

PixelPoint<sup>®</sup>

# **Datacap dsiEMVUS**

## Publication Details

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### **Patents**

The following patents apply to some areas of functionality within the PixelPoint software suite: Pat. 6,384,850; 6,871,325; 6,982,733; 8,146,077; 8,287,340.

### **Revision History**

<b>10/07/2015 – Initial Release</b> <b>02/02/2016 – Revision 1</b> Updated Content <b>03/21/2016 – Revision 2</b> Updated Content <b>06/23/2016 – Revision 3</b> Updated content <b>07/13/2016 – Revision 4</b> Updated DLL version. Added Section on Printing Voids and Tip Adjustments <b>09/30/2016 – Revision 5</b> Added signature capture functionality and new section on auth slip layout & printing. <b>01/04/2017 – Revision 6</b> Added warning pertaining to adding tips before host-based batch closes. <b>03/16/2017 – Revision 7</b> Added Keep CC and Void printing functionality. <b>05/02/2017 – Revision 8</b> Mercury-specific wording has been removed from this article as this integration is NOT processor specific. The required DLL is still named MercuryEMVUS.dll, though should be used for ALL EMVUS payment integrations, regardless of payment processor.	<b>08/31/2017 – Revision 9</b> Changes to organization or document. Updated DLL. Note added in Keep CC section regarding AMEX cards. Pay At Table section added. <b>12/14/2017 – Revision 10</b> Added Store and Forward functionality and a note regarding use of 24-hour mode and EMV. <b>01/17/2018 – Revision 11</b> Added Suggested Gratuity functionality. New features added will now show the required minimum DLL version beside their entry in the table of contents in this doc. <b>07/17/2018 – Revision 12</b> Changes to pre-auth behavior. Added multiple tip adjustment functionality. Added ability to customize EMV authorization slips.
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This document is split into 2 sections:

1. EMV US Setup: Initial setup and configuration for Sale Authorizations.
2. Additional Functionality: Gives instructions on how to configure additional (optional) functionality offered with this integration.

**Section 1 is required for the initial setup and configuration of EMV transactions. Sections 2 is optional depending on the desired configuration.**

## Overview

PixelPoint can integrate with DataCap's Out of Scope (OOS) electronic payments system, dsiEMVUS, which uses a Windows ActiveX control that avoids handling sensitive cardholder data. Integration with dsiEMVUS allows the POS to communicate with payment servers to process payments from all major payment processors.

### Minimum Requirements:

- POS.exe 12.3.16.x
- SystemSet.exe 12.3.16.x
- MercuryEMVUS.DLL 18.7.24.396
- DataCap dsiEMVUSclient
  - See Datacap website for latest version

DataCap NETePay dsiEMVUS Support has been certified on the following interfaces:

- VeriFone Vx805 XPI – Mercury
- Ingenico iSC250 - Mercury

### Supported Functions

- Credit (with Tokenization)
- Sale
- Return
- Sale + Tip
- Sale + Cash back (if supported by the Host)
- Void Sale
- Void Return
- Manual CC Entry
- Settlement
- Summary Report
- Store and Forward
- Signature Capture (on supported devices)
- Pay at Table (on supported devices)
- Suggested Gratuity (on iSC250)

### Supported Processors

- Mercury
- Vantiv
- WorldPay
- TSYS
- Heartland
- Chase Paymentech
- First Data

### Important

Deposits are not supported with EMV. If using 24 hour mode in the POS with EMVUS, all PreAuth transaction must be closed (add tips) before the Host does their Auto-Settle, or the establishment does their own BatchSettlement. Payment transactions (PreAuth or SaleAuth) can no longer be moved over to the next day when using 24 hour mode, as with the old Legacy, non-EMV Payment hosts.

## Installing DataCap Software

### Middleware Payment Installation (DataCap/Payment Processor)

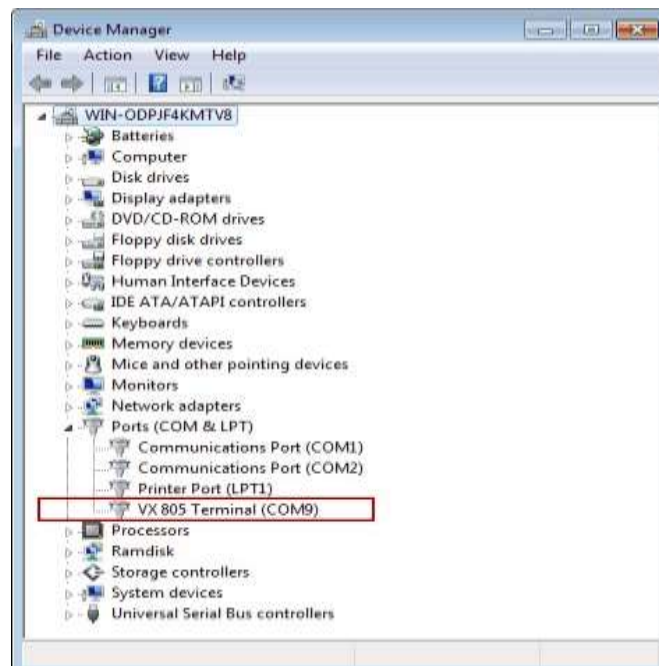
Download and install all required DataCap components for the payment processor in use.

- SQL Instance (OS dependent)
- dsiEMVUSClient (latest version)
  - To be installed on ALL Stations in the environment, as well as the Server
- NETePay EMV Host 5.05 or higher
  - To be installed on the Server

Refer to DataCap documentation for complete instructions on how to install NETePay.

### USB Device Installation

- Download the USB driver for the Pin Pad device. This should be provided by the payment processor or pin pad supplier.
- Install the USB driver using Admin privileges.
- Plug the device into a USB com port on the server (Windows should acknowledge that the device installed correctly).
- Check to ensure that the driver was installed correctly by going to Windows/Control Panel/Device Manager/Ports and confirm that there are no errors or warnings for the device (VX805 Terminal in the example blow).
- Make note of which com port the device is connected to. Typically (COM9).



