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1 Introduction

MDB Payment is a free utility that allows payment systems to be used with our Windows based photo booth and kiosk apps and iPad based photo booth app. It connects to the payment system via a MDB-USB Interface from Qibixx (<https://www.shop.qiba.pt/shop/p0037q-mdb-usb-standard-1#attr=>). This connects to the Windows computer via USB and to the payment system via MDB. The utility monitors the state of the payment system and the screen displayed by the photo booth and can send commands to photo booth or the payment system e.g. send a start command to the photo booth when a payment has been accepted. It has been tested with the Nayax VPOS Touch card reader (<https://www.nayax.com/solution/vpos-touch/>) but should also work with similar devices such as the Nayax Onyx or MDB payment systems from other companies.

MDB (Multi-Drop Bus) is a standard in the vending machine industry for connecting payment systems such as contactless credit card readers to vending machines. The vending machine controller (or VMC) controls the vending machine and communicates with the payment system using MDB interface. MDB payment systems typically operate in one of two modes: authorization first/always idle mode or selection first/idle mode.

In authorization first/always idle mode the customer initiates the payment process by scanning their credit card. When the card has been authorized the customer is asked to select a product and the VMC requests a payment. Next the payment system collects the payment and if it succeeds the product or service is dispensed.

In selection first/idle mode the customer selects the product first and the VMC requests payment from the payment system. The customer is asked to scan their credit card and if the payment is authorized the product or service is dispensed.

2 Configuration

Equipment required:

1. Qibixx MDB USB Standard (<https://www.shop.qiba.pt/shop/p0037q-mdb-usb-standard-1#attr=>)
2. Qibixx MDB Power Supply + MDB adapter (<https://www.shop.qiba.pt/shop/p0045q-mdb-power-supply-51#attr=>)
3. Nayax VPOS Touch (<https://www.nayax.com/solution/vpos-touch/>)

Configuring the MDB-USB Interface

There are two versions of the MDB-USB Interface board. The MDB Payment Utility will work with either version.

The latest version has "MDB-USB Interface VMC/Peripheral" printed on its case. This does not need any special configuration or changes to jumper settings.

The older version has "MDB-USB Interface Master/Slave" printed on its case. This has a number of jumpers (<https://docs.qibixx.com/mdb-products/mdb-usb-standard-jumpers>) which should be set as follows:

Jumper 1 should be disconnected to disable firmware update mode

Jumper 2 is the debug port and isn't used

Jumper 3 is CPU power selector - some boards don't have this but if present it should be set to MDB

power

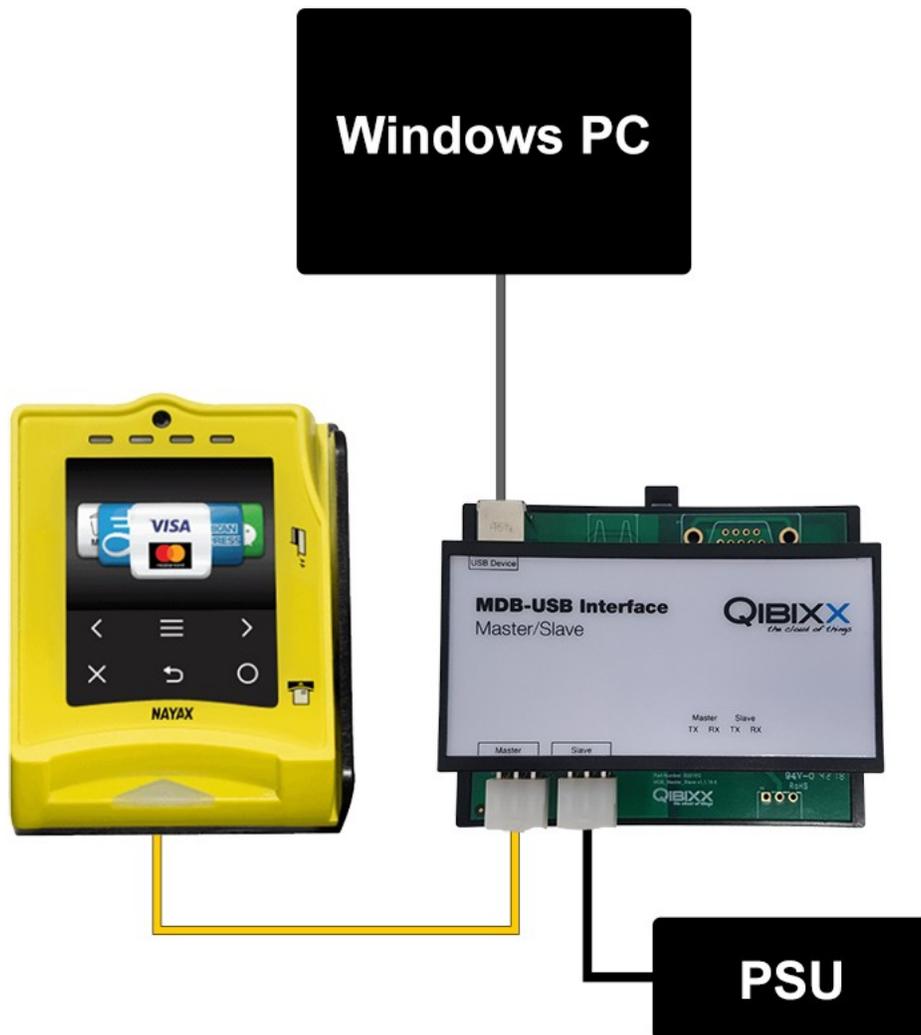
Jumper 4 should be disconnected because it is not powered via USB

Jumper 5 should be connected because it is acting as a VMC host

Jumper 6 should be connected

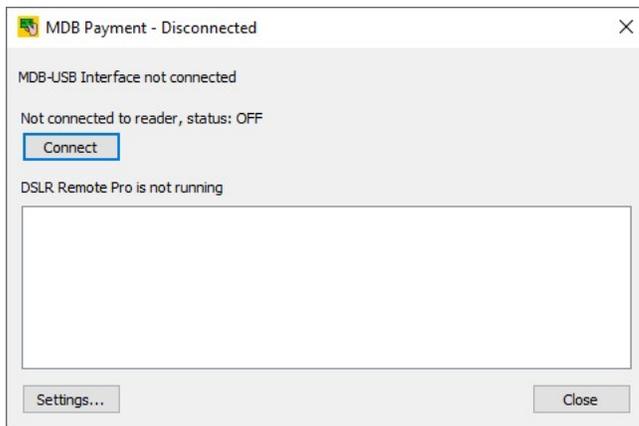
Connecting everything up

Connect the power cable from the PSU (power supply unit) to the peripheral (or slave) connector on the MDB-USB Interface. Then connect the yellow cable from the Nayax VPOS Touch to the VMC (or master) connector on the MDB-USB Interface and connect the MDB-USB Interface to the Windows PC via USB.



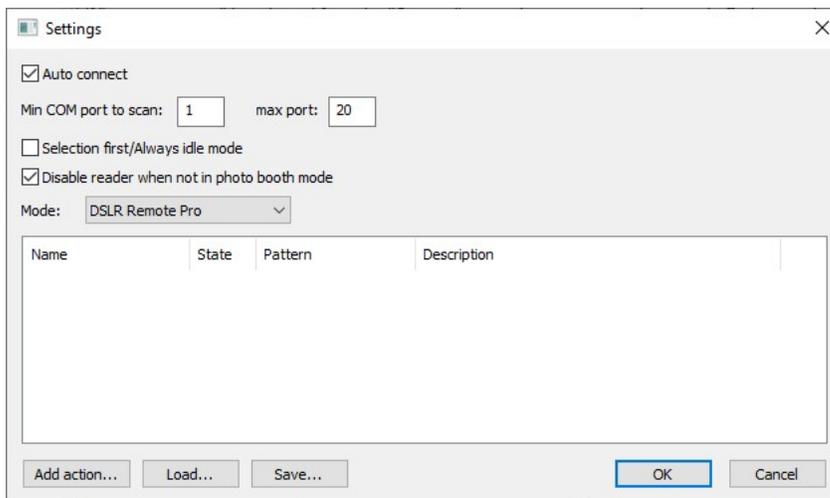
Running the MDB Payment utility

Next run the MDB Payment utility:



The top few lines show the status of the MDB-USB Interface and the payment system (or reader). When you run the MDB Payment utility for the first time this will show the status as being disconnected. The "Connect" button will connect or disconnect to the MDB-USB Interface. The line below the "Connect" button shows the status of the photo booth app and the area below it shows a log of events.

Click on the "Settings..." button to set up the utility:



Select "Auto connect" to connect automatically to the MDB-USB Interface. The "Min COM port to scan" and "max port" settings specify the range of serial COM ports to scan when attempting to connect to the MDB-USB Interface. Normally there is no need to change these settings unless other serial devices are connected to the computer.

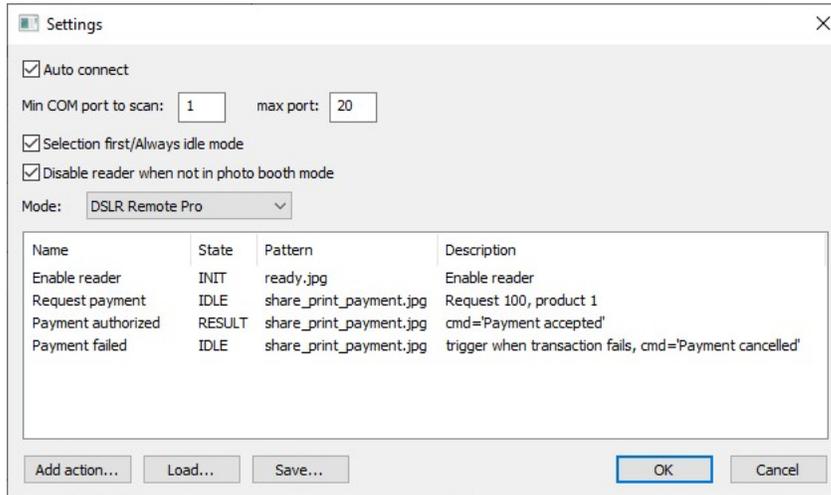
The "Selection first/Always idle mode" checkbox should be set if the payment system is set up in "Selection first/Always idle" mode and unchecked if it is in "Authorization first/idle mode". The Nayax VPOS Touch is normally shipped with MDB level 1 which supports "Authorization first/idle" mode and so this checkbox should be left unchecked.

The "Disable reader when not in photo booth mode" checkbox will disable the payment system when the photo booth is not running. When the Nayax VPOS Touch is disabled it displays the "Cash only" screen. The text displayed on the "Cash only" screen can be edited by logging into the Nayax web Dashboard and editing the machine settings.

The "Mode" dropdown list is used to select the type of photo booth being used: either DSLR Remote Pro or Breeze Booth for iPad. Most of the examples in this help file show how to connect to a photo booth running using DSLR Remote Pro.

The "Add action..." button is used to add actions responding to events from the payment system or the photo booth. This will be described in more detail in the examples sections of this help file.

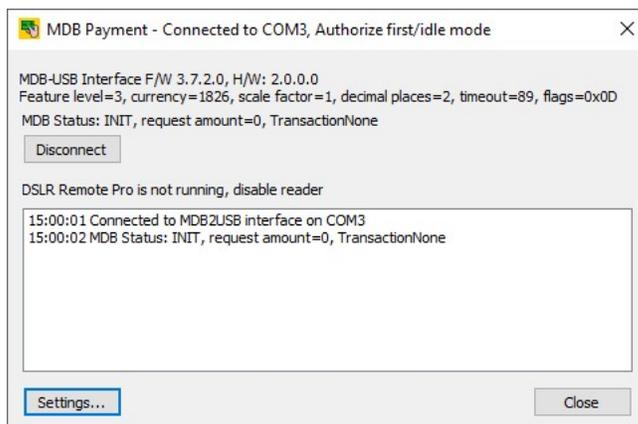
When a number of actions have been defined the settings dialog will look something like this:



Actions can be edited by double clicking on them in the list or right clicking on the action and selecting "Edit action...". Actions can be deleted by right clicking on the action and selecting "Delete action".

The actions can be saved to an XML settings file by clicking on the "Save..." button. Previously saved settings can be loaded by clicking on the "Load..." button. Please note that when loading settings from file the current settings will be replaced by the ones loaded from the settings file.

Click on the "OK" button to save the settings. The utility should connect to the MDB-USB Interface and display a screen similar to the one below:



If it connects to the MDB-USB Interface it will show the MDB-USB Interface's firmware and hardware versions in the first status line and the connection status in the window title bar.

If the Nayax VPOS Touch is connected the MDB status will be shown as INIT otherwise it will be shown as OFF.

Right click on the log area to clear the log or to save it to file.

Troubleshooting

First check that you are running the latest version of the MDB Payment Utility by clicking on the icon in the top left corner of the window and selecting "About MDBPayment...". You need to be running version 1.0.1 or later to work with the latest MDB-USB Interface hardware.

If the MDB Payment Utility doesn't connect to the MDB-USB Interface try pressing the "Connect" button. You can set it up to connect automatically when the MDB Payment Utility runs by selecting "Auto connect" in the settings.

If it still doesn't connect check the USB connection between the computer and the MDB-USB Interface and the power supply.

If you have the older version of the MDB-USB Interface which has "MDB-USB Interface, Master/Slave" printed on its cover you need to check the jumper settings.

If DSLR Remote Pro does not respond to commands sent from the MDB Payment Utility check that "Start options" is set to "Touchscreen" in DSLR Remote Pro's "Photobooth Settings" dialog:

The screenshot shows the 'Photobooth Settings' dialog box with the following visible settings:

- Display Options:**
 - Number of images [1 to 10]: 4
 - Inactivity timeout in secs (0=disabled): 0
 - Delay before taking first photo: 4
 - Delay before taking remaining photos: 4
 - Image preview time (0=disabled): 0
 - Minimum time to display processing screen: 0
 - Text displayed when counting down to taking photo: Taking photo @imageNumber@ of @numberOfImages@ in @secsToNextPhoto@ secs
 - Font: Arial, 28 point
 - Text color: [white]
 - Text offset (0=auto): 0
 - Enable live view
 - Live view height: 500
 - Live view left offset (-1=centered): -1
 - Live view top offset: 0
 - External flash mode
 - Don't mirror preview images
 - Show print progress
 - Auto standby
 - Mirror output images
 - Clicker mode
 - Scan QR codes for strings
 - Scan QR codes for commands
- Camera settings mode:** Simple
- Live view white balance: Auto (ambience)
- Start fullscreen photobooth mode automatically when camera connects
- Start options:** Touchscreen
- Output Options:**
 - Output: Print and save JPEG copy
 - Confirm before printing
 - Print layout: [Edit layout...]
 - Number of copies to print [1 to 20]: 1
 - Print photos in: color
 - Maximum number of copies: 9
 - Reprint screen settings...
 - Sharpen images, amount: 75
 - Photobooth images folder containing screen, layout and overlay images: C:\Users\chris\Documents\PhotoboothImages\EVENT1

3 MDB Modes and States

MDB payment systems normally are set up to operate in one of two modes: authorization first/idle mode or selection first/always idle mode. Each mode has a number of states which indicate the progress of the vending cycle:

Authorization first/idle mode states:

OFF - MDB-USB Interface is not connected to a payment system

INIT - reader is disabled and showing the "cash only" screen

IDLE - reader displays cashless animation waiting for user to present their card

CREDIT - card has been scanned, reader shows the "select a product" screen and waits for the VMC to request the amount to charge the card

VEND - reader is waiting for payment authorization

RESULT - payment is accepted

Selection first/always idle mode states:

OFF - MDB-USB Interface is not connected to a payment system

INIT - reader is disabled and showing the "cash only" screen

IDLE - reader displays the product selection screen and waits for VMC to request money

VEND - reader is waiting for user to pay

RESULT - payment is accepted

Example of a simple vending cycle in authorization first/idle mode

State	Description
IDLE	The reader is enabled and is displaying the authorization screen with an animation inviting the user to scan their credit card. When the user scans their card the state changes to CREDIT
CREDIT	The reader displays the "select a product" screen and waits for the user to select a product. When a product is selected the state changes to VEND. If a timeout occurs before the user selects a product the transaction is cancelled and the state returns to IDLE
VEND	The reader is obtaining authorization for the requested payment. If the payment is authorized the state changes to RESULT. If it fails the transaction is cancelled and the state returns to IDLE
RESULT	The payment has been authorized and the reader is waiting for the vending machine to dispense the product. When the product has been dispensed the vending machine sends and END command and the state changes to IDLE. If the vending machine is unable to dispense the product it can send a failure message to cancel the transaction

Example of a simple vending cycle in selection first/always idle mode

State	Description
IDLE	The reader is enabled and is displaying the "select a product" screen. When the user selects a product the vending machine requests payment from reader and the state changes to VEND
VEND	The reader displays the "authorization" screen and waits for the user to present their card. If the user presents their card and the payment is authorized the state changes to RESULT. If a timeout occurs before the user presents the card or the payment is not authorized or the vending machine cancels the selection the transaction is cancelled and the state returns to IDLE
RESULT	The payment has been authorized and the reader is waiting for the vending machine to dispense the product. When the product has been dispensed the vending machine sends and END command and the state changes to IDLE. If the vending machine is unable to dispense the product it can send a failure message to cancel the transaction

4 DSLR Remote Pro examples

To accept payments for a photo booth running DSLR Remote Pro you need to run the MDB Payment utility and DSLR Remote Pro on the same computer.

Please note: To use the MDB Payment utility with DSLR Remote Pro you need to be running DSLR Remote Pro v3.16 or later.

In DSLR Remote Pro's "Photobooth Settings" dialog set "Start options" to "Touchscreen" so that it can accept commands from the MDB Payment Utility.

The MDB Payment utility controls the photo booth by sending touchscreen commands to DSLR Remote Pro and communicates with the payment system via the MDB-USB interface. Please note that touchscreen actions activated by the MDB Payment utility should not be defined in the photo booth screens otherwise users would be able to tap them without having to pay to use the photo booth.

A typical payment system for a Windows based photo booth running DSLR Remote Pro is shown below:



Authorization first examples

When the card reader is set to authorization first the session is initiated by the user scanning their credit card then the photo booth requests the payment and waits for it to be authorized before starting the countdown.

[Photo booth authorization first example 1](#) - In this example the photo booth displays a welcome screen and waits for the user to scan their credit card and then automatically starts the photo booth when the payment has been authorized.

