

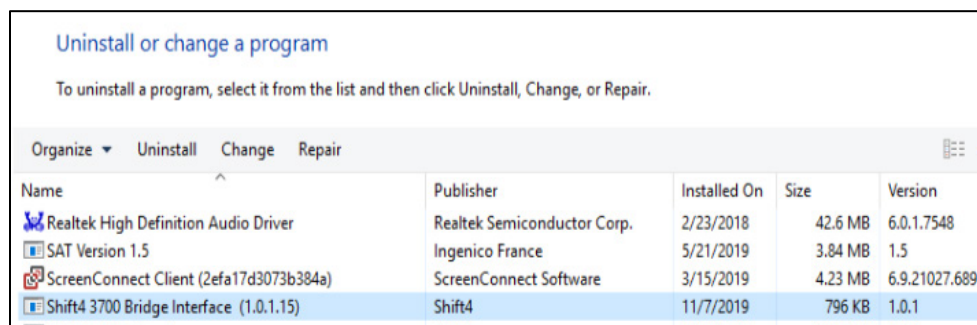
Shift4 Non-OPI 3700 EMV Interface with Existing CC Tenders

Upgrading an Older Bridge Version



WARNING! Before proceeding with the uninstall or reinstall of the Shift4 Bridge, you must make a record of all the currently configured settings for each tab of the Shift4 Bridge. This includes making a copy of the Shift4 Access Tokens attached to each revenue center. Failure to do this ahead of the application's removal will require a new Shift4 Authorization Token to be issued for this update. Once you have made a record of all the configurations in the Bridge complete the steps below.

1. Remove the Shift4 3700 Bridge Interface through the Windows Control Panel.



2. Remove the folder directory for the Shift4Interface.
 - This will normally be installed on the Windows D:\ or C:\ drive, but this can really be installed on any drive of their choice.



3. Once uninstalled, run the provided Updated Shift4 Bridge installer.
4. Go to the ...\\Shift4Interface folder and run the Shift4Config.exe program.
5. Set up tabs and reconfigure the settings you recorded earlier.

6. Go to **File > Save** once all settings are in place.
7. Navigate to ...\\Shift4Interface folder and rename the Shift4.isl to PMSXXX.isl.
 - XXX is the interface number assigned to the Shift4 Interface in Micros. For example, PMS2.isl.
8. Copy the renamed Shift4.isl and Shift4Include.isl to the folders listed below:
 - ...\\MICROS\\Res\\Pos\\Etc\\...
 - ...\\MICROS\\Res\\CAL\\WS5A\\Files\\CF\\Micros\\Etc\\...
 - ...\\MICROS\\Res\\CAL\\WS5\\Files\\CF\\Micros\\Etc\\...
 - ...\\MICROS\\Res\\CAL\\WS4LX\\Files\\CF\\Micros\\Etc\\...
 - ...\\MICROS\\Res\\CAL\\WS4\\Files\\CF\\Micros\\Etc\\...
 - ...\\MICROS\\Res\\CAL\\Win32\\Files\\Micros\\Res\\Pos\\Etc\\...



Note: If at any time you are asked to overwrite or replace a file of the same name during this process, select **YES**.



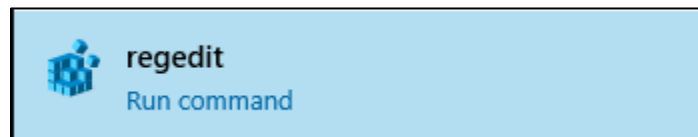
Note: If they have an alternate workstation type than the ones listed above, the renamed Shift4.isl and Shift4Include.isl files will need to be copied into the CAL folder for that workstation type as well.