## Configuring for EMVUS

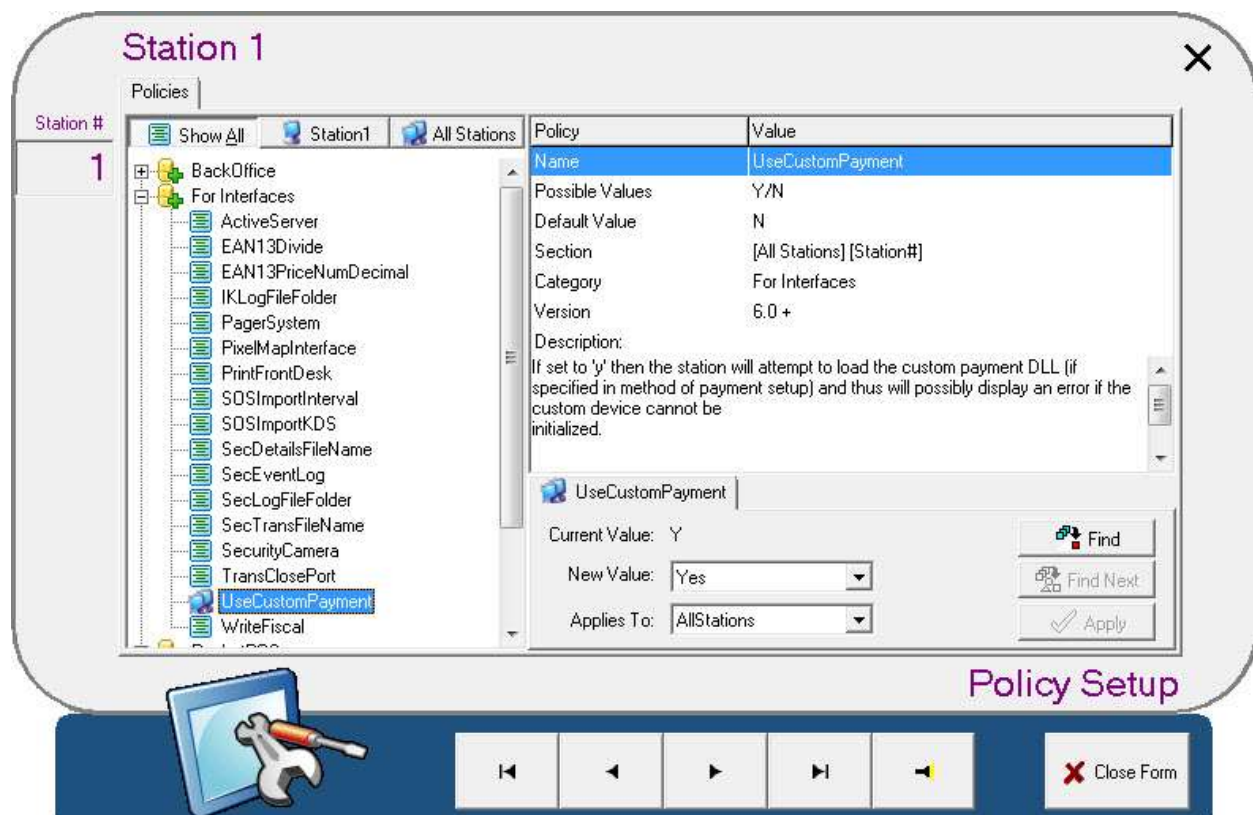
Configure a new method of payment to support EMVUS transactions. This payment method will be used to process ALL types of credit card payments.

1. In BackOffice, enable the policy *UseCustomPayment*.

### Notes:

The POS must be restarted for newly enabled policies to take effect.

Deposits via the *AllowDeposits* Policy are no longer supported using EMV.



2. Place the MercuryEMVUS.dll in *C:/PixelPOS/DLLS*.

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3. Open BackOffice>System Setup. Set 'Use Pixel Authorization Manager' to **Not Used**. If you wish to use another payment interface that relies on the Authorization Manager (Gift Cards, Pixel Member, Front Desk, etc.) AND a custom payment DLL, set this option to **Server Mode**.

The screenshot shows the 'System Setup Options' dialog box with the following details:

- Title Bar:** System Setup Options (with a close button 'X').
- Tabs:** System | Taxes | Company Info | POS Reports | Preset Payment | Orders | Defaults | Collaboration | Email Setup | Advanced | Security.
- Company:** C20-2732-12176-1856
- Num Stations:** 25
- Store No:** 0
- Options (Left Column):**
  - ☐ Open 24 Hours
  - ☐ Use Inventory Manager (Stockboy)
  - ☐ Use Reservations
  - ☐ Ask for daily Weather Conditions
  - ☐ Printers have dual ply paper
  - ☐ Use Pixel Authorization Manager (highlighted with a red circle, dropdown set to 'Not Used')
  - ☐ Auto End of Day System
- Options (Right Column):**
  - ☐ Disable Auto-Prompt for Member Coupons
  - ☐ Show Third Party Reference Field
  - Customer Display:** None Selected
  - Theme Form:** None Selected
  - Shift Rules:** None Selected
  - Auto-EOD Time:** 5:53:00 AM
- System Telephone Mask:** !\000\000-0000;0;\_
- Footer:** Includes a globe icon, a search icon, and a 'Close Form' button with a red 'X'.

4. In BackOffice, select Administrator>Payment Method Setup.

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5. Create a new payment method named EMVUS. Set the payment type to Custom.
6. Select the box No Pre-Auth Settle Check to stop the POS from notifying users that the tips on pre-auth transactions are not verified on cash out. With this option enabled, whatever the value of the check is at settle is the value that will be closed. This feature is available only in POS v18.7.26 and later.

Methods of Payment

EMVUS

Method of Payment More Info ... Advanced Payment Denominations

Description: EMVUS

Is Currency? ☐

Min. Security Required: [Dropdown]

Authorization Required:

- ☐ No Authorization
- ☐ Member/VIP Auth.
- ☐ Credit Card Auth.
- ☐ Front Desk Auth.
- ☐ Debit Card
- ☒ Custom
- ☐ Gift Card (third party)
- ☐ External Authorization

Payment Options:

- ☒ Sale Auth (No PreAuth)
- ☒ No Pre-Auth Settle Check
- ☐ Disable Cash Drawer Opening
- ☐ Allow Retip
- ☐ Force Tender Settlement
- ☐ Show Calculated Tendered Amt.
- ☐ Is Bank Deposit Item (non-EFT)
- ☐ Ask For Cashback
- ☐ Ask For Tip/Change

Edit New Cancel Save Find Exit

7. Select the Advanced tab.

Methods of Payment

EMVUS

Method of Payment More Info ... Advanced Payment Denominations

Accounting Code: [Text Box]

Tip Accounting Code: [Text Box]

Min Value: [Text Box]

Max Value: [Text Box]

Custom DLL: MercuryEMVUS.dll

Printed Card Number Format: Default

Payment Options:

- ☐ Always Print on Receipt
- ☐ Do not ask for swipe
- ☐ Do not ask for Expiry Date
- ☐ Ask for CVV on manual entry
- ☐ Applies to internal member gift cards only
- ☒ Do not show in POS payment list
- ☐ Prompt for Payment Note
- ☒ Allow Voids
- ☐ Do not show in Gift Card list
- ☐ Ask for Signature on the POS

Third Party Reference: [Text Box]

Edit New Cancel Save Find Exit



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8. Uncheck the box Do not show in POS Payment list.
9. Click [Browse] and navigate to the folder *C:\PixelPOS\DLLS*.
10. Select the file MercuryEVUS.dll.
11. Click [Setup]
  - If the [Setup] button does not appear, the station is missing necessary NETePay and Datacap software.
12. Under the General tab, enter the Merchant ID provided by the payment processor.

The screenshot shows the 'EMVUS Client Configuration' window with the 'General' tab selected. The 'Merchant ID' field is highlighted with a red rectangle. Below it is the 'Operator ID' field, which is currently blank. There are several checkboxes: 'Support Tokenization' (checked), 'Terminal Based Settle Batch' (checked), 'Send Batch Summary request on Settle' (unchecked), 'Decline on Non Sufficient Funds' (unchecked), 'Support Pay at Table' (unchecked), and 'Support Store and Forward' (checked). The 'Network Settings' section shows 'IP/Host Name' as 'testhost2.dsipscs.com' and 'IP Port' as '9000'. At the bottom, the status bar reads 'PixelPoint v.17.9.25.141 | EMV US v.12.3.25.8' and there are 'Save' and 'Close' buttons.

13. Leave the Operator ID blank unless specifically directed by the processor.

**Note:** If using more than 1 device at a merchant site, these fields may need to be populated with unique ID's. Check with the processor before doing so.

14. Check the box Support Tokenization.
15. Check the box Terminal Based Settle Batch if settlements are initiated by the merchant, or leave blank if settlements are automatically initiated by the Host.
  - Check the box Send Batch Summary request on Settle. This box should remain unchecked only if the customer uses First Data as their payment processor. First Data is not able to handle this request.
16. Check Decline On Non-Sufficient Funds if you would like transactions to be declined if there are not sufficient funds on the card to cover the total amount owing. Leaving this option unchecked will cause the POS to take whatever funds remain on the card as a partial payment. The user will

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then be prompted to collect the remaining funds owed using a different payment method.

