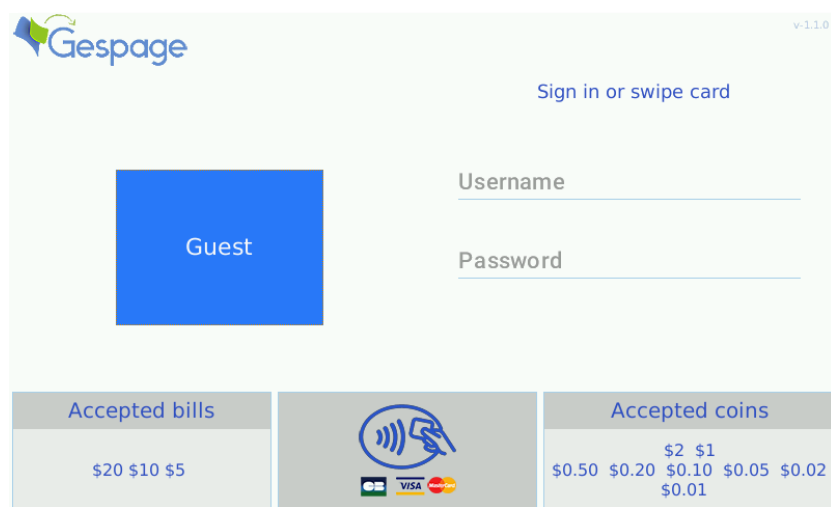
- Self-service for copies:
 - Guest users can pay by cash (coins, bills) or bank cards, server registered users can additionally pay from their account.
 - Guest users must pay first to enable the MFD and then can make copies until the credit is exhausted.
- Self-service for scan to USB stick:
 - Guest users can pay by cash (coins, bills) or bank cards, server registered users can additionally pay from their account.
 - Guest users must pay first to enable the MFD and then can scan to a USB stick until the credit is exhausted.
 - The ability to scan to a USB stick may not be available if your MFD doesn't support this feature. Please ask your MFD supplier for getting the features of your MFD.
- Self-service for print release from a USB stick:
 - Guest users can pay by cash (coins, bills) or bank cards, server registered users can additionally pay from their account.
 - Guest users must pay first to enable the MFD and then can print from a USB stick until the credit is exhausted.
 - The MFD will stop printing immediately when the credit is exhausted. This may lead to a partial printed document.
 - The ability to print from a USB stick, and the available document formats (PDF, JPEG...) are defined by your MFD. Please ask your MFD supplier to know the list of accepted documents formats.
- Self-service for print release from the server:
 - Only users with a registered account can release print jobs stored on the server. Before releasing the print job, they must check if they have enough balance to print the entire document. If needed they can insert additional cash or top their account up.
 - The print jobs have to be submitted to the server in regular ways.
- Registered user creation
 - Guest users can create a registered account registered on the server and reload it.
- A registered user can authenticate on the cBot through:
 - Keyboard login (by login and password, or by PIN code)
 - Card login with (depending on installed configuration):
 - A bar code reader (this method is often used in public library),
 - A contactless card reader (125 KHz or 13.56 MHz).
- An optional ticket printer enables receipts to be printed.

The cBot is compatible with almost all the MFD brands. Please contact your CARTADIS representative for more information on this subject.

It has a touch screen with a colour display of 7-inch.

2 Customer journey

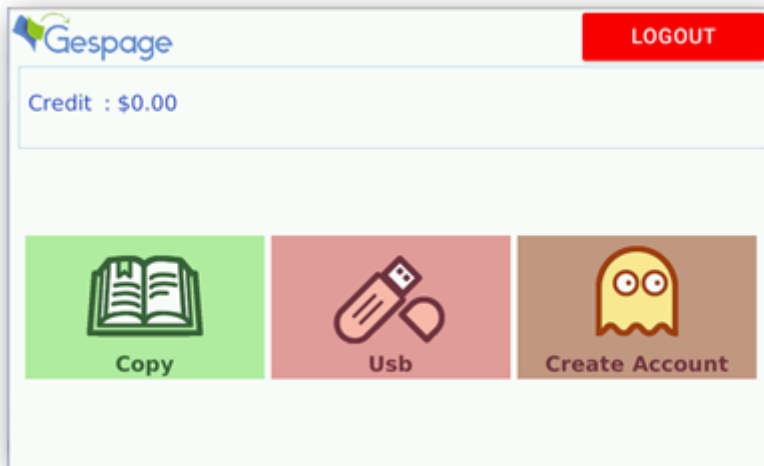
2.1 Home screen



From the bottom of the home screen, the user can see which means of payment are available. The left side of the screen is dedicated to Guest users' access while the right side is dedicated to registered users' access.

2.2 Usage by a guest user

In the next paragraphs, we call a **Guest user** a user paying with cash or bank card with no registered account. After having pressed the key “Guest”, cBot shows the following screen:

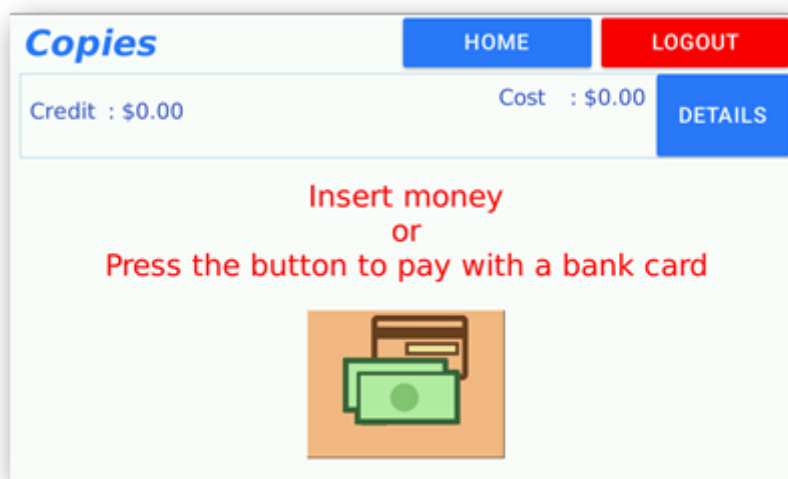


Once this screen is displayed, the user can select:

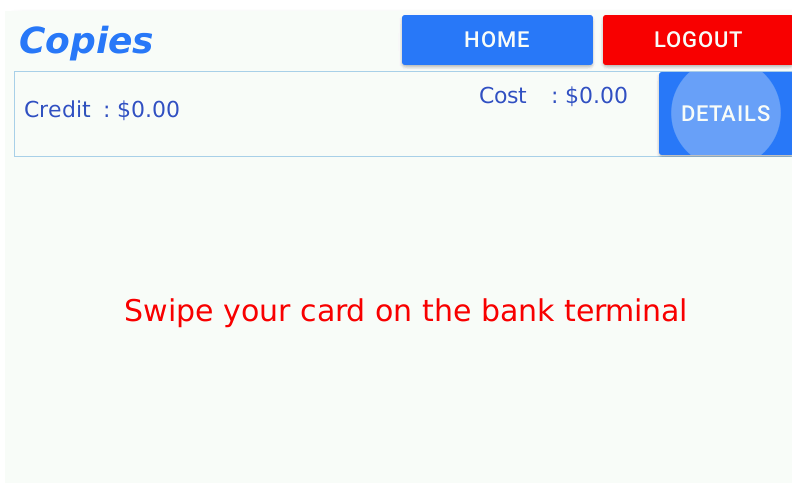
- **Copy** for copying.
- **Usb** for printing from or scanning to a USB stick.
- **Create Account** allows a user to create an account on the server and to top his account up. He would then be able to login as a registered user and to release its pending print jobs.

2.2.1 Using MFD

If either “Copy” or “Usb” is selected, the following screen is shown and the coin and bill acceptors are enabled, user can then insert money. The MFD is enabled when the amount of money inserted is higher than the price of an A4 B&W copy. The user can then use the MFD until their credit is exhausted.