[Photo booth authorization first example 2](#) - In this example the photo booth takes the photos and

then asks for payment in the print confirmation screen. When the print confirmation screen is displayed it waits for the user to scan their credit card and then prints the photos when the payment has been authorized.

[Photo booth authorization first example 3](#) - In this example the photo booth takes the photos and displays the sharing screen with options to share the photos for free or to pay per print.

Selection first examples

When the card reader is set to selection first the user selects the service they require from the photo booth and it requests a payment from the card reader. The card reader displays the amount requested and asks the user to scan their credit card. When the payment is authorized the countdown is started.

[Photo booth selection first example 1](#) - In this example the photo booth displays a welcome screen and waits for the user to tap the screen to switch to the ready screen. When the ready screen is displayed a payment request is sent to the card reader which displays the amount and invites the user to make a payment. When the payment is authorized the photo booth countdown is started.

[Photo booth selection first example 2](#) - In this example the photo booth takes the photos and displays the sharing screen with options to share the photos for free or to pay per print. When the user taps the print button in the sharing screen the photo booth requests payment. The card reader displays the amount requested and asks the user to scan their credit card. When the payment is authorized the photos are printed and the photo booth returns to the sharing screen.

4.1 Photo booth authorization first example 1

This example shows how to set up the MDB Payment utility to start a photo booth with a credit card reader in authorization first/idle mode. The photo booth app in this example is DSLR Remote Pro. In this example the photo booth displays a welcome screen and waits for the user to scan their credit card and then automatically starts the photo booth when the payment has been authorized.

Prerequisites

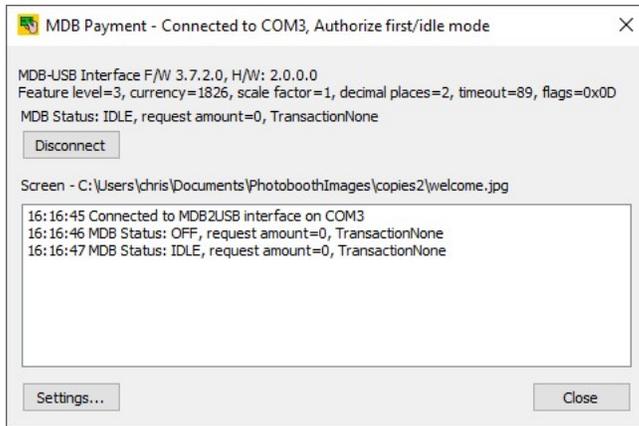
To use the MDB Payment utility you need to be running DSLR Remote Pro v3.16 or later.

First check that the credit card reader is running in MDB level 1 for authorization first/idle mode. If the Nayax VPOS Touch is not set to MDB level 1 you may need to contact Nayax support to request them to set it to MDB level 1.

Create a simple photo booth event in DSLR Remote Pro and select the "Auto standby" option so that the photo booth returns to standby mode after each session. Edit the welcome.jpg screen to display a message showing the price of the session and inviting the user to scan their credit card. Edit the ready.jpg screen to display a message saying "Authorizing payment...".

In DSLR Remote Pro's "Photobooth Settings" dialog set "Start options" to "Touchscreen" so that it can accept commands from the MDB Payment Utility.

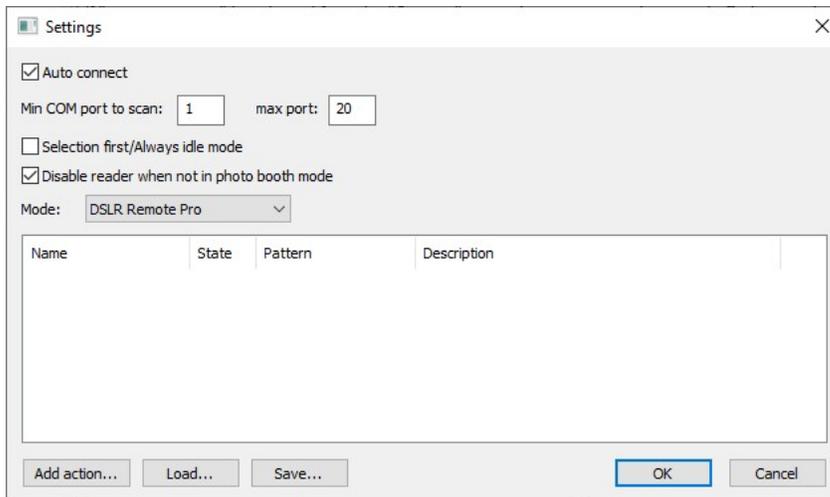
Run DSLR Remote Pro in photo booth mode and run the MDB Payment utility. The MDB Payment utility screen should look something like this:



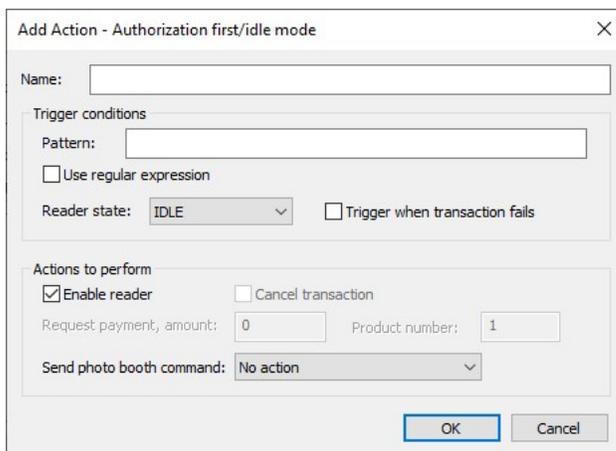
Step 1: Add an event to enable the card reader

Check that "Selection first/Always idle mode" is not selected and the "Mode:" dropdown list is set to "DSLR Remote Pro".

Click on the "Settings..." button to display the settings dialog:



Then click on the "Add action..." button to add an action:



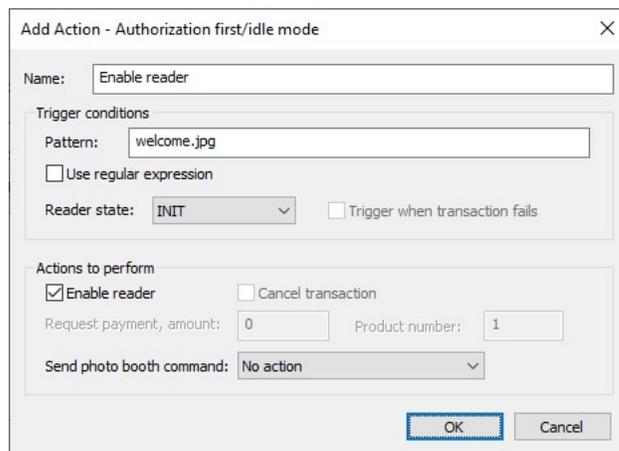
Give the action a suitable name e.g. "Enable reader" and then set the trigger conditions in the section below. What we want to do is enable the card reader when the photo booth is displaying the welcome.jpg screen and the card reader is disabled.

The "Pattern" trigger condition is set to a pattern that matches the photo booth screen e.g. welcome.jpg. If "Use regular expression" is not selected the pattern string will match any part of the photo booth screen path. In the screenshot above the screen path is shown as: "C:\Users\chris\Documents\PhotoboothImages\copies2\welcome.jpg" which can be matched by setting the pattern to "welcome.jpg". More complex pattern matches can be defined by selecting "Use regular expression" and entering a regular expression such as .*welcome\.jpg for the pattern.

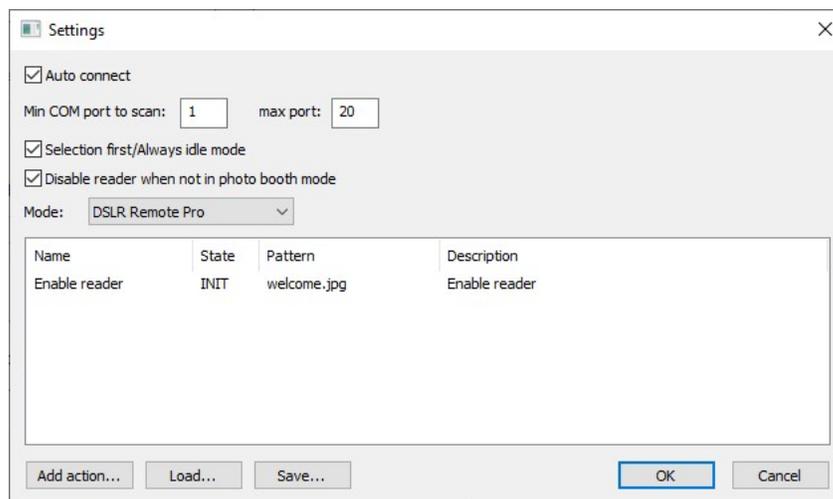
We only want to enable the card reader if it is disabled (i.e. the state is INIT) and so we set the reader state in the trigger conditions to INIT.

Next we need to specify the action to take when the trigger conditions are met. In this case all we need to do is enable the card reader.

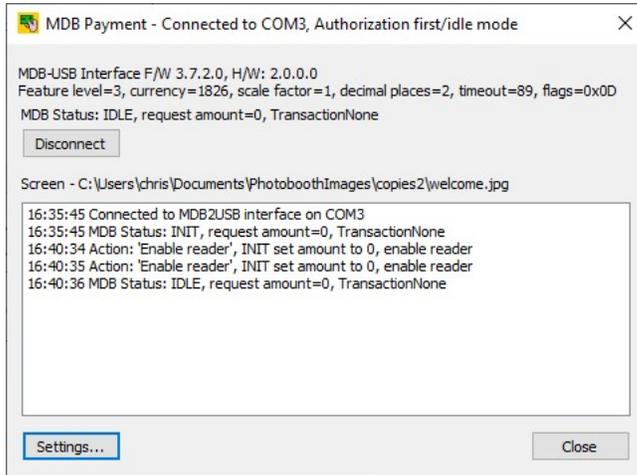
The "Add action" dialog should look something like this:



Click OK to save the action and the settings dialog should look something like this:



Click OK and the action should be triggered if the photo booth is displaying the welcome.jpg screen and the reader is disabled. The status log should show the action triggering, the reader's screen change to the contactless payment animation and the state should change to IDLE:



Step 2: Wake up the photo booth when the user scans their card

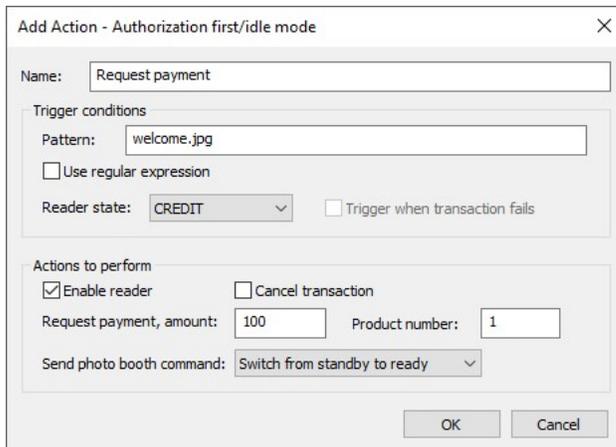
When the user scans their card the state changes to CREDIT and we want to switch the photo booth from standby to ready and to request payment. To do this click on "Add action..." in the settings dialog and name the action "Request payment". In the trigger conditions section set the pattern to welcome.jpg and the reader state to CREDIT.

In the actions to perform section set the "Request payment, amount:" to the amount, e.g. for \$1 set this to 100, and set the required product number. The product number can be set to anything and is recorded in the logs that can be accessed via the Nayax web dashboard. This can be useful if you have different options at different prices and want to keep a record of which is selected.

Note: the amount is in cents for USD or Euros and pence for GBP. This is because the scale factor is 1 and the decimal places is 2 in the MDB status shown in the main screen.

We also want to wake up the photo booth by setting the "Send photo booth command" dropdown list to "Switch from standby to ready".

The "Add action" dialog should look something like this:



When the payment has been requested the status changes to VEND. If the payment is authorized the status will change to RESULT but if it fails it will change to IDLE.

Step 3: Payment Authorized

Define a new action named "Payment authorized" that is triggered when the photo booth is displaying the ready.jpg screen and the reader state is RESULT. In the actions to perform section set the photo booth command to "Start photobooth".

The "Add action" dialog should look something like this:

The screenshot shows a dialog box titled "Add Action - Authorization first/idle mode". It has a close button (X) in the top right corner. The "Name" field contains "Payment authorized". Under "Trigger conditions", the "Pattern" field is "ready.jpg", "Use regular expression" is unchecked, and "Reader state" is set to "RESULT". There is also an unchecked checkbox for "Trigger when transaction fails". Under "Actions to perform", "Enable reader" is checked, "Cancel transaction" is unchecked, "Request payment, amount" is "0", "Product number" is "1", and "Send photo booth command" is "Start photobooth". At the bottom are "OK" and "Cancel" buttons.

Note: defining an action that is triggered by the RESULT state automatically sends a confirmation message to the reader which will display a "Thank you" screen and then switch to the IDLE state.

Step 4: Payment Failed

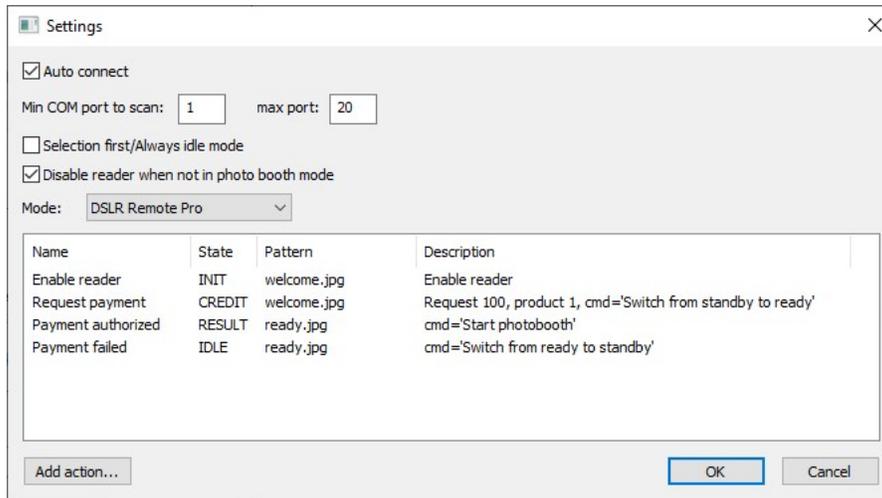
If the payment is not authorized the state changes to IDLE and we want to switch to standby mode to display the welcome.jpg screen.

Define a new action named "Payment failed" that is triggered when the photo booth is displaying the ready.jpg screen and the reader state is IDLE. In the actions to perform section set the photo booth command to "Switch from ready to standby".

The "Add action" dialog should look something like this:

The screenshot shows a dialog box titled "Add Action - Authorization first/idle mode". It has a close button (X) in the top right corner. The "Name" field contains "Payment failed". Under "Trigger conditions", the "Pattern" field is "ready.jpg", "Use regular expression" is unchecked, and "Reader state" is set to "IDLE". There is also an unchecked checkbox for "Trigger when transaction fails". Under "Actions to perform", "Enable reader" is checked, "Cancel transaction" is unchecked, "Request payment, amount" is "0", "Product number" is "1", and "Send photo booth command" is "Switch from ready to standby". At the bottom are "OK" and "Cancel" buttons.

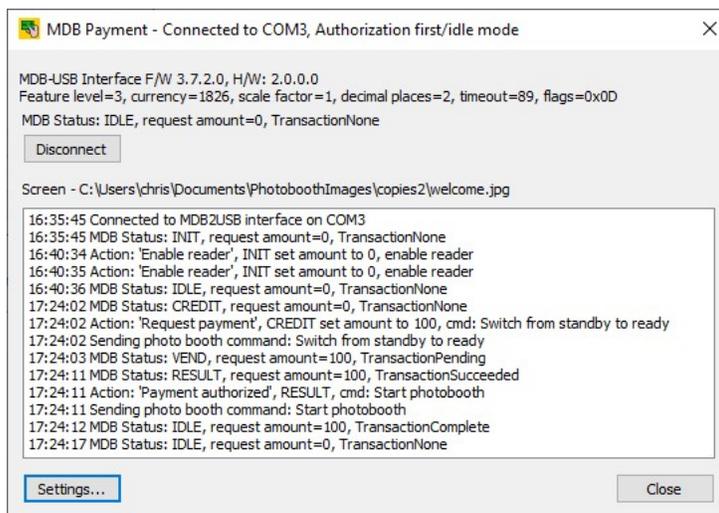
The settings screen should show all four actions and look something like this:



Check it works

Click "OK" in the settings screen to return to the main screen. Then scan a credit card (or the Nayax technician mode card) to start a payment. The photo booth should switch to the ready screen, wait for the payment to be authorized and then start the countdown. At the end of the session it should return to the welcome.jpg screen.

The main screen should look something like this:



Refinements

After the payment has been accepted and the photo booth has started taking photos the card reader will return to IDLE mode and display the contactless payment animation. There is nothing to stop the user from scanning their credit card again even though the photo booth is not ready for the next session. To prevent this we could add an action to disable the card reader when the 1.jpg countdown screen is displayed and the reader status is IDLE.

The example described on this page is a very simple single payment photo booth which starts automatically after the users scans their card and the payment has been authorized. More complicated sessions which allow the user to choose different options with different prices can be created by using profiles to build a menu of options.

The actions used in this example can be loaded by clicking on the "Load..." button and loading the MDB_authorization_first_ex1.xml settings file.

4.2 Photo booth authorization first example 2

This example shows how to set up the MDB Payment utility to pay for a print from the photo booth's print confirmation screen using a credit card reader in authorization first/idle mode. The photo booth app in this example is DSLR Remote Pro.

In this example the photo booth takes the photos and then asks for payment in the print confirmation screen. When the print confirmation screen is displayed it waits for the user to scan their credit card and then prints the photos when the payment has been authorized.

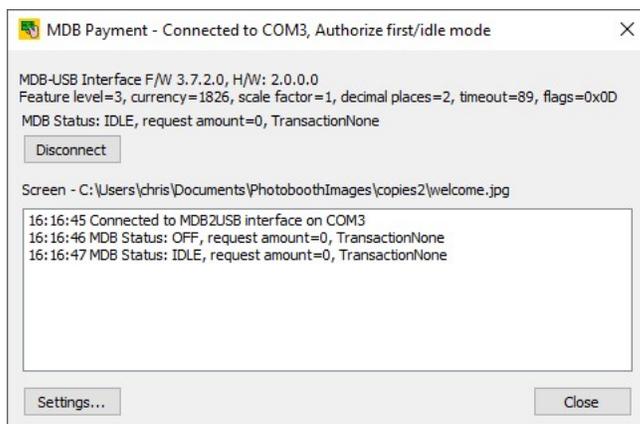
Prerequisites

To use the MDB Payment utility you need to be running DSLR Remote Pro v3.16 or later.