- This functionality applies specifically to Gift Cards (e.g. Visa Gift Cards).
17. Check Support Pay at Table to allow the integration to use a wireless pin pad device which will enable customers to pay from their table. The Pay at Table tab will appear in the EMVUS Client Configuration window only when the Pay at Table option is checked. See the Pay at Table section in Section 2 for configuration information for this feature.
  18. Check Support Store and Forward to enable transactions to be processed and stored while the POS is offline, to be settled later. See the Store and Forward section below for more information. The Store and Forward tab will appear in the EMVUS Client Configuration window only when this option is checked. See the Store and Forward section in Section 2 for configuration information for this feature.
  19. Set the IP/Host Name to the IP address of the station where the NETePay software was installed.
    - Typically, this will be the same location as the POS – i.e. Station 1.
  20. Set the Port to 9000.
  21. Select the Station tab.

**Important:** If using more than 1 device at a merchant site, the following Station fields will need to be configured and saved for each station. If you do not see the correct number of stations based on your setup in the Station # drop down, check the pixel32.ini file to ensure all stations are properly set up.

The screenshot shows the 'EMVUS Client Configuration' window with the 'Station' tab selected. The 'Station' dropdown menu is set to '1'. The 'Terminal' section has 'Terminal ID' set to '001' and a checkbox for 'Print Receipt on POS in a separate Slip'. The 'Pin Pad' section has 'Pin Pad Type' set to 'Ingenico iSC250 - Mercury', 'Com Port' set to '1', and three checkboxes: 'Prompt for TIP on Sale', 'Prompt for Cashback on Sale', and 'Capture Signature from Device'. The 'Admin' section has three buttons: 'Pin Pad Reset', 'EMV Parameters Download', and 'Server Version'. At the bottom, the version information 'PixelPoint v.1.0.0.0 | EMV US v.12.3.25.8' is displayed, along with 'Save' and 'Close' buttons.

22. In the drop down menu, select the Station # the device is connected to.

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23. Contact the payment processor to see if Terminal IDs are required for multi-terminal environments. If so, enter the terminal ID in the provided field.
24. Select Print Receipt on POS in a separate Slip if you would like authorization slips and receipts to be printed separately.
  - If this option is checked, refer to the policy *PrintCusPayReceiptNC* to choose whether or not the POS will print an authorization slip on declined EMV transactions. Authorization slips for declined transactions will be printed by default (policy is on).
25. Select the device from the PIN Pad Type drop down.
26. Enter the Com Port number that was used by Windows during the driver installation. This is typically port 9.
27. Select Prompt for TIP if you want the device to give customers the option to leave a tip at the time of sale.
  - If left unchecked, guests will still have the option to leave a tip when they sign the authorization slip. Refer to the 'Adding Tips' section of this document for instructions on how to enter tips after a sale has been completed.
28. Select Prompt for Cashback if you want the device to give customers the option to request cash back at the time of sale.

**Note:** Prompt for Tip and Cashback may not be available on all hosts.

29. Check 'Capture Signature from Device' if you wish to digitally capture signatures collected during credit card authorization. A signature capture-enabled device is required.
  - This feature was tested on the Ingenico iSC250 device.
30. Verify that all settings are correct and click [Save].

**Note:** Separate terminals in a multi-terminal environment can be configured independently from each other.

## Admin Functions

Admin functions are used to test connectivity with the Host, and to download parameters to a new or swapped-out Pin Pad.

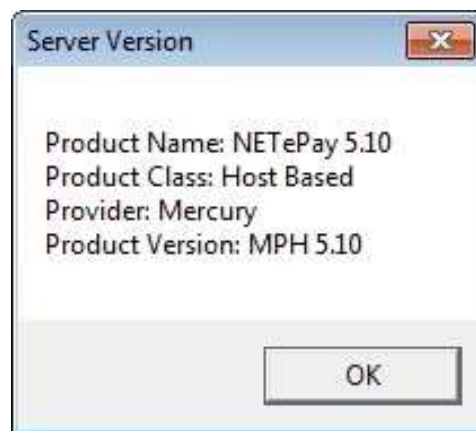
When using Admin functions (Pin Pad Reset, EMV Param Download and Server Version), log into POS>BackOffice>Payment Method>Setup for the local station that the Pin Pad Device is attached to.

For example, logging into Backoffice on Station 3, and using the Admin functions for the device on Station 1, even though the Station 1 ID is displayed in the Station Setup Form, it will not work. Only use the Admin functions on the current in-use station, with the current Station number in Station ID filed selected.

1. Select Pin Pad Reset to test communications to a PIN pad device. A success response will display if successful.
2. Select EMV Parma Download to download new parameters. This is done when installing a new pin pad, or swapping pin pads.

**Note:** NETePay must be running and connected to the Internet when downloading the parameters.

3. Select Server Version to test connectivity to the host. If successful, a window will display with the server details.



**Important:** Do not proceed to configuring the POS unless all three Admin buttons are working. If they are not, contact the payment processor for support.

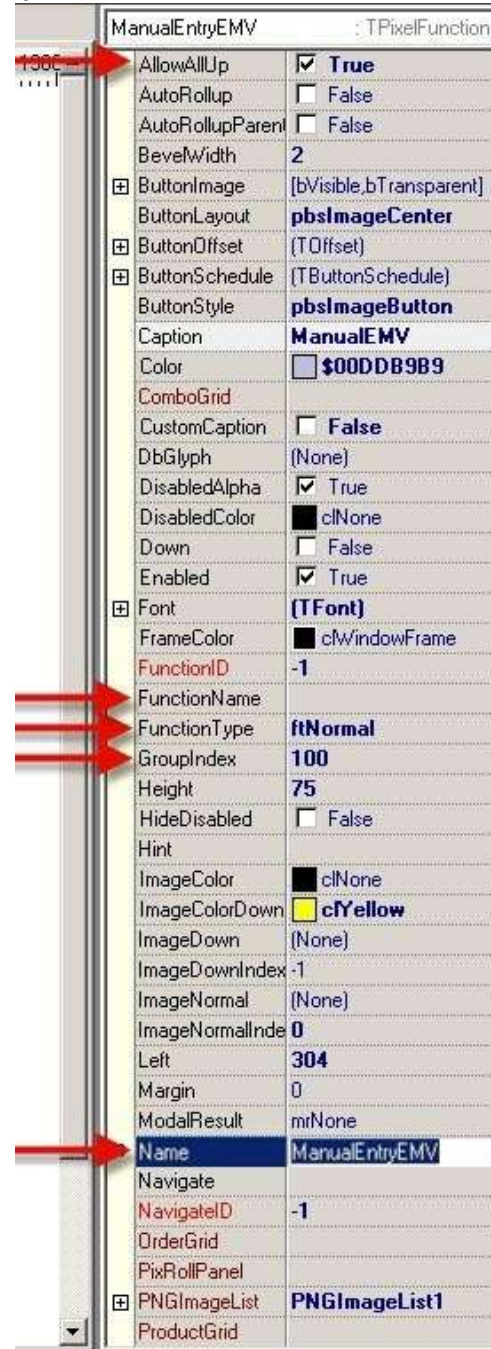
## Manual Credit Card Entry

To allow for Credit Card transactions to be entered manually, a new function button must be added to the Finish Form. This button will be used to enter a gift card or credit card number manually on the Pin Pad.

## Configuration

To add a new button for manual credit card entry:

1. Open the relevant Finish Form(s).
2. Create a new TPixelFormat button.
3. Change all button parameters as highlighted in the diagram below. Start from top to bottom, manually entering the Name "ManualEntryEMV" last. The proper spelling of "ManualEntryEMV" is critical.
4. Save the Finish Form and exit.