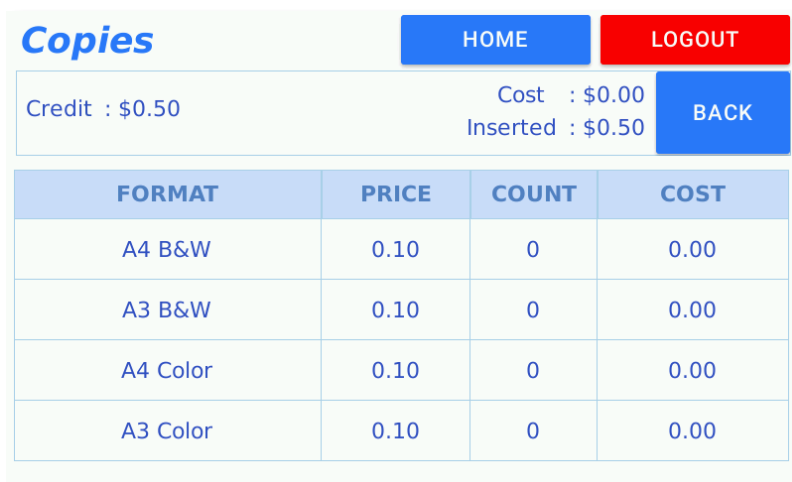
If the user wants to pay with a bank card, he must press the bank card button and then swipe his card on the bank card terminal (Nayax).



Once the bank card is swiped, it authorizes the MFD for a customizable maximum amount (20.00 for example). This maximum amount is defined in the bank card terminal itself; it can be modified in the Nayax portal (see § 6.1).

The actual amount debited from the bank card account will be defined at the end of the cBot transaction when the user presses the logout button.

Once the money is inserted or the bank card is swiped, the user can use normally the MFD. That is to say, he must use the screen of the MFD to execute any available services, of course the user interface is specific to each brand and model of MFD. While the user is using the MFD, the screen, here below, is updated with the current remaining credit.



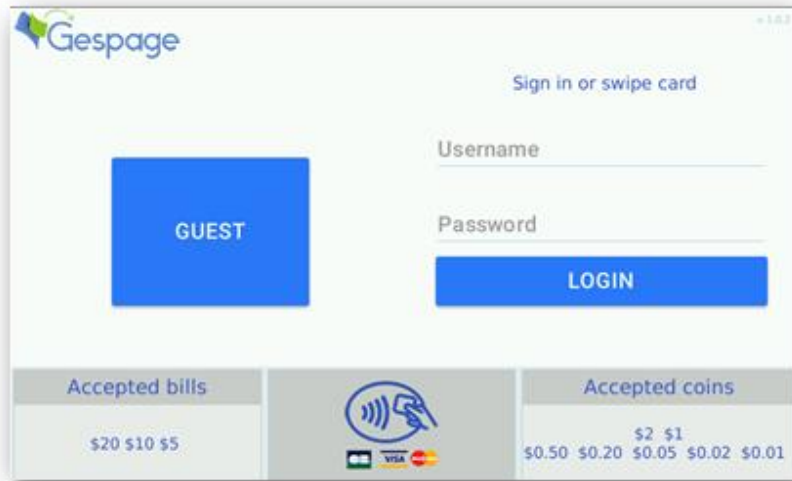
When the expected usage of the MFD is finished, the user must press the LOGOUT button, the MFD is disabled and the following actions are carried out:

- If payment was done with bills or coins, the change is returned back to the user.
- If payment was done with a bank card, the actual price of the transaction is committed to the Bank terminal.

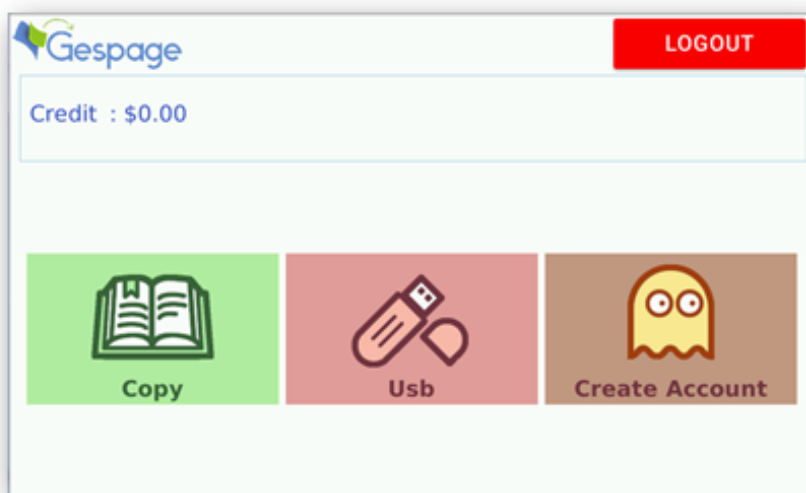
If the button "LOGOUT" is not selected, a timeout will automatically close the session, see the parameter *inactivity_timeout_secs* (see § 3.4.2).

2.2.2 Creating a user account

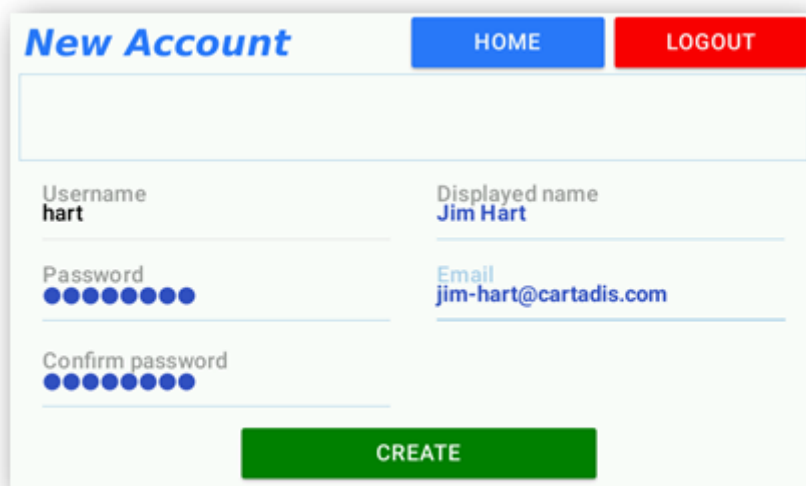
To fully use the cBot solution, a guest user may wish to create a user account on the print management and accounting server, the customer journey for creating an account is:



From the home screen, press “GUEST”, the following screen is displayed:



Press “Create Account”, the registration screen is displayed. It has to be filled with the user’s personal details.

The image shows the 'New Account' registration screen. At the top left is the title 'New Account' in blue. In the top right corner are two buttons: a blue 'HOME' button and a red 'LOGOUT' button. Below the title, there is a large empty rectangular box. Underneath this box, there are four input fields arranged in two columns. The left column has 'Username' with the value 'hart', 'Password' with ten blue dots, and 'Confirm password' with ten blue dots. The right column has 'Displayed name' with the value 'Jim Hart' and 'Email' with the value 'jim-hart@cartadis.com'. At the bottom center is a large green button labeled 'CREATE'.


Once the fields are filled in, after selecting “CREATE”, the user may be asked to read the General Terms and Conditions and must accept them for confirming the creation of your account.

Do you agree with the general terms & conditions ?


CONDITIONS GENERALES DE VENTE ET DE SERVICES (Hors e-commerce)
(
PROFROID a branch of Carrier SCS R.C.S. n° 483
018 370 - N° TVA FR 58483018370 Invoicing
adress 178, rue du Fauge – Z.I. Les Paluds - B.P.
1152 - 13400 Aubagne Cedex - France


YES CANCEL


The account name is then shown in the top left corner. Since it was just created, the current credit is 0. To top your account up, press “Reload”.


 **LOGOUT**

User : hart
Credit : \$0.00


Copy


Print


Usb



Reload


Select the mean of payment you wish to use.