First check that the credit card reader is running in MDB level 1 for authorization first/idle mode. If the Nayax VPOS Touch is not set to MDB level 1 you may need to contact Nayax support to request them to set it to MDB level 1.

Create a simple photo booth event in DSLR Remote Pro and select the "Confirm before printing" option so that the photo booth displays the confirm_printing.jpg screen before printing. Edit the confirm_printing.jpg screen to remove the print button and add a message asking for payment. Then use the touchscreen editor to delete the "Confirm printing" touchscreen action (otherwise users could tap on it to print without paying). You may also need to increase the timeout for the print confirmation screen in the "Output Settings" dialog to allow enough time for the user to make the payment. In DSLR Remote Pro's "Photobooth Settings" dialog set "Start options" to "Touchscreen" so that it can accept commands from the MDB Payment Utility.

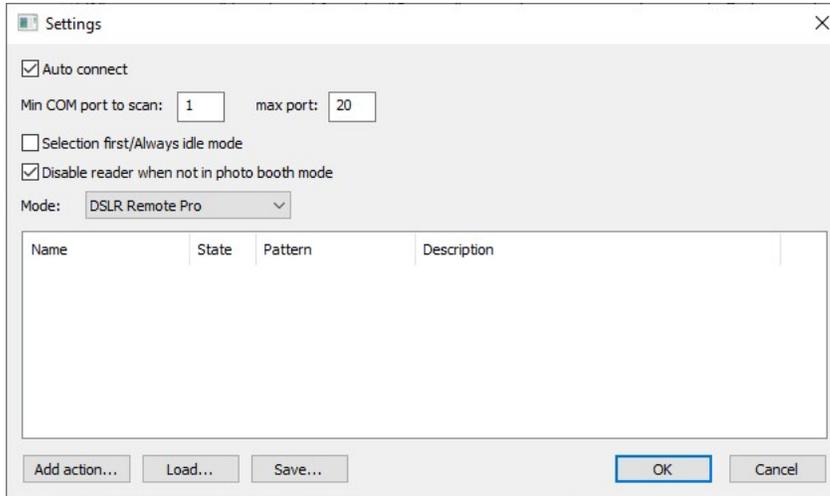
Run DSLR Remote Pro in photo booth mode and run the MDB Payment utility. The MDB Payment utility screen should look something like this:



Step 1: Add an event to disable the card reader

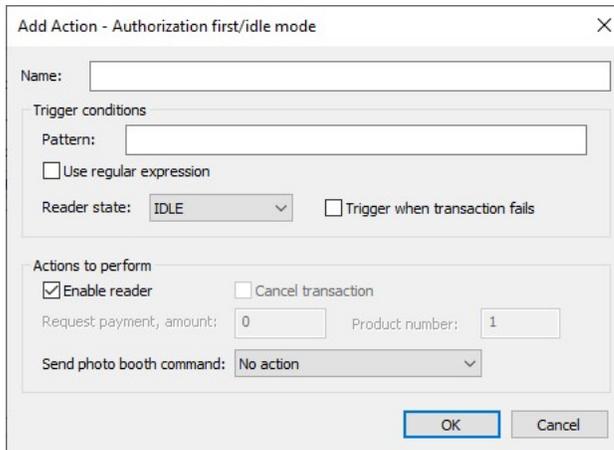
It's a good idea to disable the card reader until the print confirmation screen is displayed otherwise users might try to scan their credit card before the photo booth is ready.

Click on the "Settings..." button to display the settings dialog:



Check that "Selection first/Always idle mode" is not selected and the "Mode:" dropdown list is set to "DSLR Remote Pro".

Then click on the "Add action..." button to add an action:



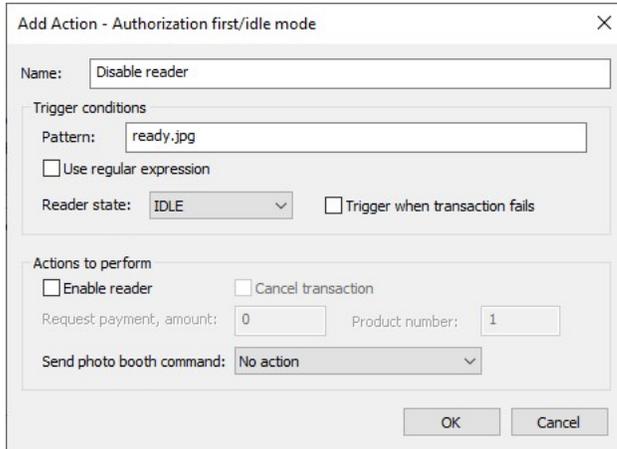
Give the action a suitable name e.g. "Disable reader" and then set the trigger conditions in the section below. What we want to do is disable the card reader when the photo booth is displaying the ready.jpg screen if the card reader is enabled.

The "Pattern" trigger condition is set to a pattern that matches the photo booth screen e.g. ready.jpg. If "Use regular expression" is not selected the pattern string will match any part of the photo booth screen path. In the screenshot above the screen path is shown as: "C:\Users\chris\Documents\PhotoboothImages\copies2\ready.jpg" which can be matched by setting the pattern to "ready.jpg". More complex pattern matches can be defined by selecting "Use regular expression" and entering a regular expression such as .*ready\.jpg for the pattern.

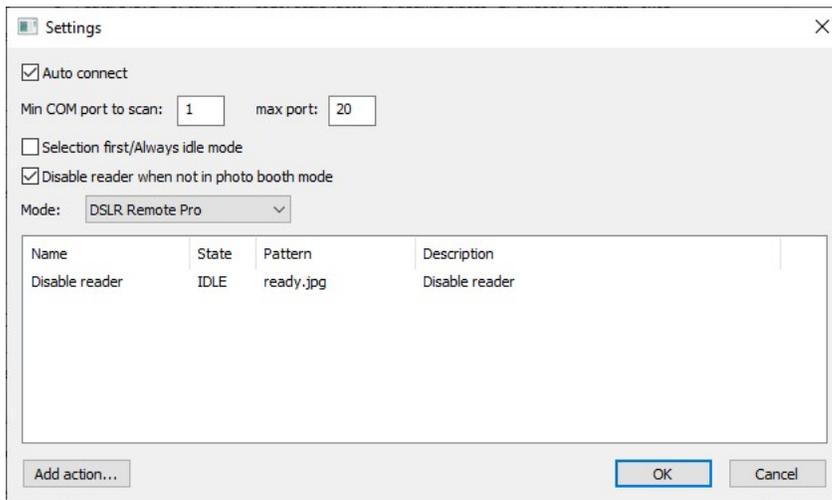
We only want to disable the card reader if it is enabled (i.e. the state is IDLE) and so we set the reader state in the trigger conditions to IDLE.

Next we need to specify the action to take when the trigger conditions are met. In this case all we need to do is disable the card reader.

The "Add action" dialog should look something like this:



Click OK to save the action and the settings dialog should look something like this:



Step 2: Enable card reader when the print confirmation screen is displayed

We need to enable the card reader when the print confirmation screen is displayed so that the user can scan their credit card to make the payment. To do this click on "Add action..." in the settings dialog and name the action "Enable reader". In the trigger conditions section set the pattern to confirm_printing and the reader state to INIT.

In the actions to perform section set enable reader.

The "Add action" dialog should look something like this:

Add Action - Authorization first/idle mode

Name:

Trigger conditions

Pattern:

Use regular expression

Reader state: Trigger when transaction fails

Actions to perform

Enable reader Cancel transaction

Request payment, amount: Product number:

Send photo booth command:

Step 3: Request payment when the user scans their card

When the user scans their card the state changes to CREDIT and we want to request payment. To do this click on "Add action..." in the settings dialog and name the action "Request payment". In the trigger conditions section set the pattern to confirm_printing and the reader state to CREDIT.

In the actions to perform section set the "Request payment, amount:" to the amount, e.g. for \$1 set this to 100, and set the required product number. The product number can be set to anything and is recorded in the logs that can be accessed via the Nayax web dashboard. This can be useful if you have different options at different prices and want to keep a record of which is selected.

Note: the amount is in cents for USD or Euros and pence for GBP. This is because the scale factor is 1 and the decimal places is 2 in the MDB status shown in the main screen.

The "Add action" dialog should look something like this:

Add Action - Authorization first/idle mode

Name:

Trigger conditions

Pattern:

Use regular expression

Reader state: Trigger when transaction fails

Actions to perform

Enable reader Cancel transaction

Request payment, amount: Product number:

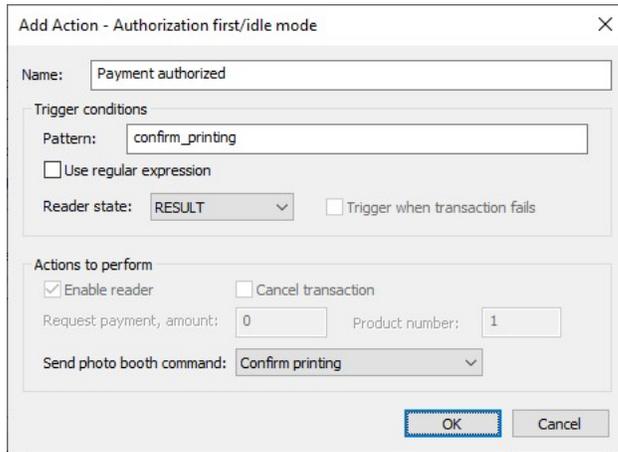
Send photo booth command:

When the payment has been requested the status changes to VEND. If the payment is authorized the status will change to RESULT but if it fails it will change to IDLE.

Step 4: Payment Authorized

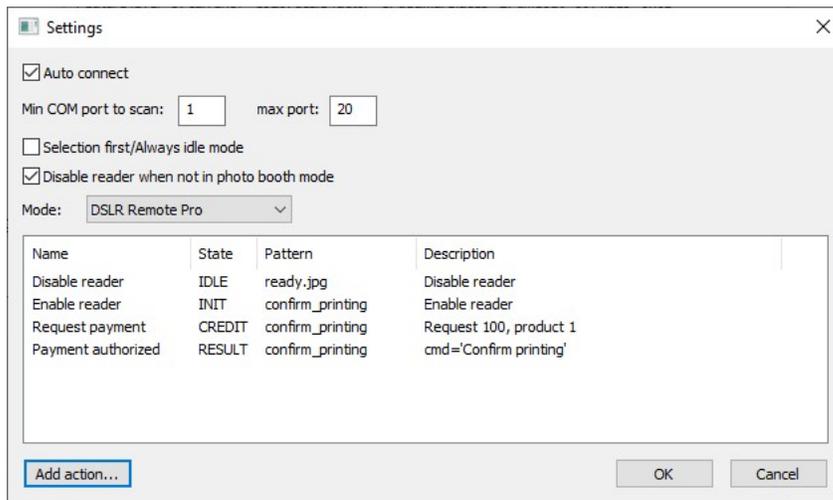
Define a new action named "Payment authorized" that is triggered when the photo booth is displaying the print confirmation screen and the reader state is RESULT. In the actions to perform section set the photo booth command to "Confirm printing".

The "Add action" dialog should look something like this:



Note: defining an action that is triggered by the RESULT state automatically sends a confirmation message to the reader which will display a "Thank you" screen and then switch to the IDLE state.

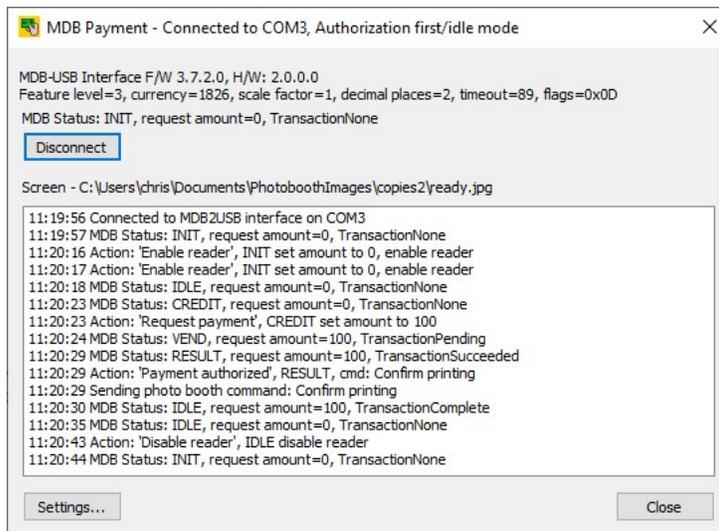
The settings screen should show all four actions and look something like this:



Check it works

Click "OK" in the settings screen to return to the main screen. Then start the photo booth and check that the card reader is disabled. Tap the start button on the photo booth to start the shooting sequence. Check that the card reader is enabled when the print confirmation screen is displayed. Then scan a credit card (or the Nayax technician mode card) to pay for the print. When the payment is authorized the photo booth should print the photos and return to the ready screen with the reader disabled.

The main screen should look something like this:



The actions used in this example can be loaded by clicking on the "Load..." button and loading the `MDB_authorization_first_ex2.xml` settings file.

4.3 Photo booth authorization first example 3

This example shows how to set up the MDB Payment utility to pay for a print from the photo booth's sharing screen using a credit card reader in authorization first/idle mode. The photo booth app in this example is DSLR Remote Pro.

In this example the photo booth takes the photos and displays the sharing screen with options to share the photos for free or to pay per print.

Prerequisites

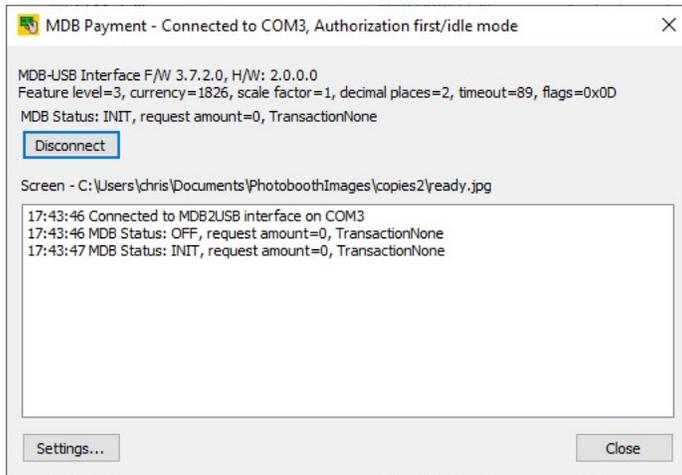
To use the MDB Payment utility you need to be running DSLR Remote Pro v3.16 or later.

First check that the credit card reader is running in MDB level 1 for authorization first/idle mode. If the Nayax VPOS Touch is not set to MDB level 1 you may need to contact Nayax support to request them to set it to MDB level 1.

Create a simple photo booth event in DSLR Remote Pro with printing and emails selected for the sharing options. After creating the event edit the settings to change the output from "Print and save JPEG copy" to "JPEG copy only" so that it creates a JPEG copy of the print layout but doesn't print it. Then click on "Print settings..." in the "Output Settings" dialog and enable payment mode. When the user taps on the print touchscreen action in the sharing the screen the photo booth will display the `share_print_payment.jpg` screen and wait for a "Payment accepted" touchscreen action before printing the photos.

In DSLR Remote Pro's "Photobooth Settings" dialog set "Start options" to "Touchscreen" so that it can accept commands from the MDB Payment Utility.

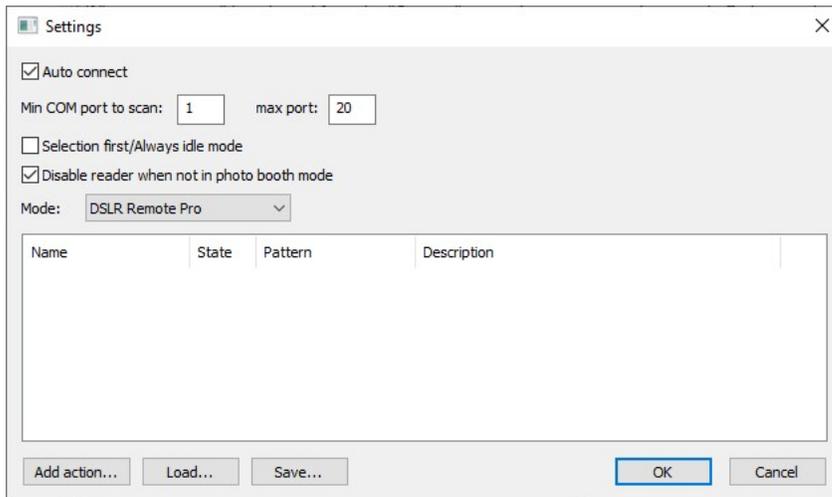
Run DSLR Remote Pro in photo booth mode and run the MDB Payment utility. The MDB Payment utility screen should look something like this:



Step 1: Add an event to disable the card reader

It's a good idea to disable the card reader until the share_print_payment.jpg screen is displayed otherwise users might try to scan their credit card before the photo booth is ready.

Click on the "Settings..." button to display the settings dialog:



Check that "Selection first/Always idle mode" is not selected and the "Mode:" dropdown list is set to "DSLR Remote Pro".

Then click on the "Add action..." button to add an action:

Give the action a suitable name e.g. "Disable reader" and then set the trigger conditions in the section below. What we want to do is disable the card reader when the photo booth is displaying the ready.jpg screen if the card reader is enabled.