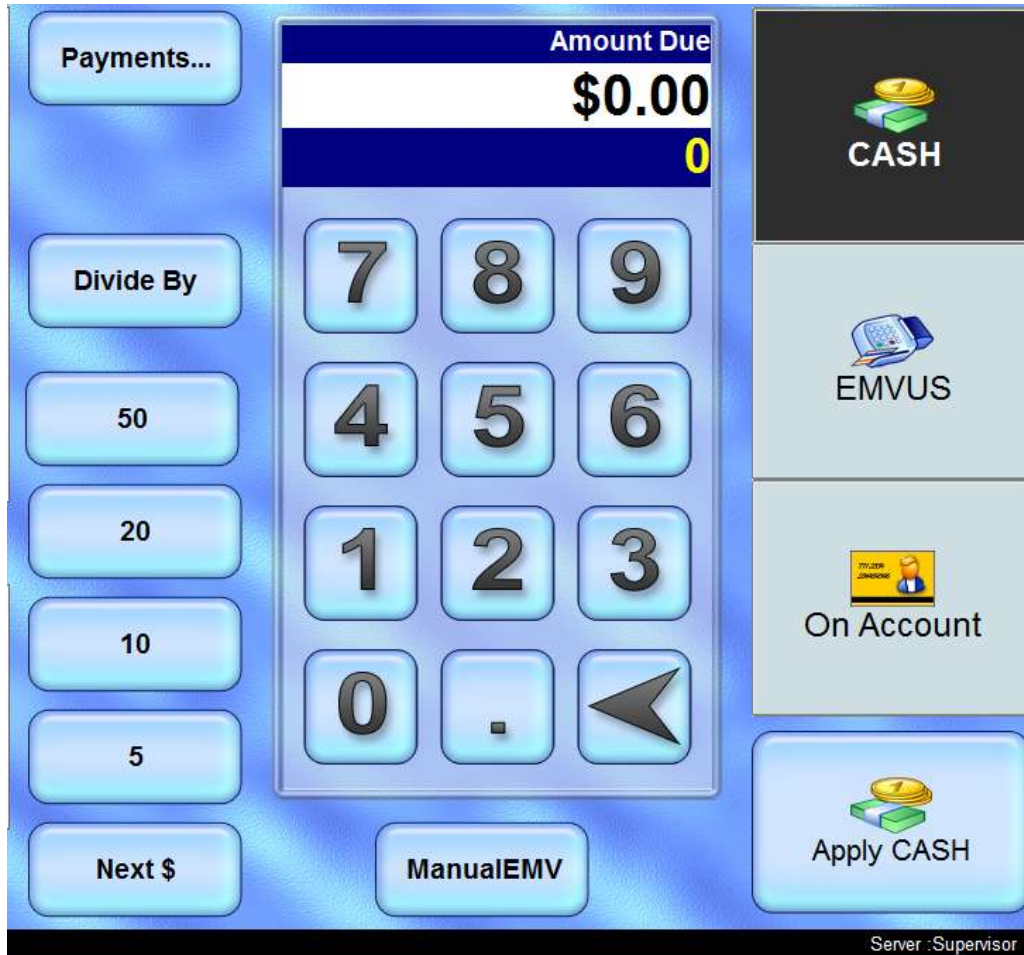


## Section 1

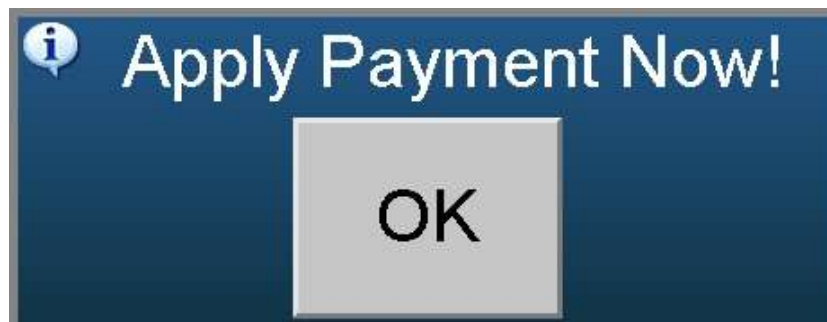
### Using the Manual Entry Button

To enter a credit card number manually:

1. Process the POS transaction and go to the Finish Screen.
2. Select the newly added [ManualEntryEMV] button.



3. Select [OK] to Apply the Payment.



4. Select EMVUS as the method of payment.
5. Follow all prompts provided by the pin pad device. Enter the credit card number when prompted. The manually entered transaction will now be processed through the pin pad.

## Settlements

### Host-Based and Time-Initiated Batch Close

For Host-Based Batch Settlement, order a Time-Initiated Batch Close (nightly automated batching) by the Host as part of the Merchant account setup and configuration. There is no settlement report, as the Batch is settled at the Host. Verify with the Host that the batch closing will not occur before all transactions have been processed and closed within the POS.

#### **WARNING!**

If the EMV solution in use by the Merchant is host-based (Payment Processor settles the batch on the merchant's behalf at a pre-defined time), and the merchant has chosen to configure the payment interface to use the PreAuth workaround, then all PreAuths in the POS must have their transactions completed (i.e. tip added) BEFORE the host performs the nightly automated Batch Settlement at their end. Any transactions still in a PreAuth state when this happens will be left stranded, where tips can no longer be added, and Support will need to be contacted to have the transactions removed from Payment and closed out to Cash.

Host Based settlements require users to perform a manual batch settlement to initiate the EOD process. If this manual batch settlement is not performed, the Host will not be able to settle and end the business day.

### Terminal-Based POS Batching

For Terminal Based Batching, the customer must perform a Batch Close/Settlement on the POS side every evening for POS reporting and accounting purposes. This is done via Manager Functions>Authorization Manager>Settle all Charges/END OF DAY as part of their regular End Of Day process. Nightly POS Batch Close may be automated by configuring in BackOffice. Refer to the BackOffice user manual for more information.

**Important:** For EMV, the POS now sends the settlement request directly to the PIN Pad device, which in turn contacts the host via NETePay. The PIN Pad must therefore be operational in order for batching to work.

## Printing Voids

To print a voided payment slip:

1. Set the policy PrintVoidPaymentApprovals to Y.
2. Add the below code to the PixelAuthLayout.txt file.

```
[Type_Void]
[Custom]
^L
&SKIP_IFRECEIPT^C&Header
^C^W&#3182&REFERENCE_NO
&SKIP_IFRECEIPT^C^W&#3191
&SKIP_IFRECEIPT^C^W&#3166 &TABLE_NUM
&SKIP_IFRECEIPT^C^NServer: &OPERATOR    Trans Date: &DATE_TIME
^L
&_
&_
^W&#3185    &SALES_TOTAL
&_
^WGratuity &TIP_OR_LINE
&_
^W&#3174 &TOTAL_OR_LINE
&_
&_
&EMV_PRINTOUT
&_
&_
&_
&NOPRINT&SKIP_NOTEMPTY&EMV_PRINTOUT^WX_____
&NOPRINT&SKIP_NOTEMPTY&EMV_PRINTOUT^N^C&#3193
```

**Note:** In environments with multiple devices, a Void transaction must be performed on the same station where the transaction originated



## Authorization Slips

With the addition of signature capture capabilities to the POS, authorization slips now have the ability to display a captured signature. To enable signature capture, the checkbox 'Capture Signature from Device' must be checked during the device and station setup.

**Note:** A signature capture-enabled device is required to use this feature. Development was verified using the Ingenico iSC250 payment device.

## Printer Setup

A new field has been added to the Printer Setup form called 'Bit Image Code'.