Reload **HOME** **LOGOUT**

User : hart
Credit : \$0.00

Select payment mode


Card


Cash

For example, if “Cash” is selected, you’ll get the following screen:

The screenshot shows a kiosk interface titled "Reload". At the top right are two buttons: "HOME" (blue) and "LOGOUT" (red). Below the title, a box displays "User : hart" and "Credit : \$0.00". The main instruction is "Select the amount to recharge". Below this is a grid of six buttons: "FREE AMOUNT" (brown), "\$0.01" (blue), "\$0.03" (blue), "\$0.05" (blue), "\$0.08" (blue), and "\$0.10" (blue).

If you select “FREE AMOUNT”, you’ll be allowed to top your account up with a variable amount of money. You should press “LOGOUT” for stopping your account up, no change is returned back in that case.

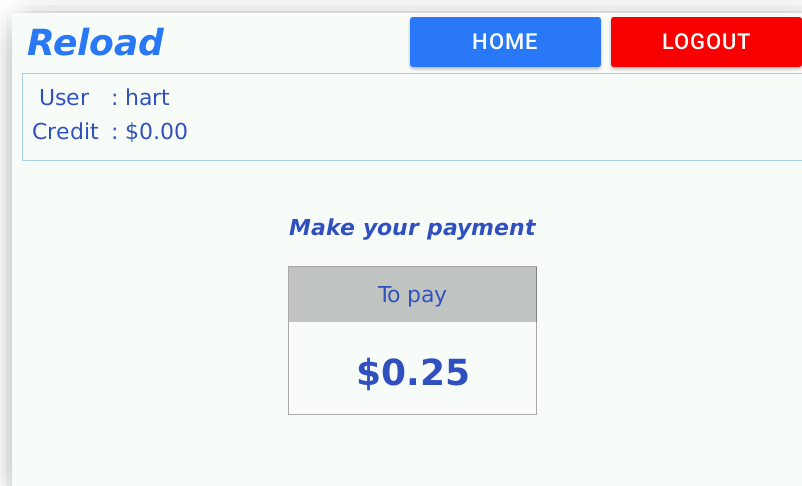
If you select a predefined amount, your transaction will be finished as soon as the predefined amount is reached. In such a case, change may be returned back to the user.

If “Card” is selected, you’ll get the following screen:

The screenshot shows a kiosk interface titled "Reload". At the top right are two buttons: "HOME" (blue) and "LOGOUT" (red). Below the title, a box displays "User : hart" and "Credit : \$0.00". The main instruction is "Select the amount to recharge". Below this is a grid of five buttons: "\$0.05" (blue), "\$0.10" (blue), "\$0.15" (blue), "\$0.20" (blue), and "\$0.25" (blue). The bottom right area of the grid is empty.

The reload amounts are predefined (we’ll see later on how to set them up).

Select an amount, the cBot shows the following screen and waits for a bank card swipe.



2.3 Usage by a registered user

A registered user must first authenticate on the cBot, this authentication can be done in 2 ways:

- by using the virtual keyboard for entering a login name and password or a print code

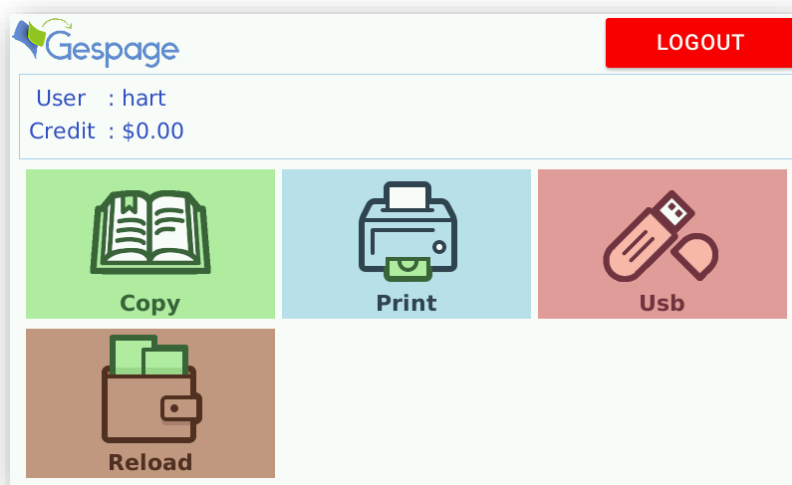
or

- by swiping a contactless user card on the card reader (not the bank card reader)
 - MIFARE contactless or 125Khz,
 - ISO magnetic,
 - Bar code.

The type of reader wished must be specified at the time of ordering your cBot.

The card ID must be known by the server, the cBot is not able to associate a card with an existing server account.

Once logged in, the user can select the same buttons as for a Guest user (see above), an additional "Print" button is shown.



If the "Print button" is selected, the list of jobs belonging to the user is shown. In the top left corner, the name and the current credit of the user are also shown.

By touching the name of a file, it becomes selected and will be printed when the button PRINT is pressed. The user balance on the server is then updated.

Print HOME LOGOUT

User : hart Cost : £0.90
Credit : £49.10

DATE	FILENAME	COST
11:51	Readme MCUXpresso 10.3.1.pdf <small>owner: hart, 18 pages, bw, duplex</small>	0.90
11:46	INRIA_guide_analyse_licences_libres_vf.pdf <small>owner: hart, 18 pages, bw, duplex</small>	0.90
11:44	ESA Brand Matrix 16.09.15.pdf <small>owner: hart, 11 pages, bw, duplex</small>	0.60
11:41	702101A InfraLINK IFSF Generic STD.pdf <small>owner: hart, 2 pages, bw, duplex</small>	0.20

PRINT DELETE REFRESH

2.4 Receipt ticket

If a ticket printer is available and enabled, at the end of the session ("LOGOUT" button pressed or session timeout occurred) the cBot offers a receipt ticket.

Copies HOME LOGOUT

Credit \$0.00 BACK

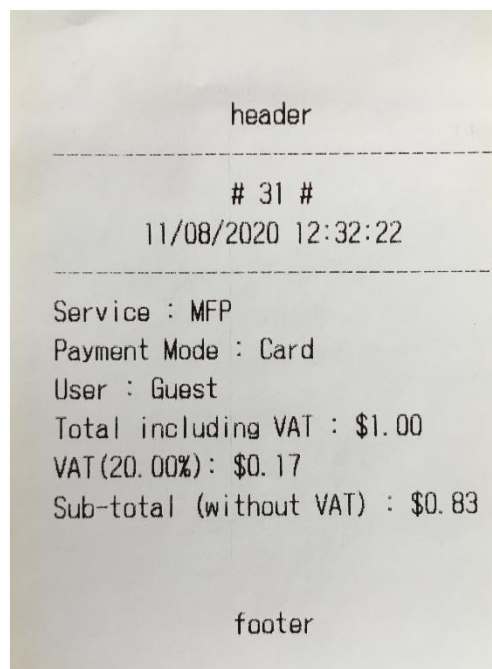
FORM			COST
Letter B			\$0.00
Legal B			\$0.00
Letter C			\$0.00
Legal Color	\$2.00	1	\$2.00

Ticket

Do you want a ticket?

YES CANCEL

If the user validates, he will get a receipt as below. The header and footer of the receipt ticket can be customized (see § 3.3.3).



3 Installation

3.1 Prerequisite

The implementation of a cBot system requires the following items:

- A print management and accounting server (like Gespage).
- A RJ45 network connection close to the cBot.
- A supply outlet close to the cBot.
- The network configuration will enable the cBot to reach the IP address of the server. From a network point of view, the cBot is a network client, it performs calls to the server on the TCP 7180 and 7181 ports, there is no call from the server to the cBot.