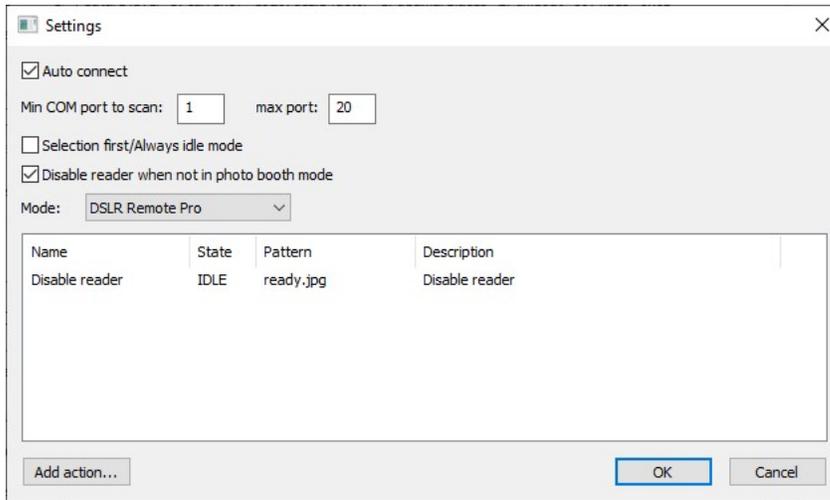
The "Pattern" trigger condition is set to a pattern that matches the photo booth screen e.g. ready.jpg. If "Use regular expression" is not selected the pattern string will match any part of the photo booth screen path. In the screenshot above the screen path is shown as: "C:\Users\chris\Documents\PhotoboothImages\copies2\ready.jpg" which can be matched by setting the pattern to "ready.jpg". More complex pattern matches can be defined by selecting "Use regular expression" and entering a regular expression such as `.*ready\.jpg` for the pattern.

We only want to disable the card reader if it is enabled (i.e. the state is IDLE) and so we set the reader state in the trigger conditions to IDLE.

Next we need to specify the action to take when the trigger conditions are met. In this case all we need to do is disable the card reader.

The "Add action" dialog should look something like this:

Click OK to save the action and the settings dialog should look something like this:

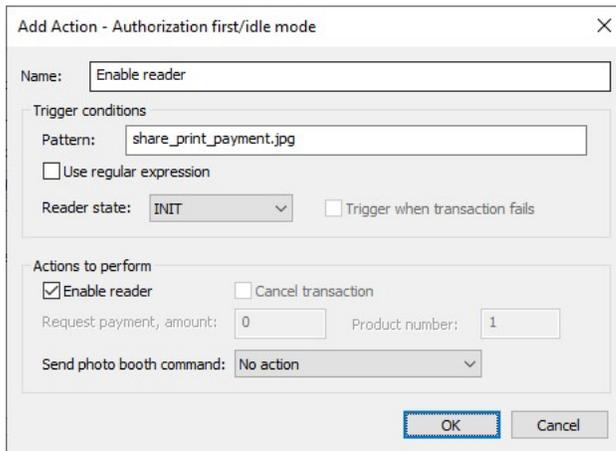


Step 2: Enable card reader when the print payment screen is displayed

We need to enable the card reader when the print payment screen is displayed so that the user can scan their credit card to make the payment. To do this click on "Add action..." in the settings dialog and name the action "Enable reader". In the trigger conditions section set the pattern to share_print_payment and the reader state to INIT.

In the actions to perform section set enable reader.

The "Add action" dialog should look something like this:



Step 3: Request payment when the user scans their card

When the user scans their card the state changes to CREDIT and we want to request payment. To do this click on "Add action..." in the settings dialog and name the action "Request payment". In the trigger conditions section set the pattern to share_print_payment and the reader state to CREDIT.

In the actions to perform section set the "Request payment, amount:" to the amount, e.g. for \$1 set this to 100, and set the required product number. The product number can be set to anything and is recorded in the logs that can be accessed via the Nayax web dashboard. This can be useful if you have

different options at different prices and want to keep a record of which is selected.

Note: the amount is in cents for USD or Euros and pence for GBP. This is because the scale factor is 1 and the decimal places is 2 in the MDB status shown in the main screen.

The "Add action" dialog should look something like this:

Add Action - Authorization first/idle mode

Name: Request payment

Trigger conditions

Pattern: share_print_payment.jpg

Use regular expression

Reader state: CREDIT Trigger when transaction fails

Actions to perform

Enable reader Cancel transaction

Request payment, amount: 100 Product number: 1

Send photo booth command: No action

OK Cancel

When the payment has been requested the status changes to VEND. If the payment is authorized the status will change to RESULT but if it fails it will change to IDLE.

Step 4: Payment Authorized

Define a new action named "Payment authorized" that is triggered when the photo booth is displaying the print payment screen and the reader state is RESULT. In the actions to perform section set the photo booth command to "Payment accepted".

The "Add action" dialog should look something like this:

Add Action - Authorization first/idle mode

Name: Payment authorized

Trigger conditions

Pattern: share_print_payment.jpg

Use regular expression

Reader state: RESULT Trigger when transaction fails

Actions to perform

Enable reader Cancel transaction

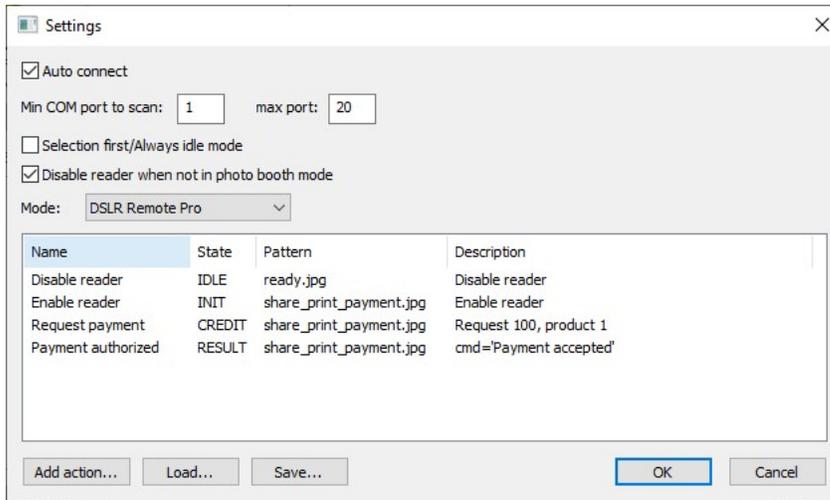
Request payment, amount: 0 Product number: 1

Send photo booth command: Payment accepted

OK Cancel

Note: defining an action that is triggered by the RESULT state automatically sends a confirmation message to the reader which will display a "Thank you" screen and then switch to the IDLE state.

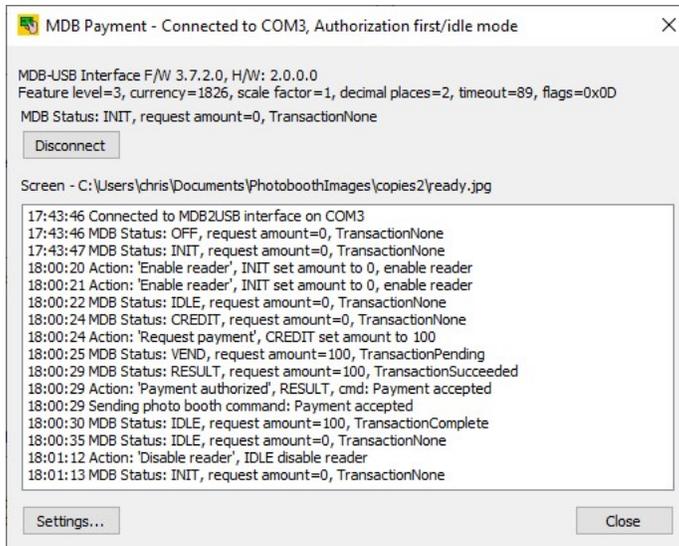
The settings screen should show all four actions and look something like this:



Check it works

Click "OK" in the settings screen to return to the main screen. Then start the photo booth and check that the card reader is disabled. Tap the start button on the photo booth to start the shooting sequence and tap the print button when the sharing screen is displayed. Check that the card reader is enabled when the print payment screen is displayed. Then scan a credit card (or the Nayax technician mode card) to pay for the print. When the payment is authorized the photo booth should print the photos and return to the sharing screen.

The main screen should look something like this:



Refinements

After the payment has been accepted the card reader will return to the IDLE state and display the contactless payment animation. There is nothing to stop the user from scanning their credit card again event though the photo booth is not ready for the next payment. To prevent this we could add an action to disable the card reader when the share.jpg screen is displayed and the reader status is INIT:

Add Action - Authorization first/idle mode

Name:

Trigger conditions

Pattern:

Use regular expression

Reader state: Trigger when transaction fails

Actions to perform

Enable reader Cancel transaction

Request payment, amount: Product number:

Send photo booth command:

If the payment fails the card reader will return to the IDLE state and the transaction status will be TransactionFailed but the photo booth will still be displaying the print payment screen. When this happens we could add an action to close the print payment screen by sending a "Payment cancelled" command to the photo booth:

Add Action - Authorization first/idle mode

Name:

Trigger conditions

Pattern:

Use regular expression

Reader state: Trigger when transaction fails

Actions to perform

Enable reader Cancel transaction

Request payment, amount: Product number:

Send photo booth command:

The actions used in this example can be loaded by clicking on the "Load..." button and loading the MDB_authorization_first_ex3.xml settings file.

4.4 Photo booth selection first example 1

This example shows how to set up the MDB Payment utility to start a photo booth with a credit card reader in selection first/always idle mode. The photo booth app in this example is DSLR Remote Pro. In this example the photo booth displays a welcome screen and waits for the user to tap the screen to switch to the ready screen. When the ready screen is displayed a payment request is sent to the card reader which displays the amount and invites the user to make a payment.

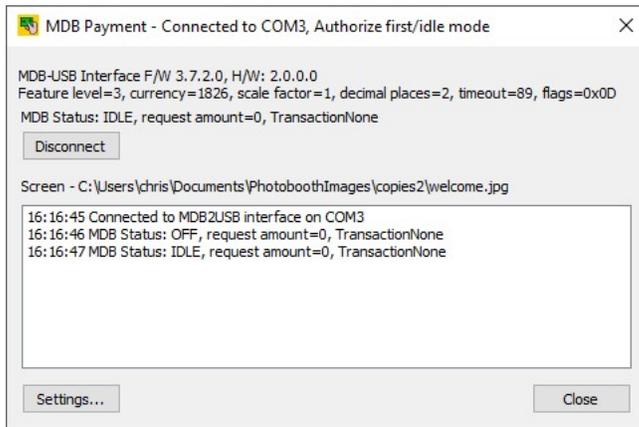
Prerequisites

To use the MDB Payment utility you need to be running DSLR Remote Pro v3.16 or later.

First check that the credit card reader is running in MDB level 3 for selection first/always idle mode. If the Nayax VPOS Touch is not set to MDB level 3 you may need to contact Nayax support to request them to set it to MDB level 3.

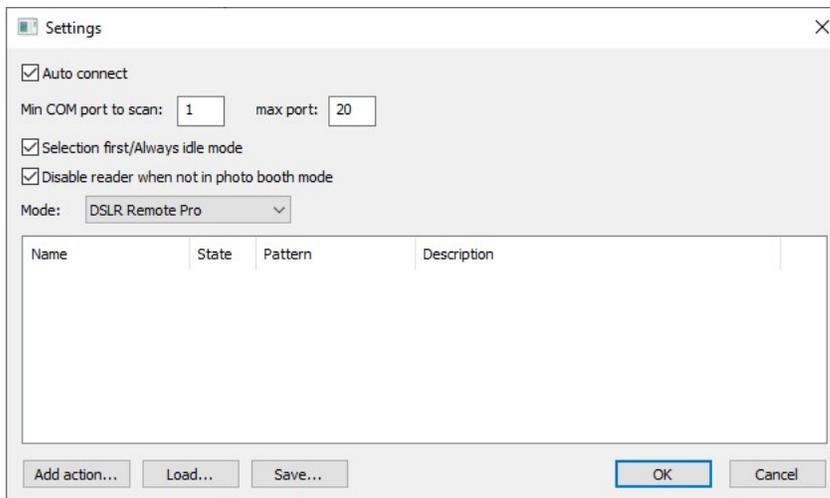
Create a simple photo booth event in DSLR Remote Pro and select the "Auto standby" option so that the photo booth returns to standby mode after each session. Edit the welcome.jpg screen to display a message showing the price of the session and inviting the user to tap the screen to start. Add a touchscreen action to "Switch from standby to ready" to the standby screen. Next edit the ready.jpg screen to display a message saying "Please pay now" and add a button to allow the user to cancel the payment. Add a touchscreen action to "Switch from ready to standby" using the touchscreen editor and place it over the cancel button in the ready screen. In DSLR Remote Pro's "Photobooth Settings" dialog set "Start options" to "Touchscreen" so that it can accept commands from the MDB Payment Utility.

Run DSLR Remote Pro in photo booth mode and run the MDB Payment utility. The MDB Payment utility screen should look something like this:



Step 1: Add an event to enable the card reader

Click on the "Settings..." button to display the settings dialog:



Check that "Selection first/Always idle mode" is selected and the "Mode:" dropdown list is set to "DSLR Remote Pro".

Then click on the "Add action..." button to add an action:

Give the action a suitable name e.g. "Enable reader" and then set the trigger conditions in the section below. What we want to do is enable the card reader when the photo booth is displaying the welcome.jpg screen and the card reader is disabled.

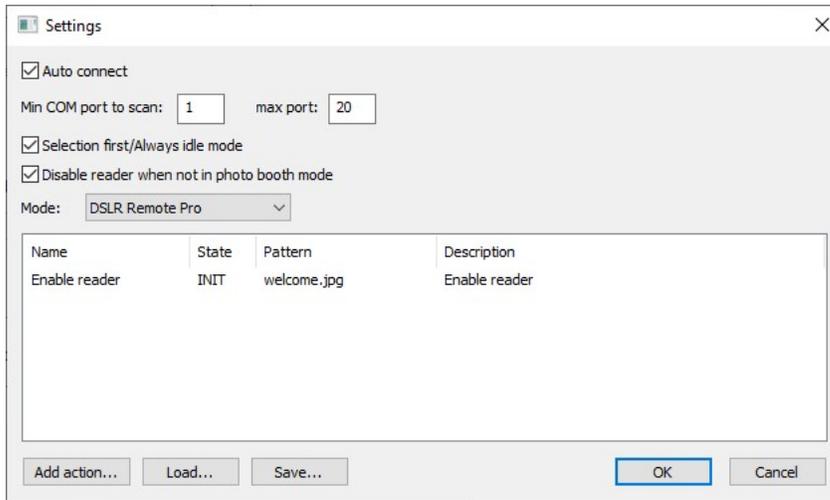
The "Pattern" trigger condition is set to a pattern that matches the photo booth screen e.g. welcome.jpg. If "Use regular expression" is not selected the pattern string will match any part of the photo booth screen path. In the screenshot above the screen path is shown as: "C:\Users\chris\Documents\PhotoboothImages\copies2\welcome.jpg" which can be matched by setting the pattern to "welcome.jpg". More complex pattern matches can be defined by selecting "Use regular expression" and entering a regular expression such as `.*welcome\.jpg` for the pattern.

We only want to enable the card reader if it is disabled (i.e. the state is INIT) and so we set the reader state in the trigger conditions to INIT.

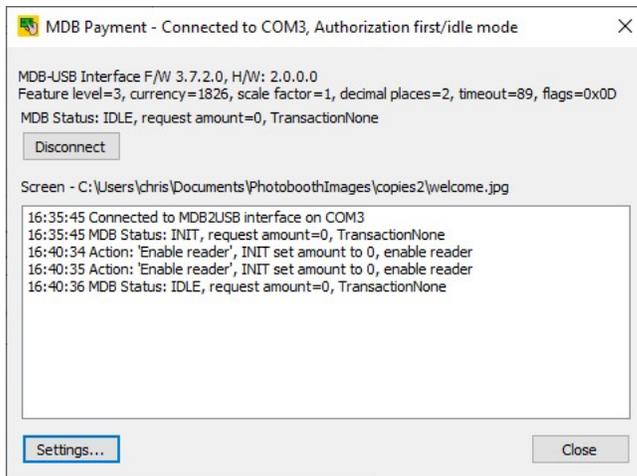
Next we need to specify the action to take when the trigger conditions are met. In this case all we need to do is enable the card reader.

The "Add action" dialog should look something like this:

Click OK to save the action and the settings dialog should look something like this:



Click OK and the action should be triggered if the photo booth is displaying the welcome.jpg screen and the reader is disabled. The status log should show the action triggering, the reader's screen change to the select product animation and the state should change to IDLE:



Step 2: Request a payment when the user taps the photo booth to start the session

When the user taps the photo booth screen it will switch from standby to ready and will display the ready.jpg screen. When this happens we want to request payment before starting the countdown. To do this click on "Add action..." in the settings dialog and name the action "Request payment". In the trigger conditions section set the pattern to ready.jpg and the reader state to IDLE.

In the actions to perform section set the "Request payment, amount:" to the amount, e.g. for \$1 set this to 100, and set the required product number. The product number can be set to anything and is recorded in the logs that can be accessed via the Nayax web dashboard. This can be useful if you have different options at different prices and want to keep a record of which is selected.

Note: the amount is in cents for USD or Euros and pence for GBP. This is because the scale factor is 1 and the decimal places is 2 in the MDB status shown in the main screen.

The "Add action" dialog should look something like this:

The screenshot shows a dialog box titled "Add Action - Selection first/always idle mode". The "Name" field contains "Request payment". Under "Trigger conditions", the "Pattern" is "ready.jpg", "Use regular expression" is unchecked, "Reader state" is "IDLE", and "Trigger when transaction fails" is unchecked. Under "Actions to perform", "Enable reader" is checked, "Cancel transaction" is unchecked, "Request payment, amount" is "100", "Product number" is "1", and "Send photo booth command" is "No action". "OK" and "Cancel" buttons are at the bottom.

When the payment has been requested the status changes to VEND. If the payment is authorized the status will change to RESULT but if it fails it will change to IDLE with the status TransactionFailed.

Step 3: Payment Authorized

Define a new action named "Payment authorized" that is triggered when the photo booth is displaying the ready.jpg screen and the reader state is RESULT. In the actions to perform section set the photo booth command to "Start photobooth".

The "Add action" dialog should look something like this:

The screenshot shows a dialog box titled "Add Action - Selection first/always idle mode". The "Name" field contains "Payment authorized". Under "Trigger conditions", the "Pattern" is "ready.jpg", "Use regular expression" is unchecked, "Reader state" is "RESULT", and "Trigger when transaction fails" is unchecked. Under "Actions to perform", "Enable reader" is checked, "Cancel transaction" is unchecked, "Request payment, amount" is "0", "Product number" is "1", and "Send photo booth command" is "Start photobooth". "OK" and "Cancel" buttons are at the bottom.