Printer Codes Setup	
Print Description	Epson TM-88 V
Printer Start Job Code	
Cut Code if applicable	27,105
Open Drawer #1	27,112,0,10,90
Open Drawer #2	
Open Drawer #3	
Normal Print	27,51,20,27,33,0
Turn Red Print On	27,33,32
Turn Red Print Off	
Turn Wide Print On	27,33,32
Turn Wide Print Off	
Prefix on Modifiers	27,33,32
End Job	
Turn Inverse Print On	
Turn Inverse Print Off	
Print Bar Code	29,107,0
Print Logo	27,97,1,28,112,1,0
Bit Image Code	27,42,0
# of Char/Normal	40
# of Char /Wide Mode	20
Lines between Jobs	7

The following commands are required in this new field. These codes are for the Epson TM-88 V thermal printer:

- 27: Initiates the print command
- 42: Selects bit-image mode, allowing for the printing of images
- 0 or 1: Selects the density of the text to be printed. An increase in density will display a more detailed image.
  - 0 = single density, 1 = double density

Additional commands are also required for the 'Normal Print' field:

- 27: Initiates the print command
- 51: Sets line spacing
- (0-255): Number of pixels between lines

## Authorization Slip Layout

In order to print captured signatures, a new command and variable must be added to the Authorization Slip layout:

The command [^U] is used to print bit images, while the variable [&SIGNATURE] indicates where to print a stored signature for an authorized transaction. See below for an example:

```
^L
^C^W&#3182&REFERENCE_NO
^C^W&COMPANY_NAME
^C^W&#3191
^C^W&PAY_METHOD
^C^W&#3183&TABLE_NUM
^C^N&OPERATOR    &DATE_TIME
^L
^N&#3187&card_number_mask
^N&#3192&AUTHORIZATION_CODE
^N&#3186&TRANSACTION_NO:15
^N
^N
^W&PAY_METHOD
&
^W^C&#3185    &SALES_TOTAL
&
^W^CGratuity &TIP
&
^W^C &#3175&TIP2
^N
^W^C&#3174&TOTAL_TENDERED
^N
^N
^N&#3193
^U&SIGNATURE
&
^N
```

## Customizing Authorization Slips

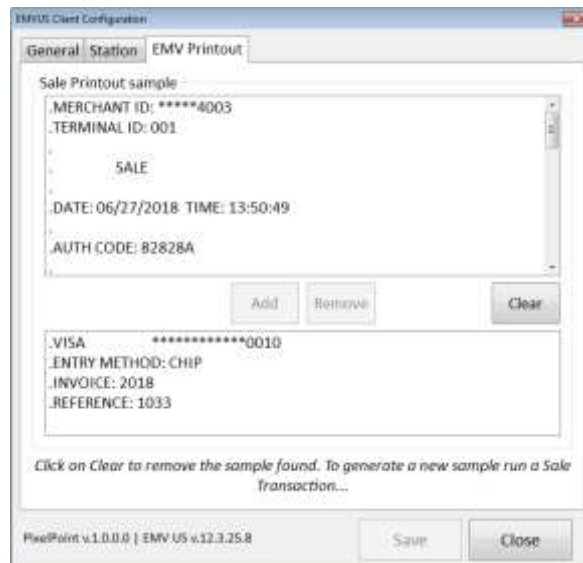
PixelPoint now offers the ability to limit what line are printed on the EMV Authorization Slip. Using the EMV Printout tab in the EMVUS Client Configuration GUI, the &EMV\_PRINTOUT variable can be made to only print selected lines from the authorization slip.

To customize EMV Auth slips:

1. In BackOffice, navigate to Payments > Method of Payment and locate the EMVUS custom payment method.
2. Click the Advanced Tab and select the Setup button under the Custom DLL field.

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3. Select the EMV Printout tab. After an EMV Sale transaction has been processed, the Sale Printout Sample field will populate to show the user what information the current EMV Printout contains.



4. To choose what lines are included in the EMV printout, highlight the desired lines in the Sale Printout Sample field and click the Add button. Repeat this step as many times as necessary until the bottom field is populated only with the lines which should be included. Lines can be removed from the bottom field by highlighting them and clicking the Remove button.

Selecting the Clear button will clear both the Sample and Included Lines fields. A new EMV Sale transaction will need to be run to populate the sample field before starting again.

5. When all desired lines from the printout sample have been selected and added to the bottom field, select the Save button and close the Configuration window. All future EMV printouts will only include the selected lines.



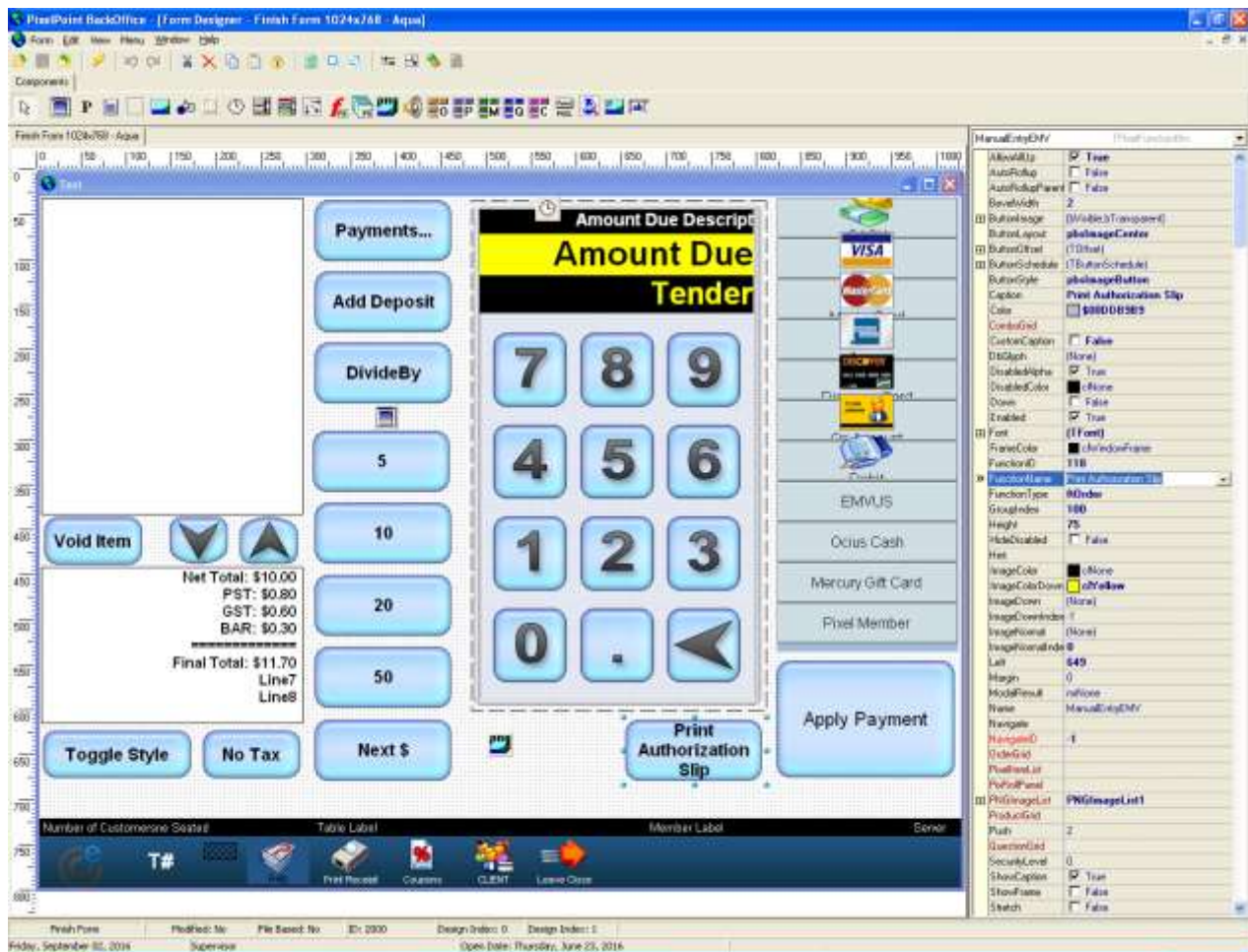
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### Manually Printing Authorization Slips

If the option 'Do not print Customer Authorization Slips' is checked during the EMVUS payment method setup, a button must be added to the finish screen in order to manually print authorization slips. To add this button:

1. From within BackOffice, open the Form Designer.
2. Open the Finish Form currently in use.
3. Drop a new Pixel function button (TPixelFunctionBtn) onto the form.
4. Set the **FunctionType** field to 'ftOrder' and the **FunctionName** field to 'Print Authorization Slip'.
5. Style the button as desired. The text that appears on the button is set in the **Caption** field.
6. Save your changes and exit the form.