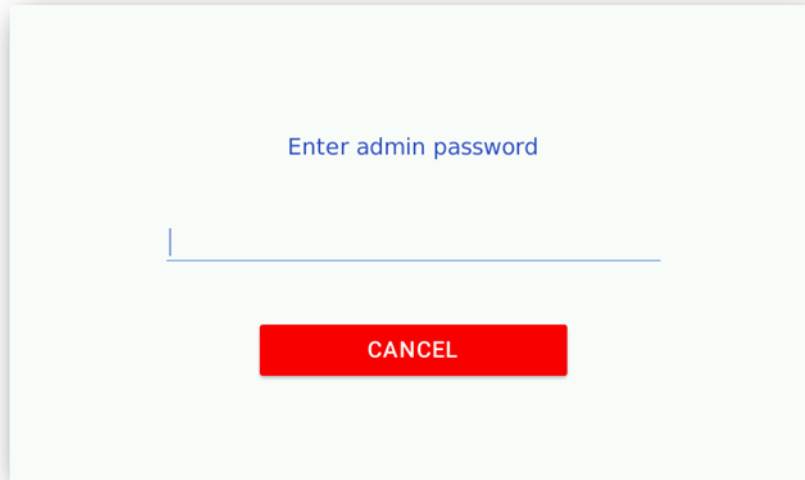
3.2 Mechanical fastening

The cBot stands on its own pedestal, if for security reasons, you would like to have it securely fixed there are 2 holes inside the pedestal allowing to fix it on the ground.

3.3 cBot local configuration

3.3.1 Entering cBot configuration menu

In order to enter in the cBot configuration menu, press the 4 corners of the screen in a Z manner (top-left, top-right, bottom-left, bottom right). If the 4 corners are pressed properly, you'll get the following screen:



Enter admin password

CANCEL

Enter the Admin password (default password is "23468"). The **Configuration** menu is displayed as follows:



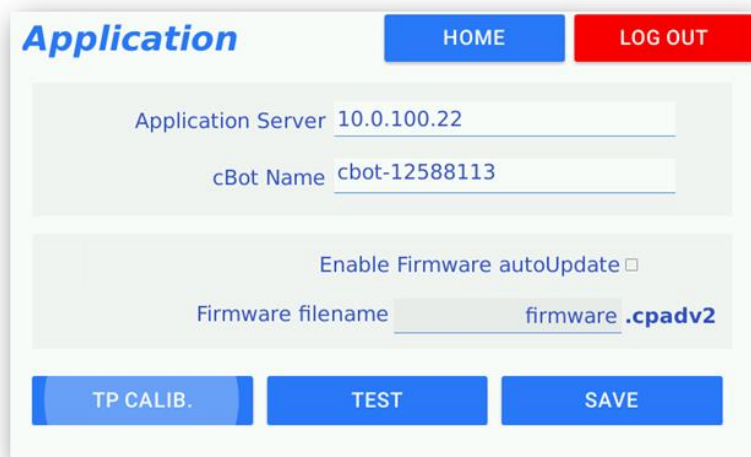
The functions accessible from the configuration menu are:

- **Network:** Configuration of the network parameters.
- **Application:** Configuration of the connection to the server.
- **Infos Version:** Display of the firmware information.
- **Card Readers:** Test of the card reader used for the user identification.
- **cBot:** Configuration of the coins and bills acceptance, viewing of the sales statistics and function of cash collection.
- **Logs:** Display of the cBot internal log.

- **Password:** Setting of a password for accessing to the configuration menu.
- **Production:** This menu is used for factory production. It is not useful for normal maintenance.

3.3.2 Configuration of the network parameters

First configure the address of the server to which the cBot will be connected. You have to select the **Application** menu, cBot will display the following screen:

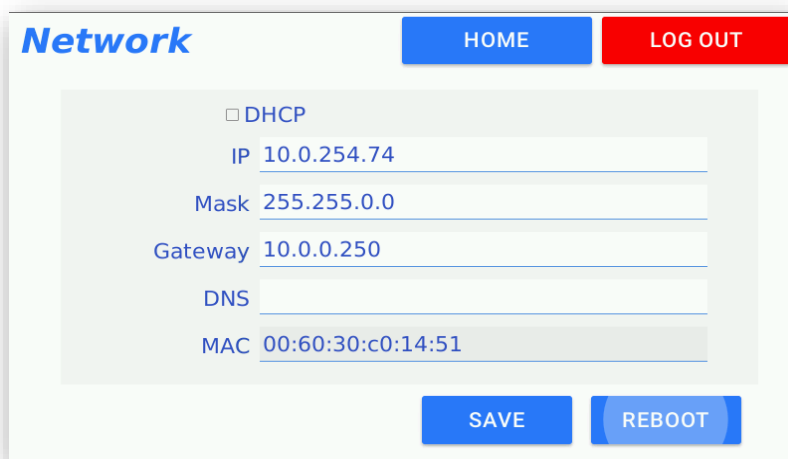


Please fill in the “Application Server” field with the IP address of your server.

If you wish so, the cBot default name may be modified, this is the name that will appear in the server for initial registration.

You can also activate the automatic update and modify the default name of the file containing the firmware on the server. Please save the modification.

You must now set the cBot network parameters by selecting the **Network** menu, see the screenshot below. You will be able to set a fixed IP address or select automatic IP address assignment (DHCP). Once the parameters modified and saved, please press the « Reboot » button.



After the first restart of the cBot, a call to the server will be established and an automatic creation of the cBot data will be performed on the server (see § 3.4 for configuration on the server).

3.3.3 Configuration of the receipt ticket

You can customize the header and footer for the printer receipts (for sales and statistics tickets).

Create a file named **ticket.header** for the header and another file named **ticket.footer** for the footer. Inside these files, write the content of the header and the footer of the cBot receipt. This operation has to be done on a computer.

Copy the **ticket.header** file and **ticket.footer** file into the root of a USB key

Connect your USB key to the cBot and validate.

3.3.4 Configuration of the General Terms and Conditions of Sale

To enable the **General Terms and Conditions** menu when a guest user is creating an account, you have to create a file with your term's contents.

On your computer, create a **cgv.txt** file with the content of your terms in text format.

Connect to the cBot by WinSCP from your computer, place this file in the folder: `/usr/local/Cartadis/` and the new General Terms and Conditions of Sale will be updated.

3.3.5 Bank card reader configuration

The Nayax bank card reader has to be configured through the Nayax portal. Its configuration has to be done during the cBot installation.

The detailed Nayax configuration is described in the annex (see § 6.1).

3.4 cBot server configuration

Most of the cBot configuration has to be done on your server.

3.4.1 Configuration on a Gespage server

By means of the Web browser, open the Gespage administration interface.

On the Gespage login page, log in with the user "admin". Then from the **Printers** menu, choose "Terminals / List of terminals", select the tab "cBot".

You should get the following type of display:

Printers Printers / Copiers ▾ Terminals ▾ Reader profiles ▾ Price profiles ▾ Mobile print profiles ▾

 List of terminals

Filter +

< cPad cPad-Pay **cBot** DRC10 Brother Epson HP Konica Minolta Kyocera Lexmark OKI Ricoh Samsung >


List of terminals					
Name	Serial	IP address	Comments	Status	
cBot_12584198	12584198	10.0.0.26		✗	
cBot_12586902	12586902	10.0.65.18		✗	
cBot_12587002	12587002	10.0.254.93		✗	
cBot_12587242	12587242	10.0.0.49		✗	
cBot_12587817	12587817	10.0.230.25		✗	
cBot_12588038	12588038	10.0.254.67		✗	
cBot_12588113	12588113	10.0.254.74		✓	

You should see at least one row in the table, which corresponds to the serial number of the cBot you just installed.

After selecting your cBot, it can be configured.

In the general parameters tab, you will see general information about your cBot like its firmware and last connection information:

 Edit a cBot

General parameters **Advanced parameters**

cBot

Name

Serial number

Comments

Reader profile

Last connection 21/01/20 14:40

Status NORMAL : Version=Cartadis CBot version 1.0.7 [Dec 26 2019].
21/01/2020 14:40:17

Comments Version=Cartadis CBot version 1.0.7 [Dec 26 2019], IP=10.0.230.25

In the advanced parameters, you will be able to see the detailed configuration of your cBot (see § 3.4.2 for description of these parameters).