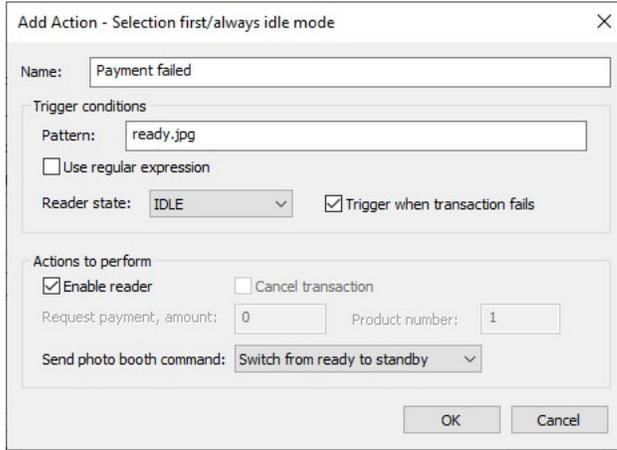
Note: defining an action that is triggered by the RESULT state automatically sends a confirmation message to the reader which will display a "Thank you" screen and then switch to the IDLE state.

Step 4: Payment Failed

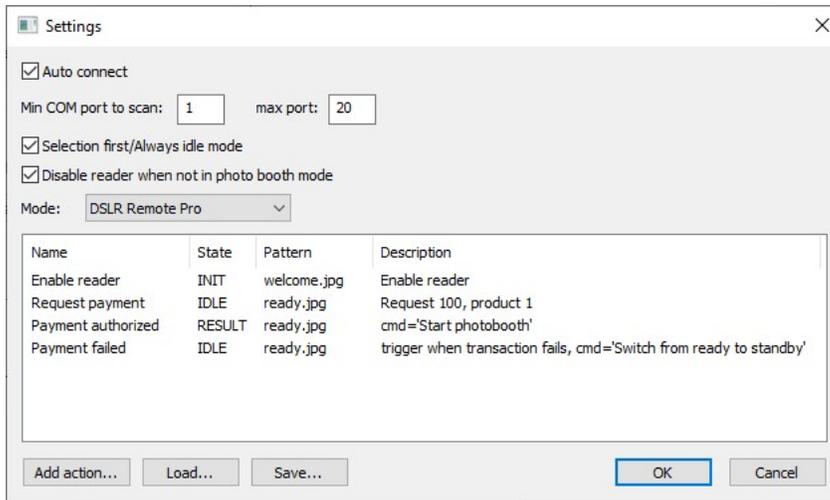
If the payment is not authorized, times out or is cancelled by the user the state changes to IDLE with the status TransactionFailed. When this happens we want to switch to standby mode to display the welcome.jpg screen.

Define a new action named "Payment failed" that is triggered when the photo booth is displaying the ready.jpg screen, the reader state is IDLE and the transaction fails. In the actions to perform section set the photo booth command to "Switch from ready to standby".

The "Add action" dialog should look something like this:



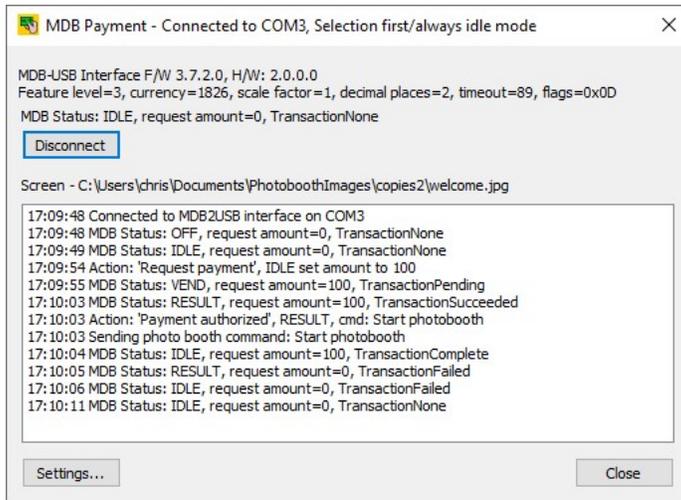
The settings screen should show all four actions and look something like this:



Check it works

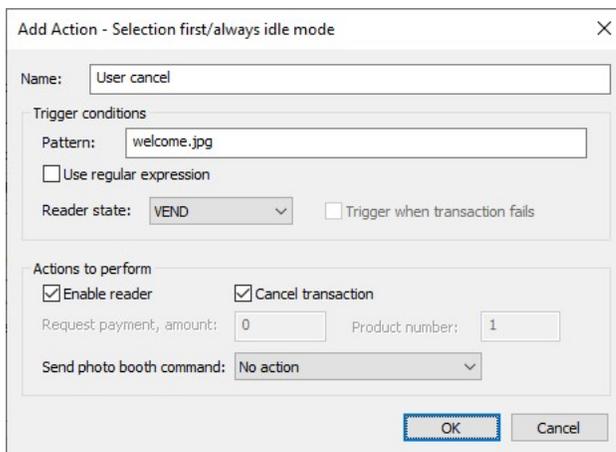
Click "OK" in the settings screen to return to the main screen. Tap the screen on the photo booth to switch from standby to ready and the card reader should show the payment screen. Then scan a credit card (or the Nayax technician mode card) to start a payment. The photo booth should wait for the payment to be authorized and then start the countdown. At the end of the session it should return to the welcome.jpg screen.

The main screen should look something like this:



Refinements

The user can cancel the payment by tapping the cancel button in the ready screen on the photo booth. This will switch the photo booth to standby mode ready for the next user but the card reader will still be showing the payment screen. To cancel the payment on the card reader we need to add an action that is triggered when the welcome.jpg screen is displayed and the card reader is in the VEND state. This action should send a cancel command to the card reader. The action would look something like this:



The example described on this page is a very simple single payment photo booth which requests a payment when the photo booth screen is tapped and starts the countdown after the payment has been authorized. More complicated sessions which allow the user to choose different options with different prices can be created by using profiles to build a menu of options.

The actions used in this example can be loaded by clicking on the "Load..." button and loading the MDB_selection_first_ex1.xml settings file.

4.5 Photo booth selection first example 2

This example shows how to set up the MDB Payment utility to pay for a print from the photo booth's sharing screen using a credit card reader in selection first/always idle mode. The photo booth app in this example is DSLR Remote Pro.

In this example the photo booth takes the photos and displays the sharing screen with options to share the photos for free or to pay per print.

Prerequisites

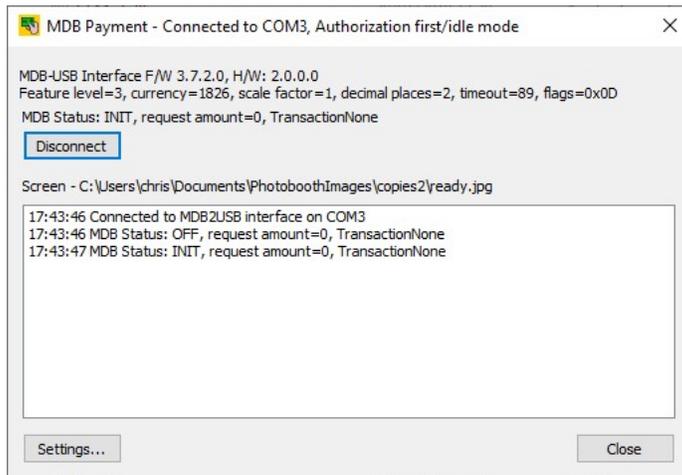
To use the MDB Payment utility you need to be running DSLR Remote Pro v3.16 or later.

First check that the credit card reader is running in MDB level 1 for authorization first/idle mode. If the Nayax VPOS Touch is not set to MDB level 1 you may need to contact Nayax support to request them to set it to MDB level 1.

Create a simple photo booth event in DSLR Remote Pro with printing and emails selected for the sharing options. After creating the event edit the settings to change the output from "Print and save JPEG copy" to "JPEG copy only" so that it creates a JPEG copy of the print layout but doesn't print it. Then click on "Print settings..." in the "Output Settings" dialog and enable payment mode. When the user taps on the print touchscreen action in the sharing the screen the photo booth will display the share_print_payment.jpg screen and wait for a "Payment accepted" touchscreen action before printing the photos.

In DSLR Remote Pro's "Photobooth Settings" dialog set "Start options" to "Touchscreen" so that it can accept commands from the MDB Payment Utility.

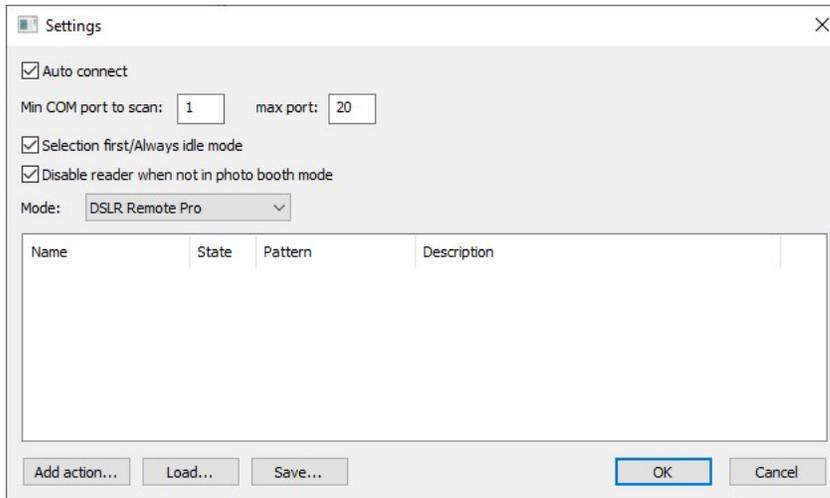
Run DSLR Remote Pro in photo booth mode and run the MDB Payment utility. The MDB Payment utility screen should look something like this:



Step 1: Add an event to enable the card reader

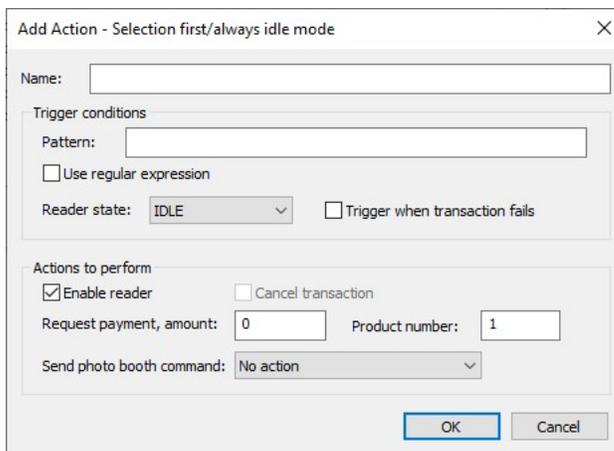
Enabling the card reader when the ready.jpg screen is displayed will display "Please select a product" and the product selection animation on the card reader's screen.

Click on the "Settings..." button to display the settings dialog:



Check that "Selection first/Always idle mode" is selected and the "Mode:" dropdown list is set to "DSLR Remote Pro".

Then click on the "Add action..." button to add an action:



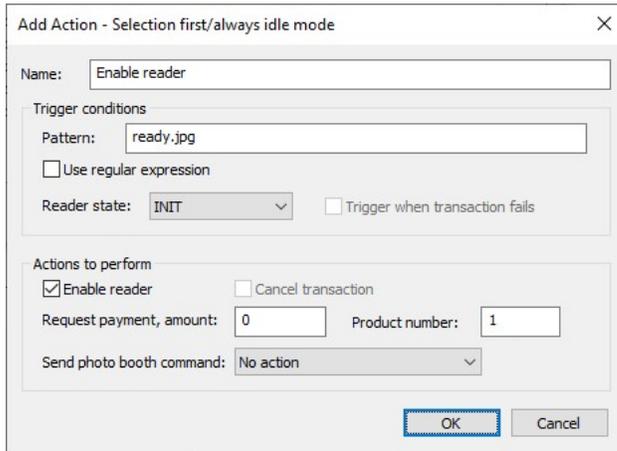
Give the action a suitable name e.g. "Enable reader" and then set the trigger conditions in the section below. What we want to do is enable the card reader when the photo booth is displaying the ready.jpg screen if the card reader is disabled.

The "Pattern" trigger condition is set to a pattern that matches the photo booth screen e.g. ready.jpg. If "Use regular expression" is not selected the pattern string will match any part of the photo booth screen path. In the screenshot above the screen path is shown as: "C:\Users\chris\Documents\PhotoboothImages\copies2\ready.jpg" which can be matched by setting the pattern to "ready.jpg". More complex pattern matches can be defined by selecting "Use regular expression" and entering a regular expression such as `.*ready\.jpg` for the pattern.

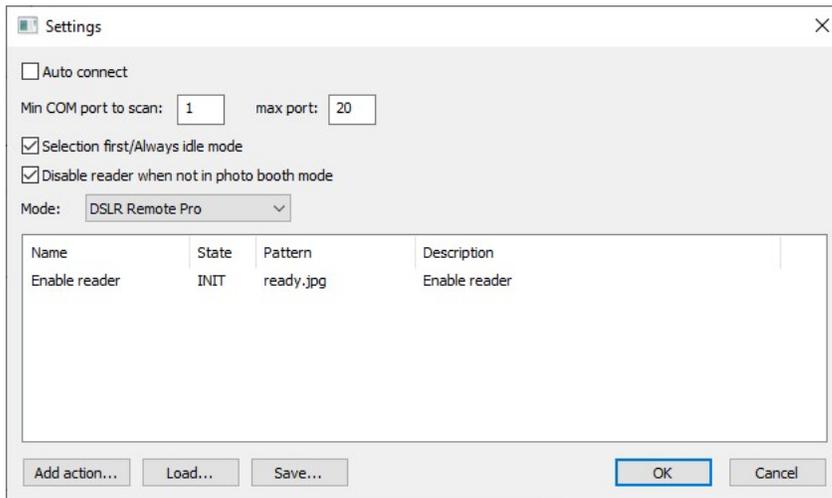
We only need to enable the card reader if it is disabled (i.e. the state is INIT) and so we set the reader state in the trigger conditions to INIT.

Next we need to specify the action to take when the trigger conditions are met. In this case all we need to do is enable the card reader.

The "Add action" dialog should look something like this:



Click OK to save the action and the settings dialog should look something like this:



Step 2: Request payment when print payment screen is displayed

When the users taps on the print touchscreen action in the sharing screen the print payment screen is displayed and we need to request payment from the card reader. To do this click on "Add action..." in the settings dialog and name the action "Request payment". In the trigger conditions section set the pattern to share_print_payment and the reader state to IDLE.

In the actions to perform section set the "Request payment, amount:" to the amount, e.g. for \$1 set this to 100, and set the required product number. The product number can be set to anything and is recorded in the logs that can be accessed via the Nayax web dashboard. This can be useful if you have different options at different prices and want to keep a record of which is selected.

Note: the amount is in cents for USD or Euros and pence for GBP. This is because the scale factor is 1 and the decimal places is 2 in the MDB status shown in the main screen.

The "Add action" dialog should look something like this:

The screenshot shows a dialog box titled "Add Action - Selection first/always idle mode". The "Name" field contains "Request payment". Under "Trigger conditions", the "Pattern" is "share_print_payment.jpg", "Use regular expression" is unchecked, and "Reader state" is set to "IDLE". The "Trigger when transaction fails" checkbox is also unchecked. In the "Actions to perform" section, "Enable reader" is checked, "Cancel transaction" is unchecked, "Request payment, amount" is "100", "Product number" is "1", and "Send photo booth command" is "No action". "OK" and "Cancel" buttons are at the bottom.

When the payment has been requested the status changes to VEND. If the payment is authorized the status will change to RESULT but if it fails it will change to IDLE.

Step 3: Payment Authorized

Define a new action named "Payment authorized" that is triggered when the photo booth is displaying the print payment screen and the reader state is RESULT. In the actions to perform section set the photo booth command to "Payment accepted".

The "Add action" dialog should look something like this:

The screenshot shows a dialog box titled "Add Action - Selection first/always idle mode". The "Name" field contains "Payment authorized". Under "Trigger conditions", the "Pattern" is "share_print_payment.jpg", "Use regular expression" is unchecked, and "Reader state" is set to "RESULT". The "Trigger when transaction fails" checkbox is unchecked. In the "Actions to perform" section, "Enable reader" is checked, "Cancel transaction" is unchecked, "Request payment, amount" is "0", "Product number" is "1", and "Send photo booth command" is "Payment accepted". "OK" and "Cancel" buttons are at the bottom.

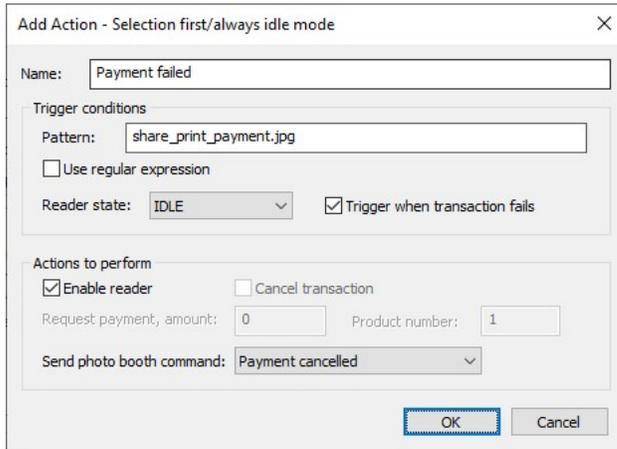
Note: defining an action that is triggered by the RESULT state automatically sends a confirmation message to the reader which will display a "Thank you" screen and then switch to the IDLE state.

Step 4: Payment Failed

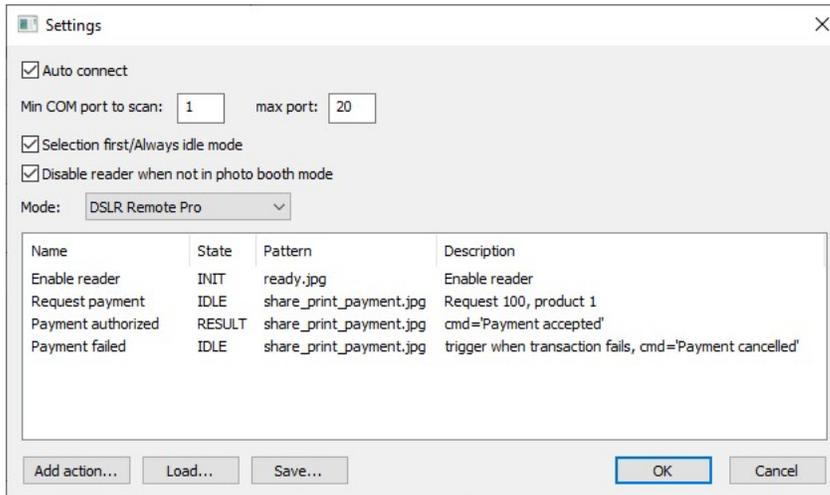
If the payment is not authorized, times out or is cancelled by the user the state changes to IDLE with the status TransactionFailed. When this happens we want to cancel the printing and return to the sharing screen.