FunctionName	Print Authorization Slip
FunctionType	ftOrder



Authorization slips can now be printed on demand by selecting the newly added button on the Finish Form. Note that this button will only print an auth slip for the most recent authorized transaction. If an older auth slip is required, it can be printed from within the Authorization Manager.

## Operational Changes and EMV Tip Limitations

### Station and Sales Type Settings

The ability to add a tip to an EMV transaction is controlled solely by the payment method settings. The POS has the ability to set a Pre-Auth both at the Station and the Sales Type level. With EMV, these settings will be ignored if set to active. Both boxes highlighted below should NOT be checked.

The image shows two side-by-side screenshots of the POS software interface. The left window is titled 'Station 1' and is part of the 'Stations Setup' dialog. It has tabs for 'Station Options', 'Printer Ports', 'Fonts', 'Advanced', and 'Receipt Setup'. Under 'Station Options', the 'Sale Auth (No PreAuth)' checkbox is highlighted with a red box. The right window is titled 'Catering' and is part of the 'Sales Type Setup' dialog. It has tabs for 'Sales Type Description', 'Sales Type Price Level', 'Delivery Mode', and 'Sales Type Exempt?'. Under 'Sales Type Price Level', the 'Allow Sales Type on Web' checkbox is checked, and the 'Sale Auth (No PreAuth)' checkbox is highlighted with a red box. Both windows have a 'Close Form' button at the bottom right.

### Auto Zero on Cash Out Policy

In a previous version of 12.3 a new policy was introduced to automatically add a zero tip on cash out to any credit card that didn't already have a tip assigned. The policy AutoZeroTipOnCashOut must be set to No.

The image shows a screenshot of the 'Policy Setup' dialog. The 'Station #' is set to 1. The 'Policy' list on the left includes 'AutoZeroTipOnCashOut', which is highlighted. The 'Value' column shows 'Y/N'. The 'Description' for the policy is: 'If yes it will prompt the Warning message will be displayed prominently to the user that all credit cards without a tip will be set as a zero tip. This will set all non-tipped credit cards to zero tip. There is no undoing this through the POS. Manual Correction will be required.' The 'Current Value' is 'No', and the 'New Value' is also set to 'No'. The 'Applies To' is 'All Stations'. The 'Find', 'Find Next', and 'Apply' buttons are visible at the bottom right.

The tips for each transaction are stored ONLY in the payment device. If this policy is left on ALL credit card transactions will be set to a zero tip.

### Adding or Adjusting Tips

This section will explain how to add or adjust tips after a transaction has been processed.

#### The Server

Before a server attempts a cash out, tips must be added, reviewed or zeroed for every credit card transaction they processed. To add, adjust or confirm zero tips:

1. Select [Your Settings] from the main floor plan screen.



2. Select [Add Tips].



3. Once in the add tips section, each authorized credit card transaction will be listed on the left.

The screenshot shows the 'Add Tips' screen. On the left, there is a table with the following data:

Reference #	Tender
2001	\$5.00

On the right, there is a summary of the selected transaction:

Name	Supervisor
Reference #	2001
Type	PreAuth MercEMVUS
Auth Code	39476A
Total	\$5.00
TIP:	\$0.24
Total (w/TIP)	\$5.24

Below the summary, there are three buttons: 'Add Tip?' (with a green plus icon), 'No Tip' (with a red X icon), and 'Total (w/TIP)' (with a yellow dollar sign icon). At the bottom left, there is a 'Search by Ref' button. At the bottom right, there is a 'Close' button. The bottom of the screen has a navigation bar with icons for 'Logout', 'Help', 'Show All Employees', 'Select Employee', 'Void', 'Add Tips', and 'Leave'.



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4. Select each transaction and use one of the three available functions:
  - Selecting [Add Tip] allows the server to add a tip to the selected transaction.
    - If a tip value exists already but must be updated, ensure to enter the correct full amount of the tip. Entries using the Add Tip function will overwrite the previously entered tip amount.
  - Select [No Tip] to enter a zero value for the tip on the selected transaction.
  - Select [Total w/Tip] to enter the total amount of the transaction, including the tip. The POS will subtract the amount owed on the cheque from this value and use the remainder as the tip amount.
5. Select [Close] when you have finished adding tips.

**IMPORTANT:** Use of these functions will overwrite any values entered on the Pin Pad. Ensure all entries are accurate as incorrect entries may result in lost tips.

### The Manager

Managers can adjust tips on behalf of a server. To add or zero tips as a manager:

1. Select the [Manager] button from the floorplan screen.



2. Open the Authorization Manager.

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3. Select [All Charges]. A list of unprocessed checks will be listed.

Reference #	Transaction	Pay Method	Auth Status	Auth Code	Tender	Change	Total Tender	Employee Name
2001	2001	Auth MercEMVUS	Forced	39476A	5	0.75	\$5.75	Supervisor

4. Select the desired check followed by the [Add Tips] button found at the bottom
5. The Add Tips screen seen on the previous page will be displayed. Add or adjust tips as needed.

**Note:** Adding or adjusting tips on a transaction where a tip was already entered on a pin pad will OVERWRITE the originally entered amount.

PixelPoint now supports multiple tip adjustments on a check before it is settled.



### Keep/Apply EMV CC Function

**Note:** The Keep EMV CC function will only work with Mercury (VANTIV Integrated Payments).

When starting a tab, POS users can take a customers credit card at the beginning of the check and store it for later use in case the guest leaves without settling their tab. When this function is used, a zero-dollar transaction is authorized on the card to obtain a token. This token is stored and used if the guest leaves without paying.

If the customer is present when the check is being settled, users should obtain the credit card and re-authorize the check for the exact total. When using the 'Keep EMV CC' button to settle a check, Mercury will process the transaction as "Card not present" and higher fees will likely be charged by the processor.

### Configuration

To add the Keep EMV CC button:

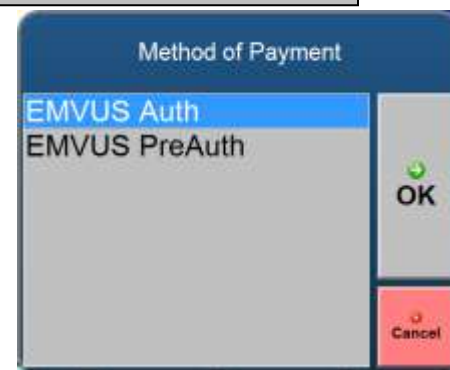
1. Open the relevant Order or Finish Form you wish to add the button to (adding to the Order form is recommended).
2. Place a new TPixelfunction button on the form.
3. Name the button 'Keep EMV CC'.
4. Set the FunctionType to 'ftPayment'.
5. Set the FunctionName to 'Keep EMV CC'.
6. Save and exit the form.