 Edit a cBot

General parameters		Advanced parameters	
anonymous_authent_enabled		<input type="text" value="yes"/>	
authentication_mode		<input type="text" value="keypad_up card"/>	
bill_validator_enabled		<input type="text" value="yes"/>	
card_preset_amount_1		<input type="text" value="5"/>	
card_preset_amount_2		<input type="text" value="10"/>	
card_preset_amount_3		<input type="text" value="15"/>	
card_preset_amount_4		<input type="text" value="20"/>	
card_preset_amount_5		<input type="text" value="25"/>	
card_preset_amounts_size		<input type="text" value="5"/>	

3.4.2 cBot server parameters

Most of the cBot configuration is done on the server through the cBot advanced parameters that we are describing below.

Customer journey parameters

- **account_creation_enabled=yes**
If “yes” enable the account creation option for Guest user, if ‘no’ disable it
- **anonymous_authent_enabled=yes**
If “yes” guest users are allowed, if ‘no’ only registered users can use the cBot.
- **authentication_mode=card|keypad_up**
For the registered users defines how they get authenticate:
 - **card** means card swipe on the private reader is allowed for authentication.
 - **keypad_up** means keyboard is used for entering a username and a password.
 - **keypad_u** means keyboard is used for only entering a username.
 - **keypad_p** means keyboard is used for only entering a print code.
 The sign “|” (pipe) is used to separated 2 simultaneous login methods. Only one keyboard login mode can be enabled at a time.
- **copies_enabled=yes**
If “yes” the button “Copies” is shown and allows to select the copy feature, else ‘no’.
- **inactivity_timeout_secs=180**
Delay in seconds to automatically close a session when there is no activity
- **joblist_page_size=5**
Number of print jobs shown on a same page in the job list screen.
- **list_page_size=30**
Define the maximum number of documents displayed on the cBot in multi-page mode.
- **printings_enabled=yes**
If “yes”, enables the Print button for the registered users. If “no”, disables it.
- **remaining_cash_action=request**
Defines what action to do for the remaining cash when closing a session of a registered user.
Possible values of this field are:

- **return:** give change to user if it's possible
- **keep:** reload the user's account
- **request:** request the user if he wants to have change back or to reload its account
- **usb_print_enabled=yes**
If "yes", enables the USB print button. If "no", disables it.
The activation of this button may be linked to your MFD interface and ability to charge for USB printing.

MFD interface parameter

- **MFP_interface=parallel**
It is the name of the management driver for the copier interface:
 - **parallel:** it is the default mode; it corresponds to the copier interface available on a wide range of copiers / MFPs. It uses the key counter interface of the copier.
 - **konicaminolta:** A Konica copier connected to the Serial Vendor Mode 2 interface.
 There are other drivers especially for SNMP interfacing. Please contact your support for getting the name of the driver matching your configuration.

Bank card reader parameters

- **card_preset_amount_N=100** (N is a value in 1 to 5 and must start at 1)
To top up an account by bank card, the button values are defined by these parameters. For example, "card_preset_amount_1=500" means the first button will have the value 5.00 for topping up an account from a bank card. The values have to be set in cents.
- **card_preset_amount_size=N** (N is a value in 1 to 5)
Tells how many buttons will be shown to reload an account by a bank card.
- **cb_payment_enabled=yes**
If "yes", a bank card terminal (Nayax) is installed, else "no".
This parameter is set during the production process.
- **nayax_choose_product_timeout=1800**
Delay in seconds for automatic cancellation of a pending bank card payment
This parameter shall not be changed except if asked by your support.

Cash peripherals parameters

- **bill_validator_enabled=yes**
If "yes", a bill reader is connected to the cBot, else "no".
This parameter is set during the production process.
- **bills_supported=2000;1000;500**
List of the bill values which are accepted by the bill reader. The values have to be set in cents and separated by a ";".
- **cash_preset_amountN=100** (N is a value in 1 to 5 and must start at 1)
To top up an account by coins and bills, the button values are defined by these parameters. For example, "cash_preset_amount_1=500" means the first button will have the value 5.00 for topping up a registered account from coins or bills. The values have to be set in cents.

- **cash_preset_amount_size=N** (N is a value in 1 to 5)
Tells how many buttons will be shown to reload a registered account by coins or bills.
- **coin_changer_enabled=yes**
If “yes”, a coin changer is installed, else “no”.
This parameter is set during the production process.
- **coins_supported_render=200;100;50;20;10**
List of the coin denominations which are accepted by the coin changer. The values have to be set in cents and separated by a “;”.
- **manual_dispenser=200;100;50;20;10**
List of the coin values which may be manually dispensed (by pressing the key switches on the changer). The values are given in cents. If this parameter is empty it is not possible to remove coins from the tubes by pressing the changer key switches. The values have to be set in cents and separated by a “;”.
- **max_coin_render_value=20.00**
Defines the maximum amount of money that the changer can return to the user.
If the sum of the money in the changer tubes is less than this amount, then the cBot considers there is not enough change in tubes to enable change back. In that case, the cBot shows a warning about change being unavailable and disable reloading amounts requiring change. Moreover, a minimum number of coins of each value is always kept in the tubes to reduce the risk of coin jam in the tubes (see § 4.3.1 for further information).

Other peripheral parameters

- **printer_vat=20.00**
Define the VAT value, in percent, shown on the printer receipt.
- **reader_type=tcm3-1356|tcbk02**
Represents the type of card reader connected to the cBot for user authentication. Example: tcm4; tcm3-1356; tcm3-125; tcbk02; tcmag1-usb. Please contact the support for getting a list of the various readers. The sign “|” (pipe) is used to separate 2 simultaneous readers.
- **ticket_printer_enabled=yes**
If “yes”, the ticket printer is enabled, else “no”.
This parameter is set during the production process.

Miscellaneous parameters

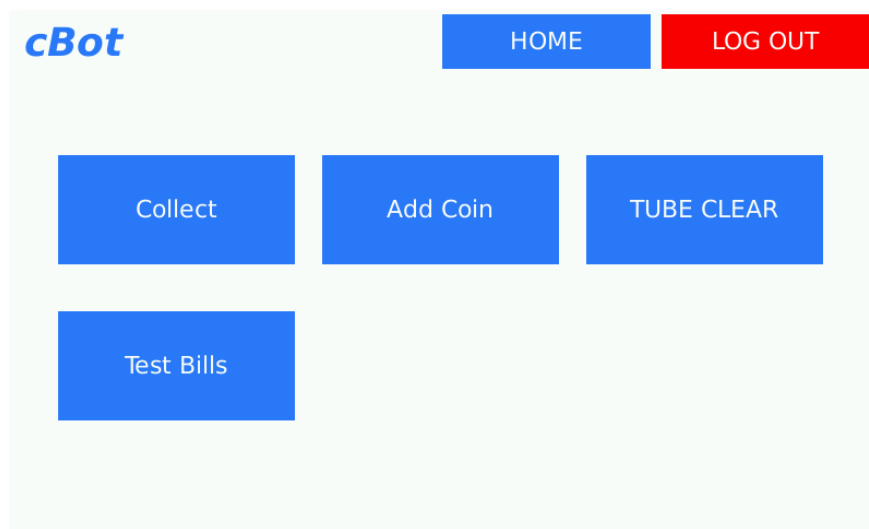
- **firmware_autoupdate_enabled=yes**
If “yes”, the cBot updates its firmware automatically from reference file placed on the server, else “no”.
- **firmware_autoupdate_filename=firmware**
This gives the name of the firmware file on the server (excluding the .cpadv2 extension). Its default value is ‘firmware’ (see § 5.2.2 for further information).
- **key_beep_enabled=yes**
If “yes”, enables the buzzer of the cBot. If “no”, disables it.