Installing and Configuring the Shift4 Bridge Interface

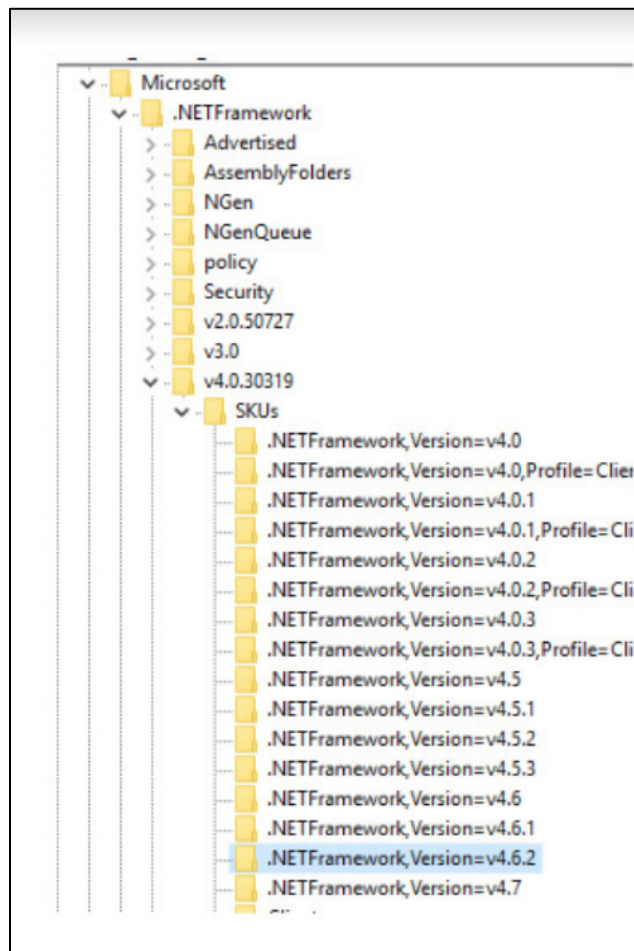
Validating .NetFramework Requirements

You will need to access the Windows Registry to view this detail. To do this, complete the following steps:

1. Navigate to your Start menu and type in the search field "Regedit" as one word.
2. A utility of the same name should display in the search results, select it. If this is not part of the search results, your Windows User login doesn't have sufficient privileges to perform this function.



3. Once inside, navigate the file tree to **HKEY_LOCAL_MACHINE > SOFTWARE > Microsoft > .NETFramework > SKUs**. Here you can see the installed versions of Microsoft's .NETFramework. This should be on Version 4.6.2 or higher.



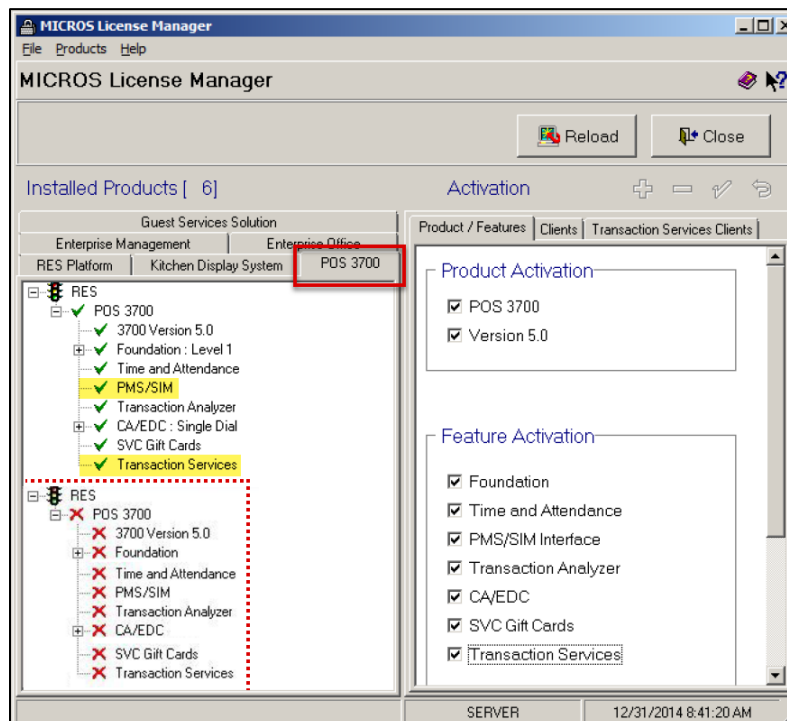
Updating .NetFramework

1. Visit the Microsoft .NETFramework download website.
 - <https://dotnet.microsoft.com/download/dotnet-framework>
2. Select the Latest Update Package Version.
3. Download the **Runtime** package.
4. Locate that file after it downloads. Double-click the file to start the setup wizard.
5. Follow the instructions. The install wizard will guide you through the setup.
6. Once done, reboot the PC.

Validating Micros 3700 Licenses

To verify Micros licensing, you can check the License Manager app. To verify, complete the following steps:

1. Go to **Start > Micros Applications > License Manager** on the Micros server, and then select the **POS 3700** tab. (Alternatively, you can access the License Manager by going to **Start > Run** and typing licmanager.)
2. There are two licenses that are required:
 - PMS/SIM
 - Transaction Services
3. The license will have a red **X** or a green checkmark **✓** next to it, which identifies if a license is present. You can re-verify this by double-clicking on the license in question to trigger a status check.
4. If any of the required licenses are not valid then the merchant will need to obtain a valid license before installing the Shift4 Bridge.



Configuring Ingenico Hardware

Modern devices come preconfigured from the injection facility. You will need to validate the devices are configured to the desired communication method of Ethernet. The current device configuration can be validated during the device reboot process on the Ingenico Copyright Screen.

Model Type	Reset Procedure
iSC250/480	Press and Hold the Clear (Yellow) and the Minus (-) keys until the device chirps.
iPP320/350	Press and Hold the Clear (Yellow) and the Period (.) keys until the device chirps.