### Storing Credit Card Information

**Note:** When using this function with an American Express (AMEX) card, users must first add an item to the check before selecting the Keep CC button.

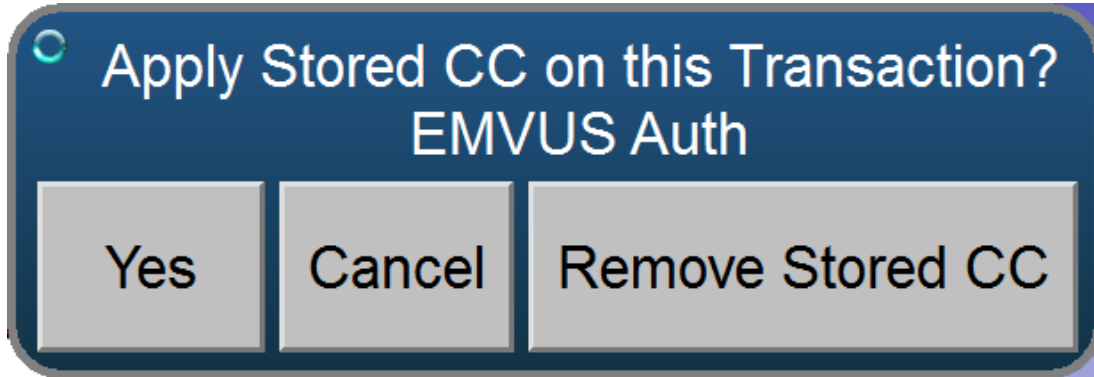
To store credit card information for later use:

1. Create a new order.
2. Click the button 'Keep EMV CC'.
  - If only one custom payment type is in use in the environment, it will be automatically selected. If more than one is in use, the user will be prompted to select from the available custom payment methods. Select a method to continue.
3. When prompted by the pin pad, insert the card and follow the prompts. The token is then stored, and the 'Keep EMV CC' button will change to read 'Apply EMV CC'. To apply the saved token for payment, the user must open the check that the token was saved under.



### Applying Payment From a Stored Credit Card

1. When ready to process the transaction and close the order, go back to the order form and click the 'Apply EMV CC' button.
2. The following dialogue box appears. Choose an option to complete the transaction.



The three given options function as follows:

- Yes – Processes the payment using the stored token. This can also be used for partial payment.
- Cancel – Cancels the action.
- Remove Stored CC – Removes the stored credit card token without processing the payment.

**Note:** Once the token has been deleted, the 'Keep EMV CC' function will no longer apply to this check.

### Pay At Table

The EMVUS integration supports various Pay at Table devices. To make use of this function, the user must first install a version of dsiEMVUS ActiveX that supports Pay at Table functionality. Since the TCP communication is handled by NetEPay, the devices and POS terminals must be connected to the same wireless network. The IP Port set during the configuration must be open and noted so it can be entered as the Static IP Address during the setup process.

The following restrictions apply:

- Any Order with a total of zero dollars (\$0) will be rejected.
- Tips must be entered on the pin pad. Any order coming from the POS with a Tip will be rejected.
- For a configuration change to be effective the user must restart the POS.
- Be careful when overriding a Table Lock. If the Order is queued on the pin pad and open or modified on the POS, payments collected on the pin pad may not sync with the POS.
- Orders that are queued on the pin pad when the POS is closed will be cancelled on the pin pad and will remain locked in the POS. The user will have to override the lock and finish the order the next time they log in.
- The keep EMV CC function will not be available when using Pay at Table.

### Setup and Configuration

To configure Pay at Table functionality for EMVUS:

1. In BackOffice, navigate to Administrator>Payment Method Setup and locate the EMV US payment method.
2. Click the Advanced Tab and select the Setup button in the Custom DLL field. In the General tab, ensure the Support Pay at Table box is checked. Select the Pay at Table tab.

The screenshot shows the 'EMVUS Client Configuration' dialog box with the 'Pay at Table' tab selected. The 'General' sub-tab is active. The 'Pin Pad Type' dropdown is set to 'Ingenico iWL258 - TSYS Voltage'. The 'Comm Mode' dropdown is set to 'Static IP Address'. The 'Static IP Address' field contains '192.168.0.116'. The 'Terminal ID' field contains '001'. The 'Pin Pad IP Port' field contains '12000'. The 'Com Port' field contains '1'. There are 'Add' and 'Remove' buttons to the right of the 'Com Port' field. Below these fields is a 'Working Devices' list box, which is currently empty. At the bottom of the dialog, there is a status bar showing 'PixelPoint v.1.0.0.0 | EMV US v.12.3.25.8' and 'Save' and 'Close' buttons.

3. The Pin Pad Type drop down is populated with a list of supported Pay at Table devices. Select the device in use from the list.
4. Choose one of the two options from the Comm Mode drop down menu:
  - Static IP Address – sends pin pad IP Address with requests
  - MAC Address – sends the pin pad MAC Address with requests
5. Enter either the Static IP Address or MAC Address in the provided field. The name of this field will change based on the selected Comm Mode.
6. Enter the Terminal ID.
7. Enter the TCP Port number in the Pin Pad IP Port field.
8. Enter the Com Port number.
9. When all fields have been completed, the Add button will enable. Click the Add button to add the configuration to the Working Devices list. Devices can be removed from the list by selecting the device and clicking the Remove button.

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Once all devices have been entered, click the Save button.

The screenshot shows the 'EMVUS Client Configuration' window with the 'Pay at Table' tab selected. The configuration fields are as follows:

- Pin Pad Type: Ingenico iWL258 - TSYS Voltage
- Comm Mode: Static IP Address
- Static IP Address: 192.168.0.116
- Terminal ID: 001
- Pin Pad IP Port: 12000
- Com Port: 1

Below these fields are 'Add' and 'Remove' buttons. A 'Working Devices' list at the bottom contains one entry: 'Ingenico iWL258 - TSYS Voltage (Static IP Address | 192.168.0.116 | 001 | 12000)'. At the bottom of the window are 'Save' and 'Close' buttons, and a version string 'PixelPoint v.1.0.0.0 | EMV US v.12.3.25.8'.

Users can add as many Pay at Table devices as needed. All saved device information is stored in the Pixel32.ini file, and will be chosen from a list in the POS by the user when applying payments.

### Applying Payments in the POS

To pay for an order using EMV US Pay at Table:

1. Create an order and proceed to the Finish Form.
2. Select the EMVUS Method of Payment.
3. If more than one device is configured (a wired as well as a wireless Pay at Table device, for example), the user will be presented with a list of devices to choose from before proceeding. Select the device that will be used to process the payment and click OK.

The screenshot shows a 'Select Pinpad' dialog box with a list of two devices:

- Ingenico iPP320 - TSYS (Wired)
- Ingenico iWL258 - TSYS Voltage (Pay at Table)

The second device is highlighted. At the bottom are navigation buttons '<' and '>', and action buttons 'Cancel' (red) and 'OK' (grey).

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4. The order will be sent to the selected device. The following message will appear on the POS. Follow the remaining steps on the pin pad to complete the payment.



When an order is sent to a Pay at Table device, the POS will lock the table and display it in green. The lock will be released once the payment has been completed or is cancelled. Payments that are declined or cancelled will need to be re-sent to the device from the POS again.

Once a payment is approved on the device, it will be applied in the POS. If a partial payment was received, the order will be unlocked and remain open until the remainder of the check is settled.

Users can send multiple bills to the Pay at Table device. Orders will be queued in the device in the order they were sent, with all tables waiting for payment locked in the POS.