-
- **polling_timeout=180**
Delay in seconds for the cBot polling of the server, for checking if the operating parameters have changed, if a new firmware version is available, and if the server is up and running.
 - **reboot_time=3.00.**
It is recommended that the cBot restarts once every 24 hours in order to optimize the organization of its memory and to obtain the fastest response time possible. The default value 3.00 means a restart around 3 am every day. **ATTENTION:** cBot ignores minutes in this parameter, a random delay is applied for rebooting within the configured hour.
 - **skin=default**
Allows to customize the cBot skin. If set to "cpadskin", the custom skin named cpadskin.zip will be downloaded from server (see § 6.2).
 - **force_locale=fr_FR**
This parameter is used for setting a language on the cBot, which is different from the server's one.

4 Management

4.1 Viewing of statistics

From the configuration screen select “cBot” to enter in the management menu:



The four choices of this menu are (some of these menus are detailed in § 5):

- **Collect:** to see the statistics of turnover and collect the cash box.
- **Add Coin:** to fill up the coin changer tubes of the cBot.
- **TUBE CLEAR:** to reset the quantity of coins in the tubes in the cBot memory.
- **Test Bills:** to test the bill reader.

The statistic counters managed by the cBot are:

- Money in the coin changer tubes sorted by denominations.
- Money in the cash box.
- Number of bills accepted sorted by denominations.
- Total of payments made by bank cards.

cBot-Collect

HOME

LOG OUT

Current

Reference

Total income : \$159.10

Coins tubes		Bills	
\$0.10	23	\$5.00	0
\$0.20	51	\$10.00	0
\$0.50	7	\$20.00	1
\$1.00	20	Total	\$20.00
\$2.00	14		
Total	\$64.00		

Coin Crate

Total

\$0.00

Bank Card

Total

\$75.10

Collect

Print ticket

Accounting

These counters exist in two forms: the “reference” and the “periodic” counters:

- We call “reference counters”, counters which are never cleared. They start from zero when the unit is brand new, then they are incremented according to the turnover.
- We call “periodic counters”, counters which are cleared every time the user is doing a cash collection (see § 4.2).

4.2 Procedure of cash collection

The procedure for cash collection is:

- Physically collect cash from the cash box and from the bill stacker.
- Print the collect ticket by pressing the button “Print ticket” in the **COLLECT** menu.
- Reset the periodic counters in pressing the button “Collect” in the **COLLECT** menu.

ATTENTION: concerning coins collection, you should only collect the cash box and not remove and empty the coin tubes, in order to keep change back (see § 4.3.1).

The statistics ticket printed by a cBot looks as below:

```
header
-----
CBot_12583169
CBot v1.1.0
15/04/2020 08:59:26
-----
STATISTICS #40
From 05/03/2020 09:57:49
To 15/04/2020 08:59:26
*****
PERIOD STATS
*****
COIN CHANGER (TUBES)
-----
$0.10 x 23 = $2.30
$0.20 x 51 = $10.20
$0.50 x 7 = $3.50
$1.00 x 20 = $20.00
$2.00 x 14 = $28.00
Total tubes = $64.00
Tube variation (DT) = $72.00
Operator filling = $258.90
-----
COIN BOX
-----
Total coins = $0.00
-----
BILL BOX
-----
$5.00 x 0 = $0.00
$10.00 x 0 = $0.00
$20.00 x 1 = $20.00
Total bills = $20.00
-----
TURNOVER
-----
Total cash box (DC) = $20.00
Total bank card (DB) = $75.10
-----
Total turnover (DT + DC + DB) =
$167.10
-----
INDICATORS
-----
Total over-payment = $448.18
*****
CUMUL STATS (since install)
*****
Total coins = $64.00
Total bills = $580.00
Total cash box = $0.00
-----
Total bank card = $136.10
-----
Total TURNOVER = $780.10
*****
footer
```

The first part of the ticket gives the periodic counters, the second part gives the reference counters.

4.3 Setting up the coin changer

4.3.1 Coin changer operating mode

The coin changer is fitted with a built-in cassette of tubes used to give back change when needed. This built-in cassette is composed of several tubes, each tube contains several coins of the same denomination. The number of tubes and the number of coins in a tube depend on the model of coin changer installed in the cBot (depending on the country).

When you receive a cBot unit, all the tubes of the coin changer are empty, so it would not be possible for the cBot to give change in such status. It is recommended that a technician is filling up the tubes at installation (see § 4.3.2). Nevertheless, after a while of usage, the tubes will be automatically filled up with the coins inserted for payments and change could be given.

The conditions required by the cBot to enable coin change are the following:

- Minimum 6 coins in each tube (to avoid a coins' jam in a tube) **AND** total money in the tubes is higher than (*max_coin_render_value* + value of 6 coins in each tube).

For example:

- if the changer is fitted with a coin changer with 2 tubes of 2€, 1 tube of 1€, 1 tube of 0.50€, 1 tube of 0.20€ and 1 tube of 0.10€.
- 6 coins in each tube represent 34.80€
- If the cBot is fitted with a bill note reader and can accept bills of 5€, 10€ and 20€. Then the maximum amount to give change is 20€, the parameter *max_coin_render_value* is set to 2000 (see § 3.4.2).
- If there is more than 54.80€ in the tubes (20.00+34.80) the cBot can give change.

Depending on the conditions, a message is shown to inform the user if the cBot is able or not able to give change.

When there is enough change in the tubes, the inserted coins are stored inside a cash box, that is the box to be emptied when collecting cash (see § 4.2).

The built-in cassette of tubes of the coin changer must not be removed and emptied by hand. Nevertheless, if for any reason you have to manually remove the coins from the tubes then you must proceed to tube synchronization process (see § 4.3.4).

4.3.2 Coins filling up

The procedure to add coins into the coin changer is the following:

- Enter the administration menu, select the **cBot** menu then select the **Add Coin** menu.
- From now on, coins can be inserted by the operator. The screen is updated at each insertion. Inserted coins introduced are counted in the statistics from *Operator filling*.

4.3.3 Coins removal

The procedure to remove coins from the coin changer is the following:

- Enter the administration menu, select the **cBot** menu then select the **Add Coin** menu.
- From the built-in menu of the changer, distribute the desired coins (this procedure depends on the coin changer - see § 4.3.4). The screen is updated at each removal. Removed coins are counted in the statistics from *Operator filling*.

4.3.4 Coin changer resynchronization

The coin changer becomes unsynchronized if coins have been added or removed manually inside the tubes (without following previously described procedures).

When the coin changer is unsynchronized, the conditions required to enable coin change cannot be checked properly by the cBot. It means the cBot may indicate to users that change is available while it is unable to give change back, or the cBot may indicate that change is unavailable while there are enough coins in the tubes.

If this occurs, the following procedure has to be applied:

1. Manually dispense all the coins from the changer. Don't remove the tube cassette but instead use the built-in menu of the coin changer for telling it to empty all the tubes (this procedure is specific to each model of coin changer).
For example, for the Suzo Happ Currenza C2:
 - Press the "Menu" key
 - Select the "Services"
 - Select "Empty tubes".
2. From the configuration screen select "cBot" then press "CLEAR TUBE".

5 Maintenance

5.1 Test menus

5.1.1 Test of the card reader

To test the card reader used for authentication, enter the administration menu and select the **Card readers** menu.

In this menu, select in the list the card reader that is installed on your cBot.

For example:

- **tcm3-1356**: For Mifare RFID cards.
- **tcbk02**: For bar code cards.

Card readers

HOME LOG OUT

Select a card reader in the list

- salto
- sam_acs
- symbol
- tcbk02
- tcm2-serial
- tcm2-usb
- tcm3-125
- tcm3-1356**
- tcm3-ccid

Swipe or insert card

Card Value

To test your card reader, present a card to the reader. You should see the ID of the card in the right panel.