If you are using a device with a black and white screen you will need to scroll down to view this detail.



This detail should show as "HOST: Ethernet: Server: Static:".

- If the device shows anything other than the message above on the HOST line, you will need to reconfigure the device for the proper settings. See the *Reconfiguring for Ethernet: Server: Static:* section.
- If the device is configured properly, you only need to assign a unique network IP address to the device. See the *Configuring IP Address Only* section.

Configuring IP Address Only

1. Begin by rebooting the device.
2. When on the Ingenico Copyright screen, press **2, 6, 3, 4**, and **Enter**. Shortly after this, the device will ask you to either press **(+) Plus** or **(F) Function** for menu.
 - If your device is requesting to press **(F)** for Menu but your unit doesn't have a function key, simply press **(+) Plus** instead.
3. Scroll to the TDA Menu and select this:

- For iSC250/480, use the **[+]** and **[-]** keys to navigate and select **[Enter]**.
 - For iPP320/350, use the **[F2]** and **[F3]** keys to navigate and select **[Enter]**.
4. Press **[0]** for Configuration.
 5. Press **[0]** again for communication.
 6. Press **[2]** for Ethernet Settings.
 7. Press **[3]** to set the IP address.
 - This is determined by the property IT. Three digits must be entered for each octet so an IP address of 10.0.1.193 would be entered as 010.000.001.193.
 8. Press **[Cancel]** when complete to return to the Ethernet Settings menu.
 9. Press **[4]** to enter the Subnet Mask.
 - This is determined by the property IT. Three digits must be entered for each octet so an IP address of 255.255.255.0 would be entered as 255.255.255.000.
 10. Press **[Cancel]** when complete to return to the Ethernet Settings menu.
 11. Press **[5]** to set the Default Gateway.
 - This is determined by the property IT. Three digits must be entered for each octet so a Default Gateway IP address of 10.0.1.1 would be entered as 010.000.001.001.
 12. Press **[Cancel]** until the device asks you to Save Settings and Reboot, and then select **Yes**.
 13. The device will reboot and it can be left alone for now.

Reconfiguring for Ethernet: Server: Static:

1. Begin by rebooting the device.
2. When on the Ingenico Copyright screen press **2, 6, 3, 4**, and **Enter**. Shortly after this, the device will ask you to either press **(+)** **Plus** or **(F)** **Function** for menu.
 - If your device is requesting to press **(F)** for Menu but your unit doesn't have a function key, simply press **(+)** **Plus** instead.
3. Scroll to the TDA Menu and select this:
 - For iSC250/480, use the **[+]** and **[-]** keys to navigate and select **[Enter]**.
 - For iPP320/350, use the **[F2]** and **[F3]** keys to navigate and select **[Enter]**.
4. Press **[0]** for Configuration.
5. Press **[0]** again for communication.
6. Press **[0]** again for Comm. Type.
7. Press **[1]** for Ethernet. (Sometimes this option can be listed as **[2]** depending on your RBA build.)
8. Press **[Cancel]** when complete to return to the TDA menu.
9. Press **[0]** for Configuration.
10. Press **[0]** again for communication.
11. Press **[2]** for Ethernet Settings.
12. Press **[0]** for the Connection Method and then select **[1]** for Server.
13. Press **[Cancel]** when complete to return to the Ethernet Settings menu.

14. Press **[1]** for DHCP to choose whether the IP address will be static or assigned by a DHCP Server.
15. Press **[1]** to set a Static IP (Preferred).
16. Press **[0]** if the IP is handled via a router with DHCP enabled (Dynamic Host Configuration Protocol).
17. Press **[Cancel]** when complete to return to the Ethernet Settings menu.
18. Press **[3]** to set the IP address.
 - This is determined by the property IT. Three digits must be entered for each octet so an IP address of 10.0.1.193 would be entered as 010.000.001.193.
19. Press **[Cancel]** when complete to return to the Ethernet Settings menu.
20. Press **[4]** to enter the Subnet Mask.
 - This is determined by the property IT. Three digits must be entered for each octet so an IP address of 255.255.255.0 would be entered as 255.255.255.000.
21. Press **[Cancel]** when complete to return to the Ethernet Settings menu.
22. Press **[5]** to set the Default Gateway.
 - This is determined by the property IT. Three digits must be entered for each octet so a Default Gateway IP address of 10.0.1.1 would be entered as 010.000.001.001.
23. Press **[Cancel]** when complete to return to the Ethernet Settings menu.
24. Press **[9]** to set the IP Port.
 - The default port setting is 12000 though the property IT could choose to change this under rare circumstances.
25. Press **[11]** to set the SSL settings. (RBA 21+ only.) This setting was added in RBA 21 and should always be set to no.
26. Press **[Cancel]** until the device asks you to Save Settings and Reboot, and then select **Yes**.
27. The device will reboot and it can be left alone for now.