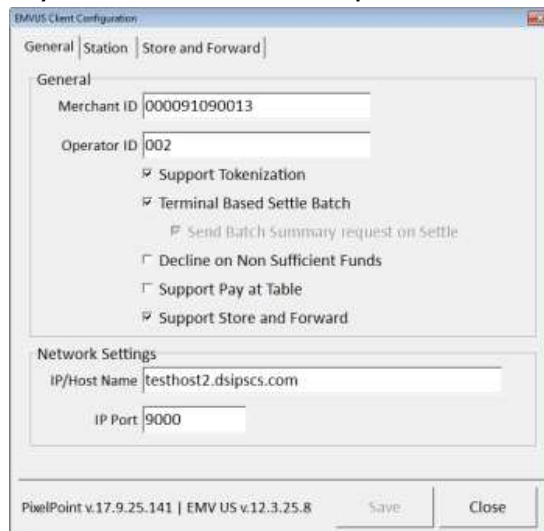
### Store and Forward

Store and forward functionality allows users to process transactions locally when the store is offline, storing them to be forwarded and settled later when connectivity is restored.

### Configuration

To configure the Store and Forward feature:

1. Ensure the the Store and Forward box is checked in the EMVUS Client Configuration window by navigating in BackOffice to Administrator>Payment Method Setup>EMVUS Profile.



The screenshot shows the 'EMVUS Client Configuration' window with the 'General' tab selected. The 'Merchant ID' is 000091090013 and the 'Operator ID' is 002. Under 'Network Settings', the 'IP/Host Name' is testhost2.dsipscs.com and the 'IP Port' is 9000. The 'Store and Forward' section is expanded, showing several checkboxes: 'Support Tokenization' (checked), 'Terminal Based Settle Batch' (checked), 'Send Batch Summary request on Settle' (unchecked), 'Decline on Non Sufficient Funds' (unchecked), 'Support Pay at Table' (unchecked), and 'Support Store and Forward' (checked). The bottom of the window shows the version 'PixelPoint v.17.9.25.141 | EMV US v.12.3.25.8' and 'Save' and 'Close' buttons.

2. Select the Store and Forward tab.



The screenshot shows the 'EMVUS Client Configuration' window with the 'Store and Forward' tab selected. The 'Parameters' section is expanded, showing 'Force Offline' (checked), 'Maximum Number of Transactions' (200), and 'Maximum Transaction Amount' (100). A note below states: 'If either the Maximum Number of Transactions or Maximum Transaction Amount are set to zero, the integration will use parameters established during the PSCS configuration process...'. The bottom of the window shows the version 'PixelPoint v.17.9.25.141 | EMV US v.12.3.25.8' and 'Save' and 'Close' buttons.

3. Check Force Offline to have transactions staged locally (even if there is an active network connection), rather than sent out for processing on a per-transaction basis.

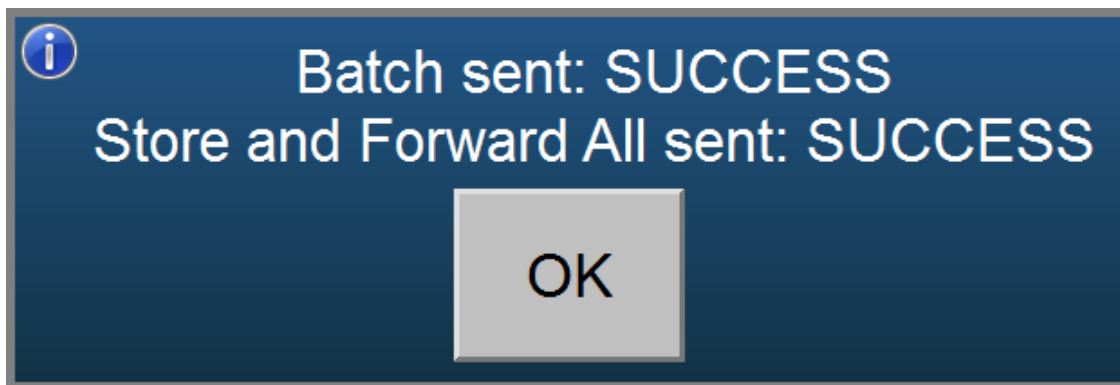
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4. Set the Maximum Number of Transactions. The integration will count every offline transaction from the beginning of the day and will stop processing new transactions once the count has reached the maximum. The user will have to send a settlement request before being able to continue staging new transactions.
5. Set the Maximum Transaction Amount. This will cause the integration to decline any offline transactions that exceed the set maximum amount.

**Note:** The Maximum Number of Transactions and Maximum Transaction Amount parameters will only apply to transactions if the option to Support Store and Forward is enabled.

### Settlements

When a settlement request is sent with the Support Store and Forward option enabled, the integration will send a Store and Forward All request first before sending the Batch request. The POS will show the result for each request once completed. This applies regardless of Force Offline being enabled or not.

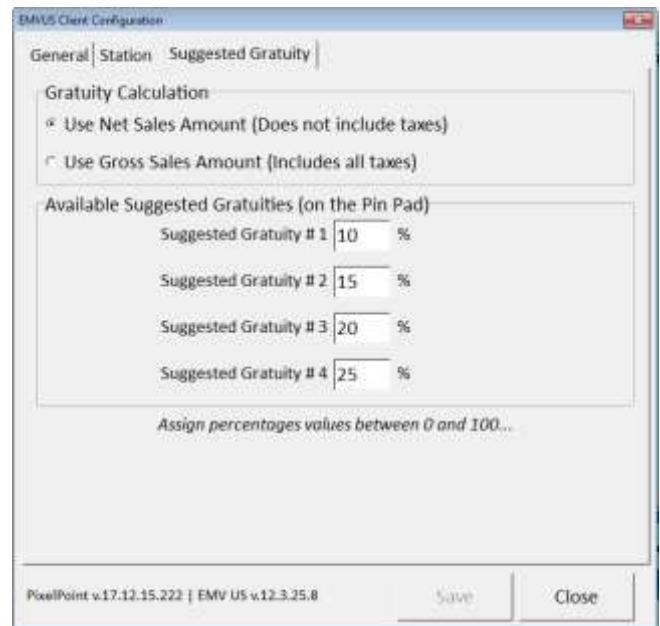




### Suggested Gratuity

PixelPoint now offers the option for the iSC250 device to suggest tip amounts to the customer based on a percentage of the check total during the payment process. To configure Suggested Gratuity:

1. In BackOffice, navigate to Administrator>Payment Method Setup and locate the EMVUS payment method.
2. Click the Advanced tab.
3. Click the Setup button in the Custom DLL field (the MercuryEMVUS.dll should already be loaded in this field).
4. In the EMVUS Client Configuration window, ensure the option Capture Signature from Device is checked under the Station tab. This will cause the Suggested Gratuity tab to appear.
5. In the Gratuity Calculation section, select whether you would like gratuity to be calculated based off of the Net Sale Amount (before taxes) or the Gross Sale Amount (after taxes).
6. In the Suggested Gratuity section, four pre-set gratuity amounts are available. Set each value to a number between 0 and 100. Each value will be displayed to the customer as a suggested tip amount based on the total of the bill. When finished, save all changes and exit.



The next time a transaction is sent to the payment device, the Suggested Gratuity option will display 4 pre-set tip amounts to choose from, based off of the total of the bill and the percentages entered in the Suggested Gratuity configuration.

#### Note

- If all four boxes are set to 0, the Suggested Gratuity option will be skipped during the payment process.
- If the option Prompt for TIP on Sale is checked while at least one Suggested Gratuity box is set to a value greater than 0, the first tip entered will be overwritten by the second option entered.