5.1.2 Test of the bill reader

Enter the administration menu, select the **cBot** menu then select the **cBot Test Bills** menu.

From now on, bills can be inserted. The screen is updated at each insertion. Bills introduced are not counted in the sales statistics.

Bills	
\$5.00	0
\$10.00	0
\$20.00	0
Total	\$0.00

5.1.3 Test of communication with the server

Enter the administration menu, select the **Application** menu.

Press the key “Test” for testing the communication with your server. If it is reaching the server, the message “Communication OK” is displayed.

Application Server

cBot Name

Enable Firmware autoUpdate ☐

Firmware filename .cpadv2

5.2 cBot firmware

The cBot can be updated either by USB or by downloading its firmware from the server.

5.2.1 Firmware version

Enter the administration menu, select the **Infos version** menu.



5.2.2 Update from an USB key

Copy the firmware file (with .cpadv2 extension) into the root of an USB key.

Connect the USB key when the application is running. After 10 seconds, a window will open for asking you to confirm the update.

Remove the USB key after about one minute when the white screen with the Cartadis logo is displayed again.

5.2.3 Update from the server

Copy the firmware file (with .cpadv2 extension) into your server cBot firmware storage folder.

For example, for Gespage server, the default firmware path is:

C:\Program Files\Gespage\GespageCore\server\resources\medias\cbot\firmware.cpadv2

You may need to rename your firmware file name to fit the default firmware name (such as firmware.cpadv2).

The server automatic update is enabled and configured through server parameters (**firmware_autoupdate_enabled** and **firmware_autoupdate_filename**).

It is recommended to run a cBot recent firmware (contact your support to check the recommended firmware).

5.3 Calibration of the touch screen

It is required to calibrate the touchscreen when the touchscreen selection is not precise or sensible enough.

Enter the administration menu, select the **Application** menu, and press the button TP CALIB.

Use the tip of a pen or a similar instrument (no scissors or knives) as shown on the picture below, touch each pattern on the screen. The calibration screen will close automatically after the fifth calibration point and the application will restart.



5.4 Logs menu

Enter the administration menu, select the **Logs** menu, and then select the “Logs” file (one file per day).

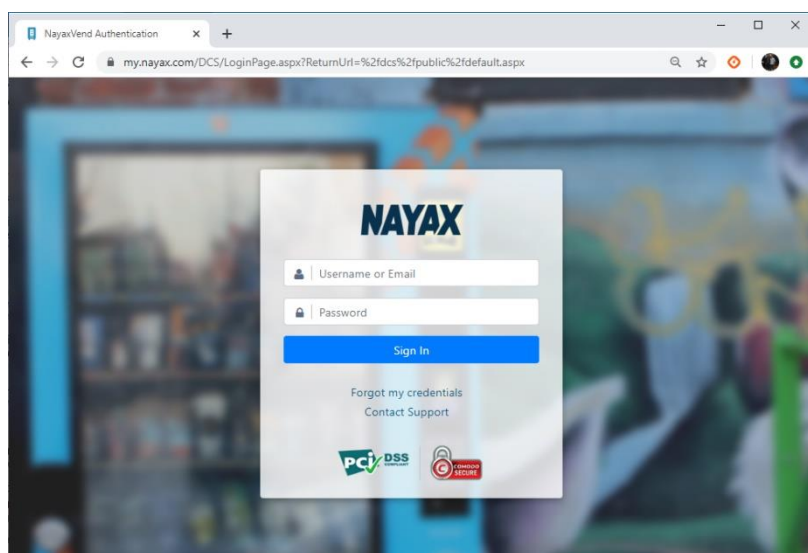


These files are useful for ensuring a diagnosis in case of defects.

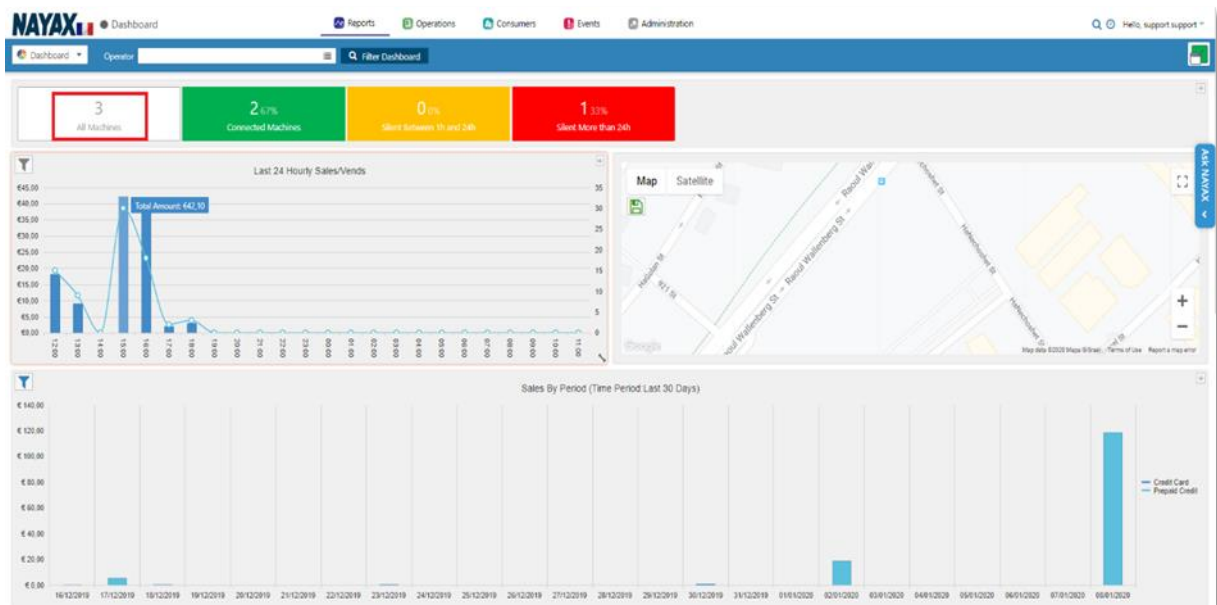
6 Annex

6.1 Nayax reader configuration

1. Log in to Nayax portal (<https://my.nayax.com>) using your login/password provided by Nayax reseller in your country



2. Click on all machines to access your Nayax terminals



3. Right click on the Nayax to set then select “Edit Machine”

The screenshot shows the NAYAX Machine Dynamic Status page. The table lists machines with columns: Operator, Machine Name, Installation Date, Last RSSI, Silent more than 24h, Last Communicate, Last Month's Cashless Sales, Number of GPS Failures Last 24h, Last 7 Days Cashless Sales, Displayed CU, Model Number, Serial Number, S/W Revision, Device Status, Device Serial, Machine Serial Number, Operator Internal Code, Existing Device FW Version, and Required Device FW Version.

The 'Edit Machine' menu is highlighted for the first machine (4040418180510464 VPOS_DEV_Mhedi).

Operator	Machine Name	Installation Date	Last RSSI	Silent more than 24h	Last Communicate	Last Month's Cashless Sales	Number of GPS Failures Last 24h	Last 7 Days Cashless Sales	Displayed CU	Model Number	Serial Number	S/W Revision	Device Status	Device Serial	Machine Serial Number	Operator Internal Code	Existing Device FW Version	Required Device FW Version
NAYAX Fra...	4040418180510464 VPOS_DEV_Mhedi	07/08/201...	13	09/01/202...	09/01/202...	6.75		135.95		cpad-1258...	*****1...	*****...	Active			1	4.0.0.8-RC4...	4.0.0.8-RC4...
NAYAX Fra...	4040418090507231 VPOS_SAV_3L12		19	19/12/201...	19/12/201...	0.00		0.00		TL12	000000004...		Active			1	4.0.0.8-RC4...	4.0.0.8-RC4...
NAYAX Fra...	4040418180510459 VPOS_SAV_dBot_MU		22	09/01/202...	09/01/202...	1.66		0.90		cpad-1258...	*****1...	*****...	Active			1	4.0.0.8-RC4...	4.0.0.8-RC4...