Define a new action named "Payment failed" that is triggered when the photo booth is displaying the print payment screen, the reader state is IDLE and the transaction fails. In the actions to perform section set the photo booth command to "Print".

The "Add action" dialog should look something like this:



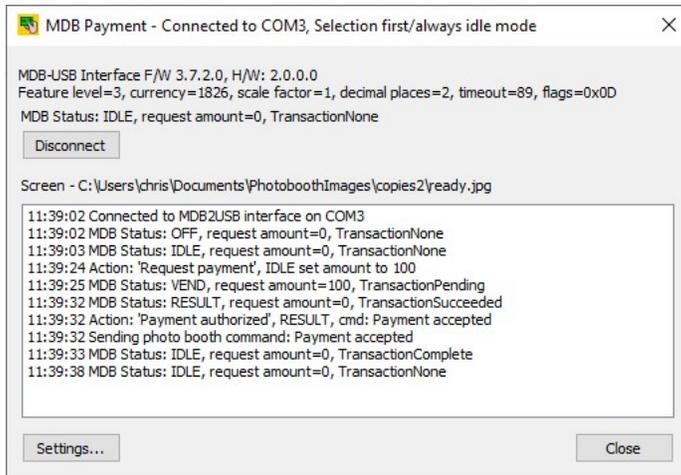
The settings screen should show all four actions and look something like this:



Check it works

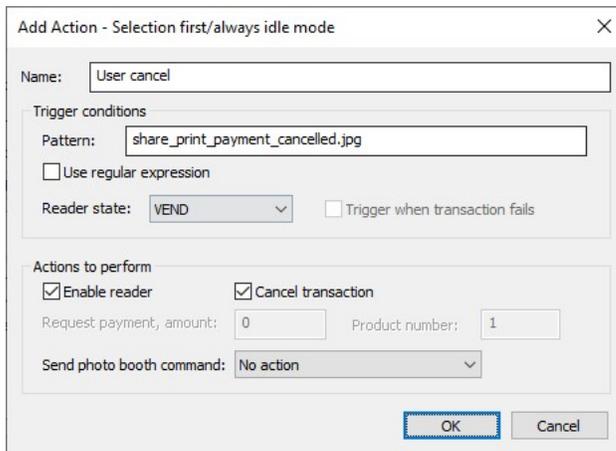
Click "OK" in the settings screen to return to the main screen. Then start the photo booth and check that the card reader is enabled and is displaying the product selection screen. Tap the start button on the photo booth to start the shooting sequence and tap the print button when the sharing screen is displayed. Check that the card reader requests payment from the user when the print payment screen is displayed. Then scan a credit card (or the Nayax technician mode card) to pay for the print. When the payment is authorized the photo booth should print the photos and return to the sharing screen.

The main screen should look something like this:



Refinements

The user can cancel the payment by tapping the cancel button in the print payment screen on the photo booth. This will display the share_print_payment_cancelled.jpg screen for a few seconds and then return to the sharing screen, but the card reader will still be showing the payment screen. To cancel the payment on the card reader we need to add an action that is triggered when the share_print_payment_cancelled.jpg screen is displayed and the card reader is in the VEND state. This action should send a cancel command to the card reader. The action would look something like this:



The actions used in this example can be loaded by clicking on the "Load..." button and loading the MDB_selection_first_ex2.xml settings file.

5 Breeze Booth for iPad examples

To accept payments for a photo booth running Breeze Booth for iPad you need to run the MDB Payment utility and the Camera Controller on the same computer.

Please note: To use the MDB Payment utility you need to be running Breeze Booth for iPad v2.3 or later and Camera Controller v1.1 or later.

The MDB Payment utility controls the photo booth by sending touchscreen commands to the iPad via the Camera Controller and communicates with the payment system via the MDB-USB interface. Please note that touchscreen actions activated by the MDB Payment utility should not be defined in the photo

booth screens otherwise users would be able to tap them without having to pay to use the photo booth.

A typical payment system for an iPad based photo booth running Breeze Booth for iPad is shown below:



Authorization first example

When the card reader is set to authorization first the session is initiated by the user scanning their credit card then the photo booth requests the payment and waits for it to be authorized before starting the countdown.

[Breeze Booth for iPad authorization first example](#) - In this example the photo booth displays the ready screen and waits for the user to scan their credit card and then automatically starts the photo booth when the payment has been authorized.

Selection first example

When the card reader is set to selection first the user selects the service they require from the photo booth and it requests a payment from the card reader. The card reader displays the amount requested and asks the user to scan their credit card. When the payment is authorized the countdown is started.

[Breeze Booth for iPad selection first example](#) - In this example the photo booth displays the ready screen and waits for the user to tap the screen to select menu 1. When the screen for menu 1 is displayed a payment request is sent to the card reader which displays the amount and invites the user to make a payment. When the payment is authorized the photo booth countdown is started.

5.1 Breeze Booth for iPad authorization first example 1

This example shows how to set up the MDB Payment utility to start a photo booth with a credit card reader in authorization first/idle mode. The photo booth app in this example is DSLR Remote Pro. In this example the photo booth displays a welcome screen and waits for the user to scan their credit card and then automatically starts the photo booth when the payment has been authorized.

Prerequisites

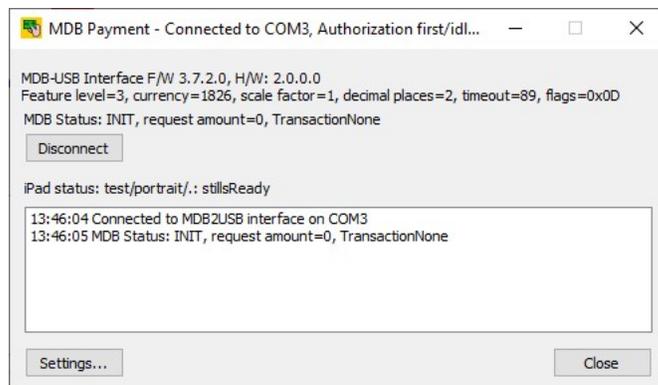
To use the MDB Payment utility you need to be running Breeze Booth for iPad v2.3 or later and Camera Controller v1.1 or later.

First check that the credit card reader is running in MDB level 1 for authorization first/idle mode. If the Nayax VPOS Touch is not set to MDB level 1 you may need to contact Nayax support to request them to set it to MDB level 1.

Create a simple stills only photo booth event in the Breeze Booth Event Editor. Edit the ready screen to remove the start button and add a message asking the user to scan their credit card to use the photo booth. Use the touchscreen editor to remove the start touchscreen action from the ready screen (otherwise users would be able to start the session by tapping the screen without having to pay).

Select the "External controller" option in the Breeze Booth for iPad app settings and run the Camera Controller utility on the Windows PC. Uncheck the "Enable camera connection" in the Camera Controller utility if you are using the iPad's built-in camera.

Run the MDB Payment utility on the same PC as the Camera Controller utility. The MDB Payment utility screen should look something like this:



Step 1: Add an event to enable the card reader

Check that "Selection first/Always idle mode" is not selected and the "Mode:" dropdown list is set to "Breeze Booth for iPad".

Click on the "Settings..." button to display the settings dialog:

Settings dialog box showing configuration options:

- Auto connect
- Startup minimized
- Settings password:
- Min COM port to scan: max port:
- Selection first/Always idle mode
- Disable reader when not in photo booth mode
- Mode:
- Table with columns: Name, State, Pattern, Description
- Buttons: Add action..., Load..., Save..., OK, Cancel

Then click on the "Add action..." button to add an action:

Add Action - Authorization first/idle mode dialog box showing configuration options:

- Name:
- Trigger conditions:
 - Pattern:
 - Use regular expression
 - Reader state:
 - Trigger when transaction fails
- Actions to perform:
 - Enable reader
 - Cancel transaction
 - Request payment, amount: Product number:
 - Send photo booth command:
- Buttons: OK, Cancel

Give the action a suitable name e.g. "Enable reader" and then set the trigger conditions in the section below. What we want to do is enable the card reader when the photo booth is displaying the ready screen and the card reader is disabled.

The "Pattern" trigger condition is set to a pattern that matches the photo booth status e.g. `stillsReady`. If "Use regular expression" is not selected the pattern string will match any part of the photo booth status string. In the screenshot above the screen path is shown as: `test/portrait/.:stillsReady` which can be matched by setting the pattern to `stillsReady`.

We only want to enable the card reader if it is disabled (i.e. the state is INIT) and so we set the reader state in the trigger conditions to INIT.

Next we need to specify the action to take when the trigger conditions are met. In this case all we need to do is enable the card reader.

The "Add action" dialog should look something like this:

Click OK to save the action and the settings dialog should look something like this:

Name	State	Pattern	Description
Enable reader	INIT	stillsReady	Enable reader

Click OK and the action should be triggered if the photo booth is displaying the stills ready screen and the reader is disabled. The status log should show the action triggering, the reader's screen change to the contactless payment animation and the state should change to IDLE:

Step 2: Request payment when the user scans their card

When the user scans their card the state changes to CREDIT and we want to request payment for the photo booth session. To do this click on "Add action..." in the settings dialog and name the action "Request payment". In the trigger conditions section set the pattern to "Print (payment)" and the reader state to CREDIT.

In the actions to perform section set the "Request payment, amount:" to the amount, e.g. for \$1 set this to 100, and set the required product number. The product number can be set to anything and is recorded in the logs that can be accessed via the Nayax web dashboard. This can be useful if you have different options at different prices and want to keep a record of which is selected.

Note: the amount is in cents for USD or Euros and pence for GBP. This is because the scale factor is 1 and the decimal places is 2 in the MDB status shown in the main screen.

The "Add action" dialog should look something like this:

The screenshot shows a dialog box titled "Add Action - Authorization first/idle mode". It has a close button in the top right corner. The "Name" field contains "Request payment". Under "Trigger conditions", the "Pattern" field contains "stillsReady", the "Reader state" dropdown is set to "CREDIT", and the "Trigger when transaction fails" checkbox is unchecked. Under "Actions to perform", the "Enable reader" checkbox is checked, the "Cancel transaction" checkbox is unchecked, the "Request payment, amount:" field contains "100", the "Product number:" field contains "1", and the "Send photo booth command:" dropdown is set to "No action". At the bottom, there are "OK" and "Cancel" buttons.

When the payment has been requested the status changes to VEND. If the payment is authorized the status will change to RESULT but if it fails it will change to IDLE.

Step 3: Payment Authorized

Define a new action named "Payment authorized" that is triggered when the photo booth is displaying the stills ready screen and the reader state is RESULT. In the actions to perform section set the photo booth command to "Start photobooth".

The "Add action" dialog should look something like this:

Add Action - Authorization first/idle mode

Name:

Trigger conditions

Pattern:

Use regular expression

Reader state: Trigger when transaction fails

Actions to perform

Enable reader Cancel transaction

Request payment, amount: Product number:

Send photo booth command:

Note: defining an action that is triggered by the RESULT state automatically sends a confirmation message to the reader which will display a "Thank you" screen and then switch to the IDLE state.

The settings screen should show all four actions and look something like this:

Settings

Auto connect Startup minimized

Settings password:

Min COM port to scan: max port:

Selection first/Always idle mode

Disable reader when not in photo booth mode

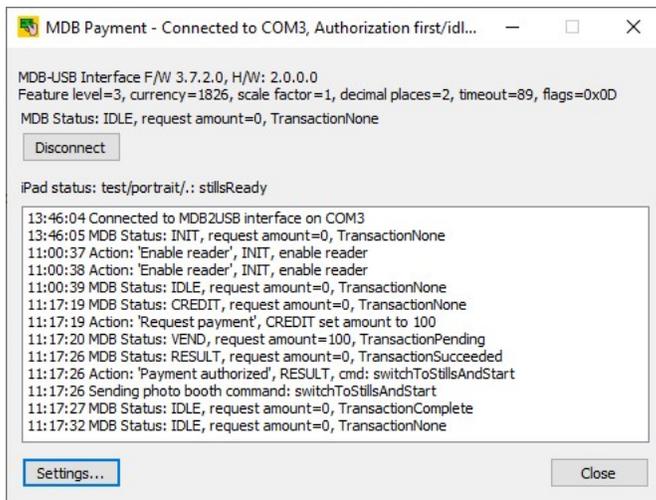
Mode:

Name	State	Pattern	Description
Enable reader	INIT	stillsReady	Enable reader
Request payment	CREDIT	stillsReady	Request 100, product 1
Payment authorized	RESULT	stillsReady	cmd='switchToStillsAndStart'

Check it works

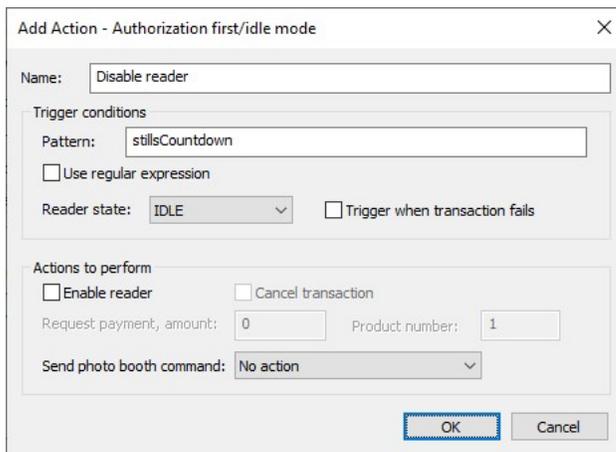
Click "OK" in the settings screen to return to the main screen. Then scan a credit card (or the Nayax technician mode card) to start a payment. When the payment is authorized and the photo booth should start the countdown.

The main screen should look something like this:



Refinements

After the payment has been accepted and the photo booth has started taking photos the card reader will return to IDLE mode and display the contactless payment animation. There is nothing to stop the user from scanning their credit card again even though the photo booth is not ready for the next session. To prevent this we could add an action to disable the card reader when the countdown screen is displayed and the reader status is IDLE:



The actions used in this example can be loaded by clicking on the "Load..." button and loading the MDB_ipad_authorization_first_ex1.xml settings file.

5.2 Breeze Booth for iPad selection first example 1

This example shows how to set up the MDB Payment utility to start a photo booth with a credit card reader in selection first/always idle mode. The photo booth app in this example is Breeze Booth for iPad.

In this example the photo booth displays the ready screen and waits for the user to tap the screen to switch to display the menu 1 screen. When the menu 1 screen is displayed a payment request is sent to the card reader which displays the amount and invites the user to make a payment. When the payment is authorized a "switchToStillsAndStart" command is sent to the photo booth to start the countdown.

Prerequisites

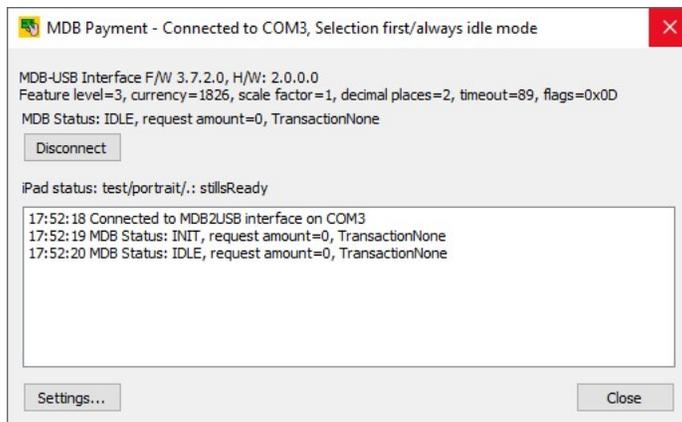
To use the MDB Payment utility you need to be running Breeze Booth for iPad v2.3 or later and Camera Controller v1.1 or later.

First check that the credit card reader is running in MDB level 3 for selection first/always idle mode. If the Nayax VPOS Touch is not set to MDB level 3 you may need to contact Nayax support to request them to set it to MDB level 3.

Create a simple stills only photo booth event in the Breeze Booth Event Editor. Add an overlay image for menu 1 (menu1.png) with a message asking the user to pay and a cancel button. Add a touchscreen action to "closeMenu1" over the cancel button in the menu screen. Next set the menu timeout to 90 secs in the general settings tab of the Event Editor to ensure the menu doesn't timeout before the user has time to make their payment.

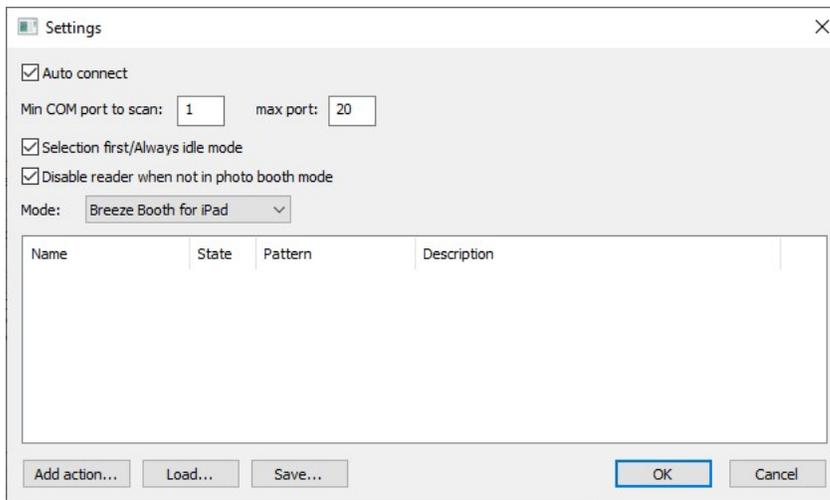
Select the "External controller" option in the Breeze Booth for iPad app settings and run the Camera Controller utility on the Windows PC. Uncheck the "Enable camera connection" in the Camera Controller utility if you are using the iPad's built-in camera.

Run the MDB Payment utility on the same PC as the Camera Controller utility. The MDB Payment utility screen should look something like this:



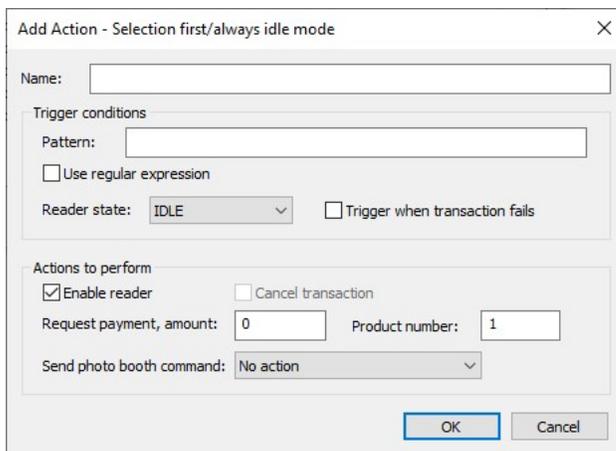
Step 1: Add an event to enable the card reader

Click on the "Settings..." button to display the settings dialog:



Check that "Selection first/Always idle mode" is selected and the "Mode:" dropdown list is set to "Breeze Booth for iPad".

Then click on the "Add action..." button to add an action:



Give the action a suitable name e.g. "Enable reader" and then set the trigger conditions in the section below. What we want to do is enable the card reader when the photo booth is displaying the stills ready screen and the card reader is disabled.

The "Pattern" trigger condition is set to a pattern that matches the photo booth state e.g. stillsReady. If "Use regular expression" is not selected the pattern string will match any part of the photo booth screen path. In the screenshot above the screen path is shown as: "test/portrait/./: stillsReady" which can be matched by setting the pattern to "stillsReady". More complex pattern matches can be defined by selecting "Use regular expression" and entering a regular expression such as test.*stillsReady for the pattern.

We only want to enable the card reader if it is disabled (i.e. the state is INIT) and so we set the reader state in the trigger conditions to INIT.

Next we need to specify the action to take when the trigger conditions are met. In this case all we need to do is enable the card reader.

The "Add action" dialog should look something like this:

Add Action - Selection first/always idle mode

Name:

Trigger conditions

Pattern:

Use regular expression

Reader state: Trigger when transaction fails

Actions to perform

Enable reader Cancel transaction

Request payment, amount: Product number:

Send photo booth command:

Step 2: Request a payment when the user taps the photo booth to start the session

When the user taps the photo booth screen it will switch from the `stillsReady` screen to the `menu 1` screen. When this happens we want to request payment before starting the countdown. To do this click on "Add action..." in the settings dialog and name the action "Request payment". In the trigger conditions section set the pattern to `menu1` and the reader state to `IDLE`.

In the actions to perform section set the "Request payment, amount:" to the amount, e.g. for \$1 set this to 100, and set the required product number. The product number can be set to anything and is recorded in the logs that can be accessed via the Nayax web dashboard. This can be useful if you have different options at different prices and want to keep a record of which is selected.

Note: the amount is in cents for USD or Euros and pence for GBP. This is because the scale factor is 1 and the decimal places is 2 in the MDB status shown in the main screen.

The "Add action" dialog should look something like this:

Add Action - Selection first/always idle mode

Name:

Trigger conditions

Pattern:

Use regular expression

Reader state: Trigger when transaction fails

Actions to perform

Enable reader Cancel transaction

Request payment, amount: Product number:

Send photo booth command:

When the payment has been requested the status changes to `VEND`. If the payment is authorized the status will change to `RESULT` but if it fails it will change to `IDLE` with the status `TransactionFailed`.

Step 3: Payment Authorized

Define a new action named "Payment authorized" that is triggered when the photo booth is displaying the menu 1 screen and the reader state is RESULT. In the actions to perform section set the photo booth command to "menu1SwitchToStillsAndStart".

The "Add action" dialog should look something like this:

The screenshot shows a dialog box titled "Add Action - Selection first/always idle mode". It contains the following fields and options:

- Name: Payment authorized
- Trigger conditions:
 - Pattern: menu1
 - Use regular expression
 - Reader state: RESULT (dropdown)
 - Trigger when transaction fails
- Actions to perform:
 - Enable reader
 - Cancel transaction
 - Request payment, amount: 0
 - Product number: 1
 - Send photo booth command: menu1SwitchToStillsAndStart (dropdown)
- Buttons: OK, Cancel

Note: defining an action that is triggered by the RESULT state automatically sends a confirmation message to the reader which will display a "Thank you" screen and then switch to the IDLE state.

Step 4: Payment Failed

If the payment is not authorized, times out or is cancelled by the user the state changes to IDLE with the status TransactionFailed. When this happens we want to close the menu 1 screen and return to the stills ready screen.

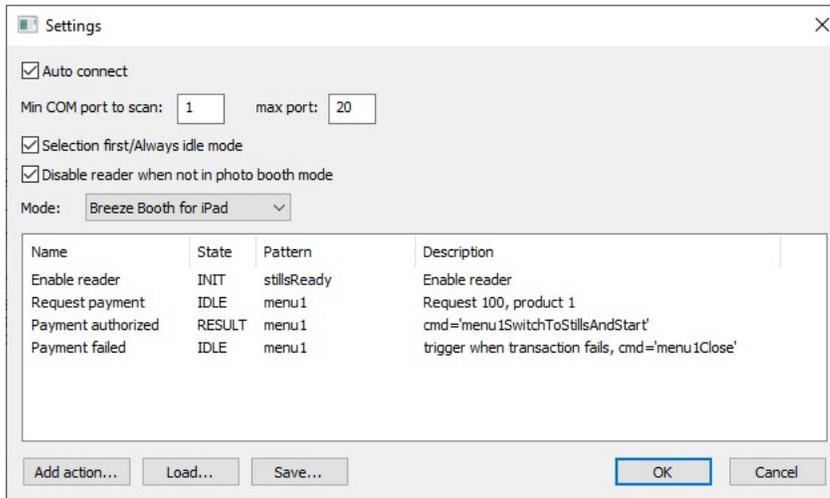
Define a new action named "Payment failed" that is triggered when the photo booth is displaying the menu 1 screen, the reader state is IDLE and the transaction fails. In the actions to perform section set the photo booth command to "menu1Close".

The "Add action" dialog should look something like this:

The screenshot shows a dialog box titled "Add Action - Selection first/always idle mode". It contains the following fields and options:

- Name: Payment failed
- Trigger conditions:
 - Pattern: menu1
 - Use regular expression
 - Reader state: IDLE (dropdown)
 - Trigger when transaction fails
- Actions to perform:
 - Enable reader
 - Cancel transaction
 - Request payment, amount: 0
 - Product number: 1
 - Send photo booth command: menu1Close (dropdown)
- Buttons: OK, Cancel

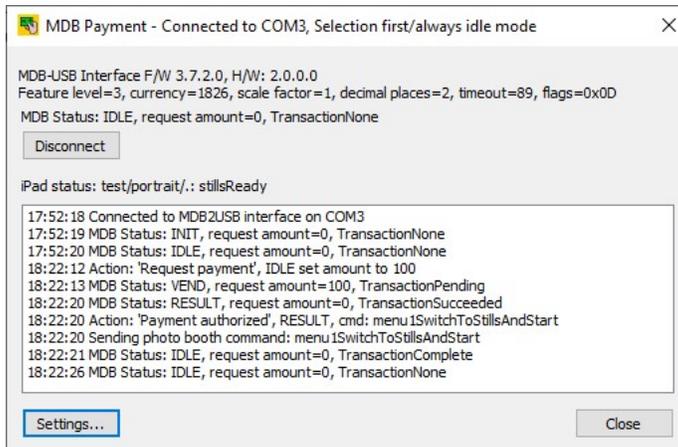
The settings screen should show all four actions and look something like this:



Check it works

Click "OK" in the settings screen to return to the main screen. Tap the iPad photo booth screen to display menu 1 and the card reader should request a payment. Then scan a credit card (or the Nayax technician mode card) to start a payment. The photo booth should wait for the payment to be authorized and then start the countdown. At the end of the session it should return to the stills ready screen.

The main screen should look something like this:



Refinements

The user can cancel the payment by tapping the cancel button in the menu 1 screen on the photo booth. This will close the menu screen and return to the ready screen ready for the next user but the card reader will still be showing the payment screen. To cancel the payment on the card reader we need to add an action that is triggered when the stills ready screen is displayed and the card reader is in the VEND state. This action should send a cancel command to the card reader. The action would look something like this:

Add Action - Selection first/always idle mode

Name: User cancel

Trigger conditions

Pattern: stillsReady

Use regular expression

Reader state: VEND

Trigger when transaction fails

Actions to perform

Enable reader

Cancel transaction

Request payment, amount: 0

Product number: 1

Send photo booth command: No action

OK Cancel

The example described on this page is a very simple single payment photo booth which requests a payment when the photo booth screen is tapped and starts the countdown after the payment has been authorized.

It could be extended to request different amounts for printed photos and for GIFs by using menu 1 for photos (as described in this example) and menu 2 for GIFs. Then add actions for menu 2 "request payment" with the GIF payment amount, "payment authorized" to send the command "switchSwitchToGifAndStart" and "payment failed" to send the command "menu2Close".

More complex sessions which allow the user to choose from a range of different options with different prices can be created by using profiles to build a menu of options.

The actions used in this example can be loaded by clicking on the "Load..." button and loading the MDB_ipad_selection_first_ex1.xml settings file.

6 Breeze Kiosk examples

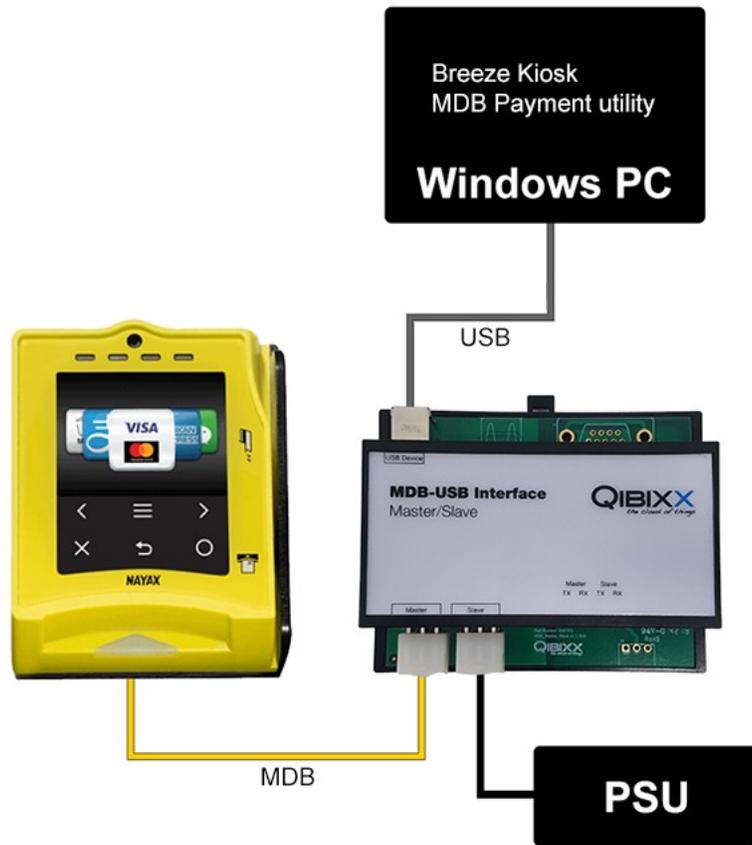
To accept payments for a photo booth kiosk running Breeze Kiosk you need to run the MDB Payment utility and Breeze Kiosk on the same computer.

Please note: To use the MDB Payment utility with Breeze Kiosk you need to be running Breeze Kiosk v2.1 or later.

The MDB Payment utility controls the Breeze Kiosk by sending "Payment accepted" or "Payment cancelled" commands to Breeze Kiosk.

The MDB Payment utility controls the kiosk by sending commands to Breeze Kiosk and communicates with the payment system via the MDB-USB interface.

A typical payment system for a Windows based kiosk running Breeze Kiosk is shown below:



Authorization first example

When the card reader is set to authorization first the Breeze Kiosk enables the card reader when the users select print and then waits for the payment to be authorized before printing the photos.

[Breeze Kiosk authorization first example](#)

Selection first example

When the card reader is set to selection first the user selects print in Breeze Kiosk and it requests a payment from the card reader. The card reader displays the amount requested and asks the user to scan their credit card. When the payment is authorized the photos are printed.

[Photo booth selection first example](#)

6.1 Breeze Kiosk authorization first example 1

This example shows how to set up the MDB Payment utility to pay for prints using Breeze Kiosk with a credit card reader in authorization first/idle mode.

In this example when the user selects print in Breeze Kiosk it displays the print payment screen and waits for the user to scan their credit card and then automatically prints the photos when the payment has been authorized.

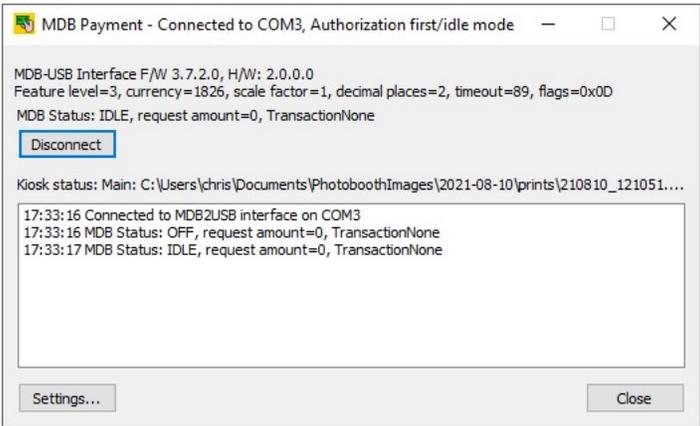
Prerequisites

To use the MDB Payment utility you need to be running Breeze Kiosk v2.1 or later.

First check that the credit card reader is running in MDB level 1 for authorization first/idle mode. If the Nayax VPOS Touch is not set to MDB level 1 you may need to contact Nayax support to request them to set it to MDB level 1.

Check that Breeze Kiosk 2.1 or later is installed on the computer. Then In Breeze Kiosk enable the print option and click on "Print settings..." to enable print payment mode. Check the "Print screen timeout" is set to 90 secs to ensure the payment screen doesn't timeout before the user has time to make their payment.

Run the MDB Payment utility on the same PC as Breeze Kiosk. The MDB Payment utility screen should look something like this:



Step 1: Add an event to enable the card reader

Check that "Selection first/Always idle mode" is not selected and the "Mode:" dropdown list is set to "Breeze Kiosk".

Click on the "Settings..." button to display the settings dialog:

Then click on the "Add action..." button to add an action:

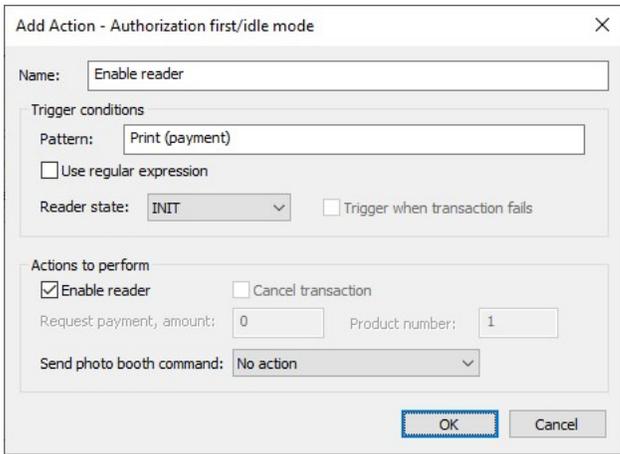
Give the action a suitable name e.g. "Enable reader" and then set the trigger conditions in the section below. What we want to do is enable the card reader when Breeze Kiosk is displaying the print payment screen and the card reader is disabled.

The "Pattern" trigger condition is set to a pattern that matches the kiosk's state e.g. "Main:" or "Print (payment)". If "Use regular expression" is not selected the pattern string will match any part of the kiosk status string.

We only want to enable the card reader if it is disabled (i.e. the state is INIT) and so we set the reader state in the trigger conditions to INIT.

Next we need to specify the action to take when the trigger conditions are met. In this case all we need to do is enable the card reader.

The "Add action" dialog should look something like this:



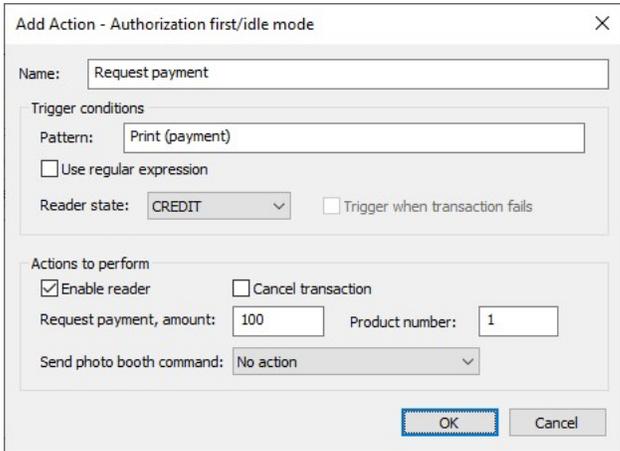
Step 2: Request payment when the user scans their card

When the user scans their card the state changes to CREDIT and we want to request payment for the print. To do this click on "Add action..." in the settings dialog and name the action "Request payment". In the trigger conditions section set the pattern to "Print (payment)" and the reader state to CREDIT.

In the actions to perform section set the "Request payment, amount:" to the amount, e.g. for \$1 set this to 100, and set the required product number. The product number can be set to anything and is recorded in the logs that can be accessed via the Nayax web dashboard. This can be useful if you have different options at different prices and want to keep a record of which is selected.

Note: the amount is in cents for USD or Euros and pence for GBP. This is because the scale factor is 1 and the decimal places is 2 in the MDB status shown in the main screen.

The "Add action" dialog should look something like this:



When the payment has been requested the status changes to VEND. If the payment is authorized the status will change to RESULT but if it fails it will change to IDLE.

Step 3: Payment Authorized

Define a new action named "Payment authorized" that is triggered when Breeze Kiosk is displaying the print payment screen and the reader state is RESULT. In the actions to perform section set the photo

booth command to "Payment accepted".

The "Add action" dialog should look something like this:

Add Action - Authorization first/idle mode

Name:

Trigger conditions

Pattern:

Use regular expression

Reader state: Trigger when transaction fails

Actions to perform

Enable reader Cancel transaction

Request payment, amount: Product number:

Send photo booth command:

Note: defining an action that is triggered by the RESULT state automatically sends a confirmation message to the reader which will display a "Thank you" screen and then switch to the IDLE state.

Step 4: Payment Failed

If the payment is not authorized the state changes to IDLE and we want to cancel the print and return to the main screen.