4. Then you will see the **Edit Machine** menu, you will have to adjust some parameters in the “General” tab.


The screenshot shows the 'Edit Machine' window with the following tabs and options:

- Dashboard (Beta)**
- General** (selected)
- Products Map
- Business days
- Payment
- Keep Alive
- Queue
- Dex
- Attributes
- History
- Alerts
- Auto PP Cards
- FTL

The 'General Information' and 'Card Readers' sections are highlighted. The 'MDB' and 'Payment' sections are also highlighted.


4.1 In section “General information”

 NAYAX France / CARTADIS / DEVELOPEMENT / CARTADIS / 4040418180510464-VPOS_DEV_Mhedi

▼  General Information

General		Customer/Location Address (Filled by Distributor)	
Operator*	DEVELOPEMENT	Use Location From	Machine
Machine Type*	Combo	Customer/Location	
Machine Model*	RS232 - PC Machine - Marshall	Institute Name	
Machine Profile	Cashless + Telemetry	Institute Location	
Machine Group*	CARTADIS	Location Type	
Sales Source*	Live Transactions	Sub Location Type	
Machine Reference*	VPOS_DEV_Mhedi	Machine Location/Address	
Machine Number (Operator)	4040418180510464	Search Address	
Machine Serial Number		Country	Choose...
Status*	Active	State	
Labels	Choose...		

4.2 In section “Card Readers”

▼  Card Readers

<input type="checkbox"/> Card Reader MDB Level	1	?
<input type="checkbox"/> Contactless delay start	200	?
<input type="checkbox"/> Decimal Place	2	?
<input type="checkbox"/> EMV Contact Floor Limit	0	?
<input type="checkbox"/> EMV Contactless Floor Limit	0	?
<input type="checkbox"/> EMV Contactless Transaction Limit	2001	?
<input type="checkbox"/> Extended Cards Support	MAESTRO+SDA+DDA+BNP	?
<input type="checkbox"/> Oberthur Payment	Disabled	?
<input type="checkbox"/> Scale Factor	1	?
<input type="checkbox"/> Transaction Start Ignore List	Ignore None	?
<input type="checkbox"/> Transaction Start Method	Accept All	?
<input type="checkbox"/> VPOS Button Function	VPOST Cancel button disable during Authoris...	?
<input type="checkbox"/> VPOS Card Options	EMV Contact, EMV Cless	?
<input type="checkbox"/> VPOS Double Read	Disabled	?
VPOS FW Version	2002	?
<input type="checkbox"/> VPOS LCD Language	French	?
<input type="checkbox"/> VPOS Read Source Enabled	All Read Sources Enabled(Default)	?
VPOS SAM Number	0000000000000000	?
VPOS Serial		?

4.3 In section “MDB”

MDB

<input type="checkbox"/> Cashless MDB address	Marshall VMC	?
<input type="checkbox"/> MDB flags	* Flags Disabled	?
<input type="checkbox"/> Reader State Error Event Timeout (MAX: 255 sec)	255	?

4.4 In section “Payment”

Payment

<input type="checkbox"/> Cash Revalue Enable & Limit	2000	?
<input type="checkbox"/> Choose Product Timeout (sec)	1800	?
<input type="checkbox"/> Credit Card Revalue Amount	500	?
<input type="checkbox"/> Custom Minimum Price	5000	?
<input type="checkbox"/> Default Credit	2000	?
<input type="checkbox"/> EMV Price Table	C%100	?
<input type="checkbox"/> Payment Flags	no flags set	?

5. Click on “Save”

Edit Machine

Dashboard Actions Info Create **Save** Close Machine Edit

Dashboard(Beta) General Products Map Business days Payment Keep Alive Queue Dex Attributes History Alerts Auto PP Cards FTL

6. Click on “Actions > Update Queue” for updating your adjustments

Edit Machine

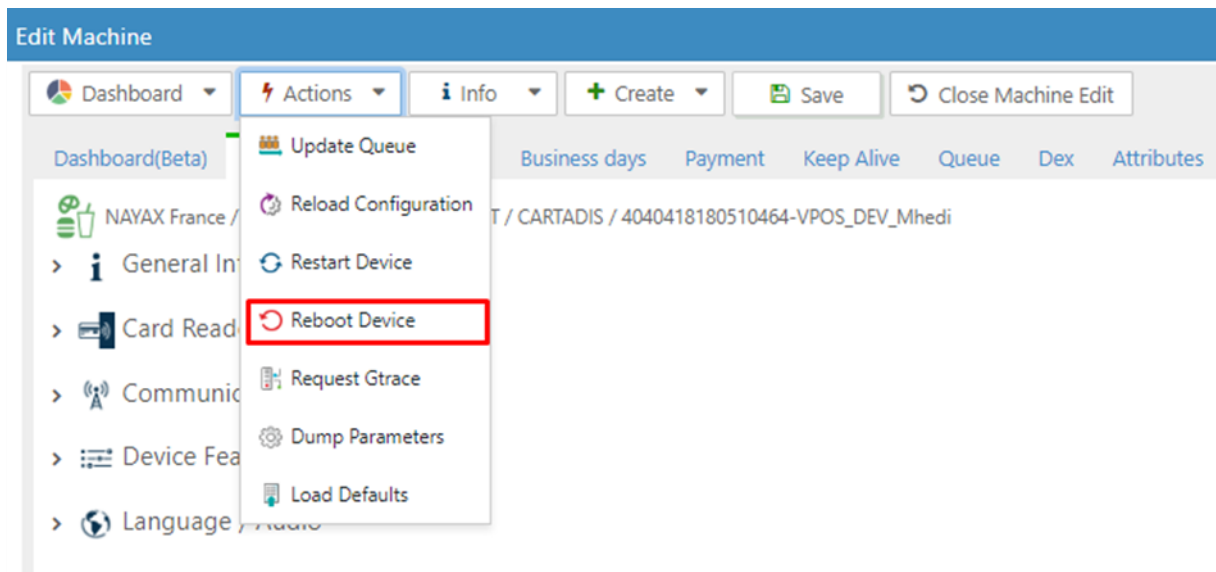
Dashboard Actions Info Create Save Close Machine Edit

Dashboard(Beta) **Update Queue** Business days Payment Keep Alive Queue Dex Attributes

NAYAX France / CARTADIS / 4040418180510464-VPOS_DEV_Mhedi

- General Info
- Card Reader
- Communication
- Device Features
- Language
- Reload Configuration
- Restart Device
- Reboot Device
- Request Grace
- Dump Parameters
- Load Defaults

7. You can now click on “Actions > Reboot Device” in order to reboot your VPOS terminal



6.2 Custom skin or messages

1. Retrieve the default skin or language files

You can access the files by 2 possible means:

- Rename the cBot firmware archive with .tgz suffix and uncompress it (for example with 7zip)
- Connect by WinScp on the cBot and browse files.

The files to retrieve are the following:

- For the skin, get the default folder under /usr/local/Cartadis/styles/skins
- For the messages, get a language file under /usr/local/Cartadis/styles/lang (for example fr_FR for French).

2. Customize files

The following operations have to be done on your computer and not on the cBot directly.

- Customize the skin
 - Rename the default folder to a custom skin name (ex: mycustomer).
 - Keep the directories as they are and keep only the files that you want to customize or modify (for example, the logo image).
 - You can then customize the files.
- Customize the messages
 - Rename the language file to *customized_msg.lang*
 - Keep in the file only the messages that you want to customize.
 - You can then customize the messages.

3. Build customized package

You should zip your skin and/or the customized message (at the root) in a zip package named cpadskin.zip.

Place the file on the server under the cBot firmware upgrade directory.

For example, for Gespage, the default firmware path is: GespageCore\server\resources\medias\cbot.

In case of a customized skin, you also need to customize the **skin** name in the cBot server parameter skin (ex: mycustomer).