Define a new action named "Payment failed" that is triggered when Breeze Kiosk is displaying the print payment screen and the reader state is IDLE and the transaction has failed. In the actions to perform section set the photo booth command to "Payment cancelled".

The "Add action" dialog should look something like this:

Add Action - Authorization first/idle mode

Name:

Trigger conditions

Pattern:

Use regular expression

Reader state: Trigger when transaction fails

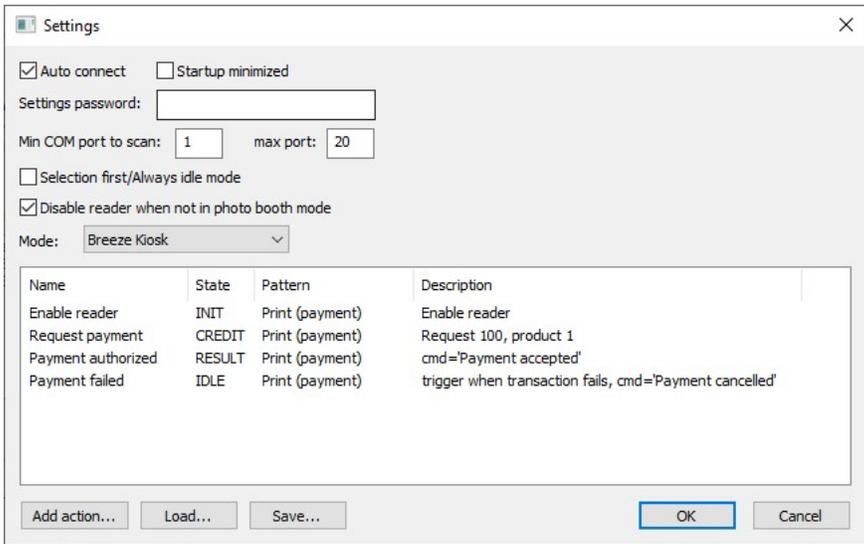
Actions to perform

Enable reader Cancel transaction

Request payment, amount: Product number:

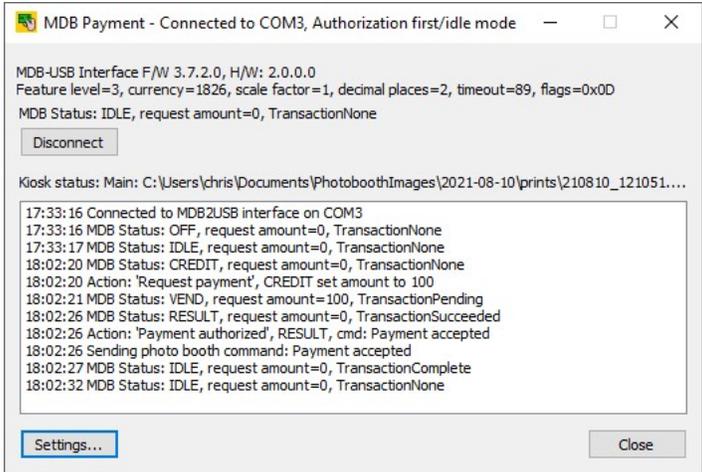
Send photo booth command:

The settings screen should show all four actions and look something like this:



Check it works

Click "OK" in the settings screen to return to the main screen. Then tap the print icon in Breeze Kiosk and when the print payment screen is displayed scan a credit card (or the Nayax technician mode card) to start a payment. Breeze Kiosk should wait for the payment to be authorized and then print the photos and return to the main screen. The main screen should look something like this:



Refinements

After the payment has been accepted and the photos have been printed the card reader will return to IDLE mode and display the contactless payment animation. There is nothing to stop the user from scanning their credit card again before they have selected another photo to print. To prevent this we could add an action to disable the card reader when the main screen is displayed and the reader status is IDLE.

The actions used in this example can be loaded by clicking on the "Load..." button and loading the MDB_authorization_first_ex1.xml settings file.

6.2 Breeze Kiosk selection first example 1

This example shows how to set up the MDB Payment utility to pay for prints using Breeze Kiosk with a credit card reader in selection first/always idle mode.

In this example when the user selects print in Breeze Kiosk it displays the print payment screen and sends a payment request to the card reader which displays the amount and invites the user to make a payment. When the payment is authorized a "Payment accepted" command is sent to Breeze Kiosk telling it to print the photos.

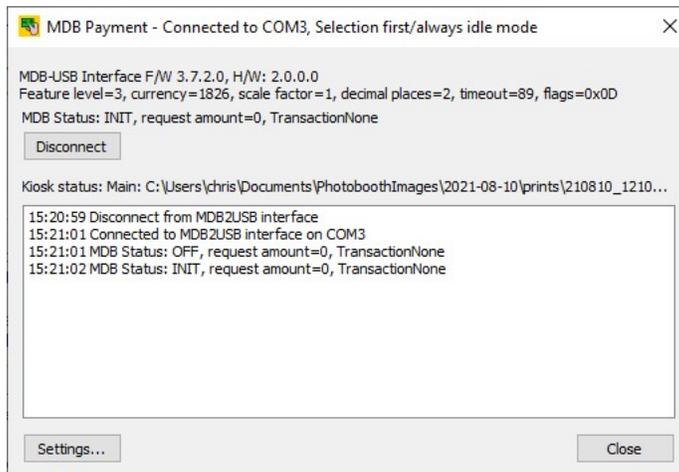
Prerequisites

To use the MDB Payment utility you need to be running Breeze Kiosk v2.1 or later.

First check that the credit card reader is running in MDB level 3 for selection first/always idle mode. If the Nayax VPOS Touch is not set to MDB level 3 you may need to contact Nayax support to request them to set it to MDB level 3.

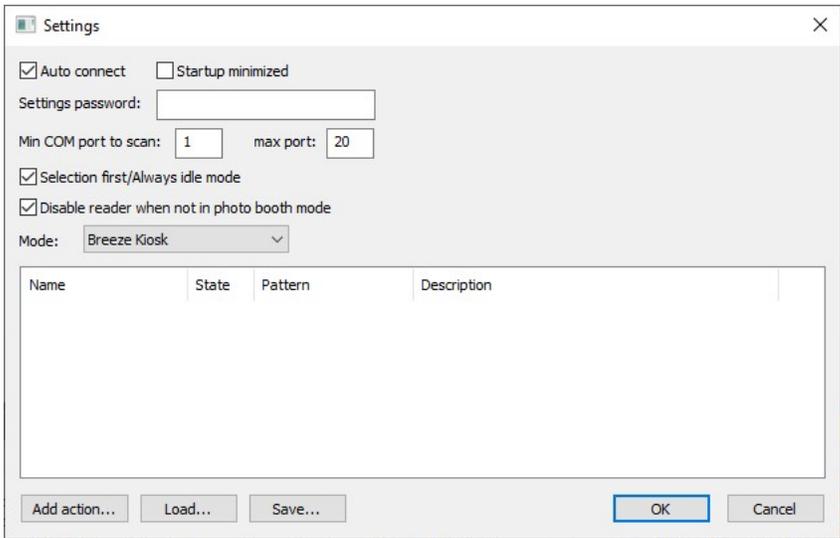
Check that Breeze Kiosk 2.1 or later is installed on the computer. Then In Breeze Kiosk enable the print option and click on "Print settings..." to enable print payment mode. Check the "Print screen timeout" is set to 90 secs to ensure the payment screen doesn't timeout before the user has time to make their payment.

Run the MDB Payment utility on the same PC as Breeze Kiosk. The MDB Payment utility screen should look something like this:

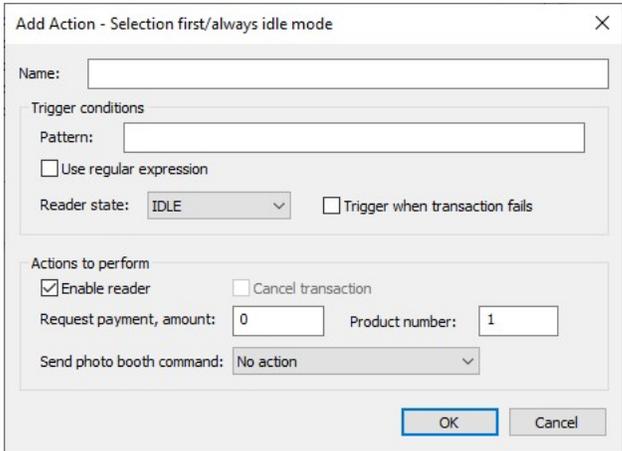


Step 1: Add an event to enable the card reader

Click on the "Settings..." button to display the settings dialog:



Check that "Selection first/Always idle mode" is selected and the "Mode:" dropdown list is set to "Breeze Kiosk". Then click on the "Add action..." button to add an action:



Give the action a suitable name e.g. "Enable reader" and then set the trigger conditions in the section below. What we want to do is enable the card reader when the Breeze Kiosk is displaying the main screen and the card reader is disabled.

The "Pattern" trigger condition is set to a pattern that matches the kiosk's state e.g. "Main:" or "Print (payment)". If "Use regular expression" is not selected the pattern string will match any part of the kiosk status string.

We only want to enable the card reader if it is disabled (i.e. the state is INIT) and so we set the reader state in the trigger conditions to INIT.

Next we need to specify the action to take when the trigger conditions are met. In this case all we need to do is enable the card reader.

The "Add action" dialog should look something like this:

The screenshot shows a dialog box titled "Add Action - Selection first/always idle mode". The "Name" field contains "Enable reader". Under "Trigger conditions", the "Pattern" is "Main:", "Use regular expression" is unchecked, "Reader state" is "INIT", and "Trigger when transaction fails" is unchecked. Under "Actions to perform", "Enable reader" is checked, "Cancel transaction" is unchecked, "Request payment, amount" is "0", "Product number" is "1", and "Send photo booth command" is "No action". "OK" and "Cancel" buttons are at the bottom.

Step 2: Request a payment when the user selects print

When the user taps print icon in Breeze Kiosk it will switch from the main screen to the to the print payment screen. When this happens we want to request a payment before printing. To do this click on "Add action..." in the settings dialog and name the action "Request payment". In the trigger conditions section set the pattern to "Print (payment)" and the reader state to IDLE.

In the actions to perform section set the "Request payment, amount:" to the amount, e.g. for \$1 set this to 100, and set the required product number. The product number can be set to anything and is recorded in the logs that can be accessed via the Nayax web dashboard. This can be useful if you have different options at different prices and want to keep a record of which is selected.

Note: the amount is in cents for USD or Euros and pence for GBP. This is because the scale factor is 1 and the decimal places is 2 in the MDB status shown in the main screen.

The "Add action" dialog should look something like this:

The screenshot shows a dialog box titled "Add Action - Selection first/always idle mode". The "Name" field contains "Request payment". Under "Trigger conditions", the "Pattern" is "Print (payment)", "Use regular expression" is unchecked, "Reader state" is "IDLE", and "Trigger when transaction fails" is unchecked. Under "Actions to perform", "Enable reader" is checked, "Cancel transaction" is unchecked, "Request payment, amount" is "100", "Product number" is "1", and "Send photo booth command" is "No action". "OK" and "Cancel" buttons are at the bottom.

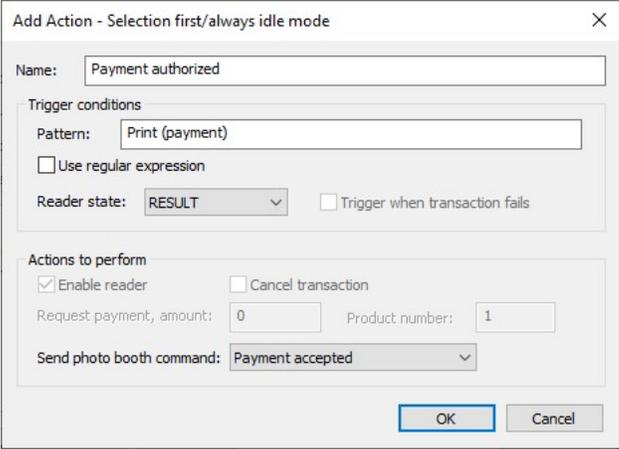
When the payment has been requested the status changes to VEND. If the payment is authorized the status will change to RESULT but if it fails it will change to IDLE with the status TransactionFailed.

Step 3: Payment Authorized

Define a new action named "Payment authorized" that is triggered when the Breeze Kiosk is displaying

the print payment screen and the reader state is RESULT. In the actions to perform section set the photo booth command to "Payment accepted".

The "Add action" dialog should look something like this:



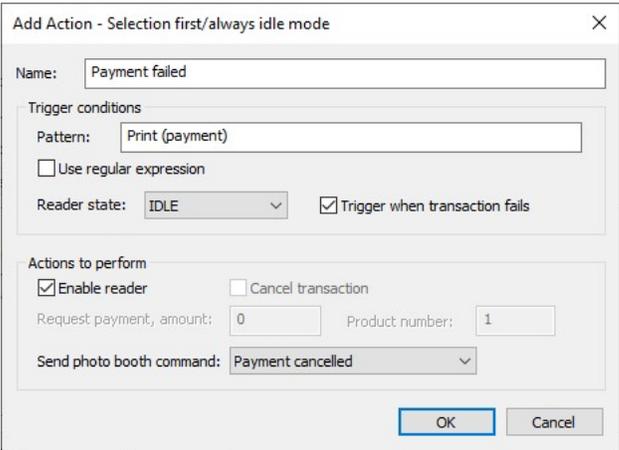
Note: defining an action that is triggered by the RESULT state automatically sends a confirmation message to the reader which will display a "Thank you" screen and then switch to the IDLE state.

Step 4: Payment Failed

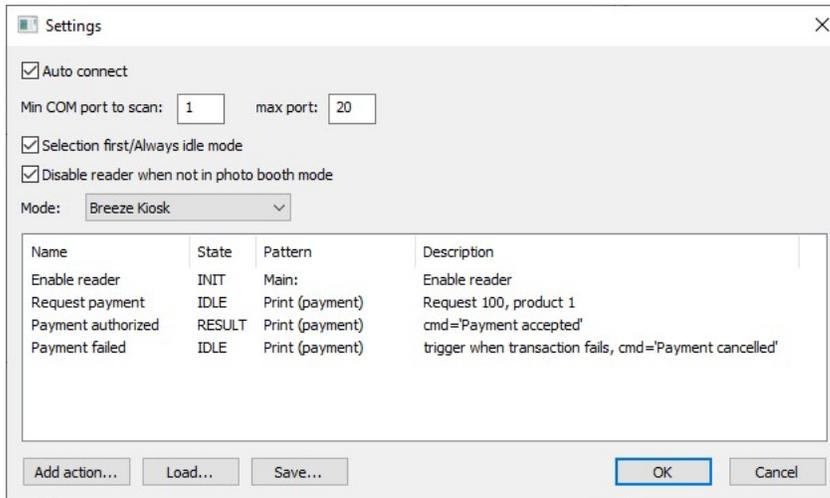
If the payment is not authorized, times out or is cancelled by the user the state changes to IDLE with the status TransactionFailed. When this happens we want to close the print payment screen and return to the main screen without printing the photos.

Define a new action named "Payment failed" that is triggered when the photo booth is displaying the print payment screen, the reader state is IDLE and the transaction fails. In the actions to perform section set the photo booth command to "Payment cancelled".

The "Add action" dialog should look something like this:



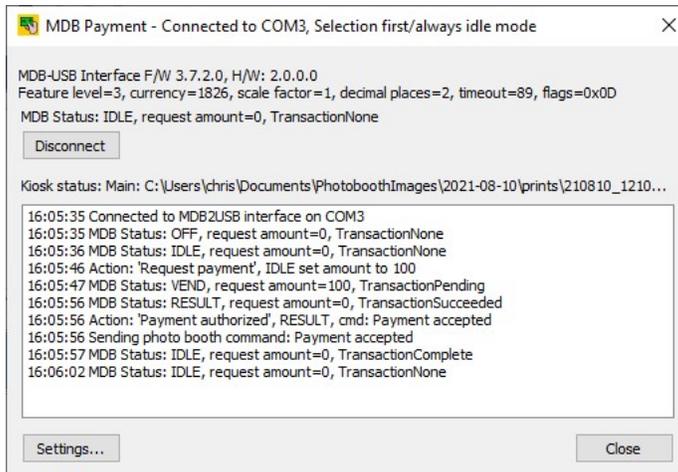
The settings screen should show all four actions and look something like this:



Check it works

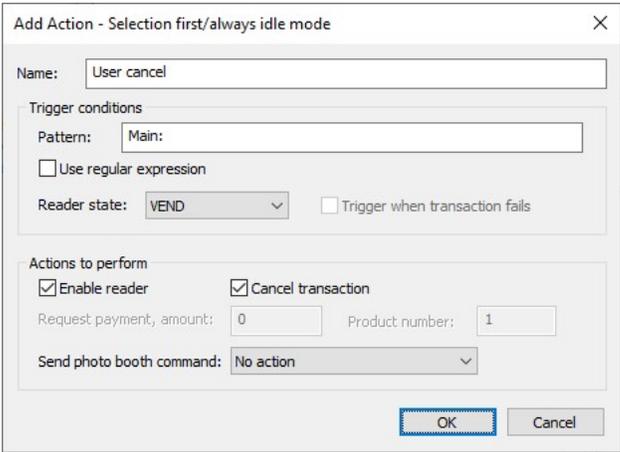
Click "OK" in the settings screen to return to the main screen. Tap the print icon in Breeze Kiosk to display the print payment screen and the card reader should request a payment. Then scan a credit card (or the Nayax technician mode card) to start a payment. The Breeze Kiosk should wait for the payment to be authorized and then start printing. After printing Breeze Kiosk will display the main screen again.

The main screen should look something like this:



Refinements

The user can cancel the payment by tapping the cancel button in the print payment screen in Breeze Kiosk. This will close the print payment screen and return to the main screen ready for the print request but the card reader will still be showing the payment screen. To cancel the payment on the card reader we need to add an action that is triggered when the main screen is displayed and the card reader is in the VEND state. This action should send a cancel command to the card reader. The action would look something like this:



The actions used in this example can be loaded by clicking on the "Load..." button and loading the MDB_kiosk_selection_first_ex1.xml settings file.

7 Release History

20 February 2024: MDB Payment Utility v1.0.2

- Updated to include new touchscreen actions for Breeze Booth for iPad
- Fixed an issue loading saved settings from Breeze Kiosk

19 July 2022: MDB Payment Utility v1.0.1

- Updated to support latest MDB-USB Interface hardware and firmware

15 December 2021: MDB Payment Utility v1.0

- First public release