The Universal Transaction Gateway® (UTG®)

1. Go to **Start > All Programs > Shift4 Payments > Universal Transaction Gateway > UTG (v2) TuneUp** and verify all the data is accurate across all of the tabs below:

The Express Tab

- Station Name = REST
- Serial = This will be supplied by Shift4 on the UTG Config Sheet under Serial Number.
- Host Address = Micros Server IP Address (e.g., 192.168.100.250).
- Location = Zip Code
- Api Serial Number and Password = Leave these blank.

The API Interfaces Tab

- Select **Add**, then **REST**.
- Host Address = Micros Server IP Address (e.g., 192.168.100.250).
- Port = This must be 277.
- Select **Generate Certificate** and fill in the appropriate information:
 - Common Name = Micros Bridge
 - Friendly Name = DBA name from the UTG Configuration Sheet
 - Organization = Restaurant name with location if multiples
 - Email Address = Sites main contact email (owner, GM, etc.)
 - Locality = City
 - State/Province = ST
 - Country = US
 - DNS Tab – In the DNS box, you need to add two things:
 - Micros Server IP Address (on the first line)
 - localhost (on the second line) – Please be aware that you are typing the word “localhost” and not using the actual localhost IP on this line.
 - CA SelfSigned / Intermediate – Select the following items:
 - **SelfSigned**
 - **CRT**
 - **Server Authentication**
 - **Client Authentication**
 - **4098 bit**
 - ****MAKE SURE Embed Key in unchecked****
 - Enter a password and make sure you keep this somewhere safe for your records. (You will also need this for the next couple of steps after the certificate is generated.)
 - Click on **Generate** – This will prompt you for the folder where the certificate and key will be saved. Save it to C:\Shift4\. After about 30 seconds, you should see SUCCESS at the bottom, then Exit.

- Certificate File – Browse to C:\Shift4\ and select the *.crt file within. (You will need to change to see All Files, as it defaults to *.cer.)
- Certificate Password – Enter the password that you created above.
- Private Key File – Browse to C:\Shift4\yes and select the *.key file within. (You will need to change to see All Files, as it defaults to *.cer.)
- Private Key Password – Enter the password that you created above.
- Select **OK**.

Devices Tab

- Select **Add**, then fill in the appropriate PinPad information:
 - o Device Name = PinPad-101 where 101 matches the Workstation name – WS6-101, etc.
 - o Device Type = Select the appropriate type. (We normally use Ingenico iPP320 RBA.)
 - o API Terminal ID = This will be supplied by Shift4 on the UTG Config Sheet.
 - o Connection = This will normally be Direct TCP/IP.
 - o IP Address = PinPad IP Address (For example, 192.168.100.1 if the workstation is 192.168.100.101.)
 - o Port = 12000 if you are using the default on the iPP320.
 - o Manual Card Entry = Enable MCE
 - Select **Disabled** for CVV Code, Street Number, and Zip Code.
 - o Source Serial = This will be supplied by Shift4 on the UTG Config Sheet as Serial Number.
 - o Select Contactless Enabled and Bypass Amount OK.
 - o Select **OK** and repeat as many times as necessary for each PinPad.

[Option] Advanced Tab

If the D:\ drive was used for installation:

- Select **Trace Configuration** and make sure the directory within is D:\Shift4\UTG2\Trace\, then **OK**.
- Select **Splunk Configuration** and make sure the directory within is D:\Shift4\Splunk\, then **OK**.

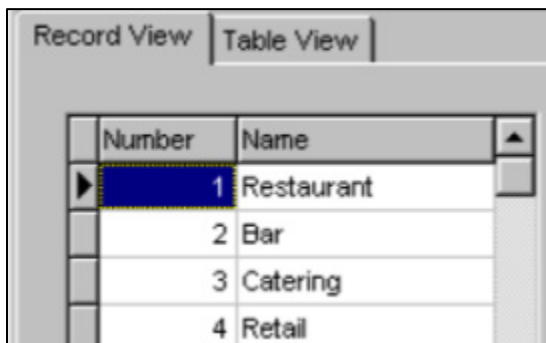
Finish

- Once you have verified all the data is accurate across all of the above tabs, select the **Save** button, and TuneUp will close.

Configuring Micros 3700 POS Configurator



WARNING! It is important to know that any time a Record Number or Record Name is spoken of, these details should be written down for later use during the setup. These values are found in the Record View tab on each of the configuration pages. These values will be needed throughout the setup of the POS Configurator and the Shift4 Bridge (e.g., # Record Name).



Record View Table View	
Number	Name
1	Restaurant
2	Bar
3	Catering
4	Retail

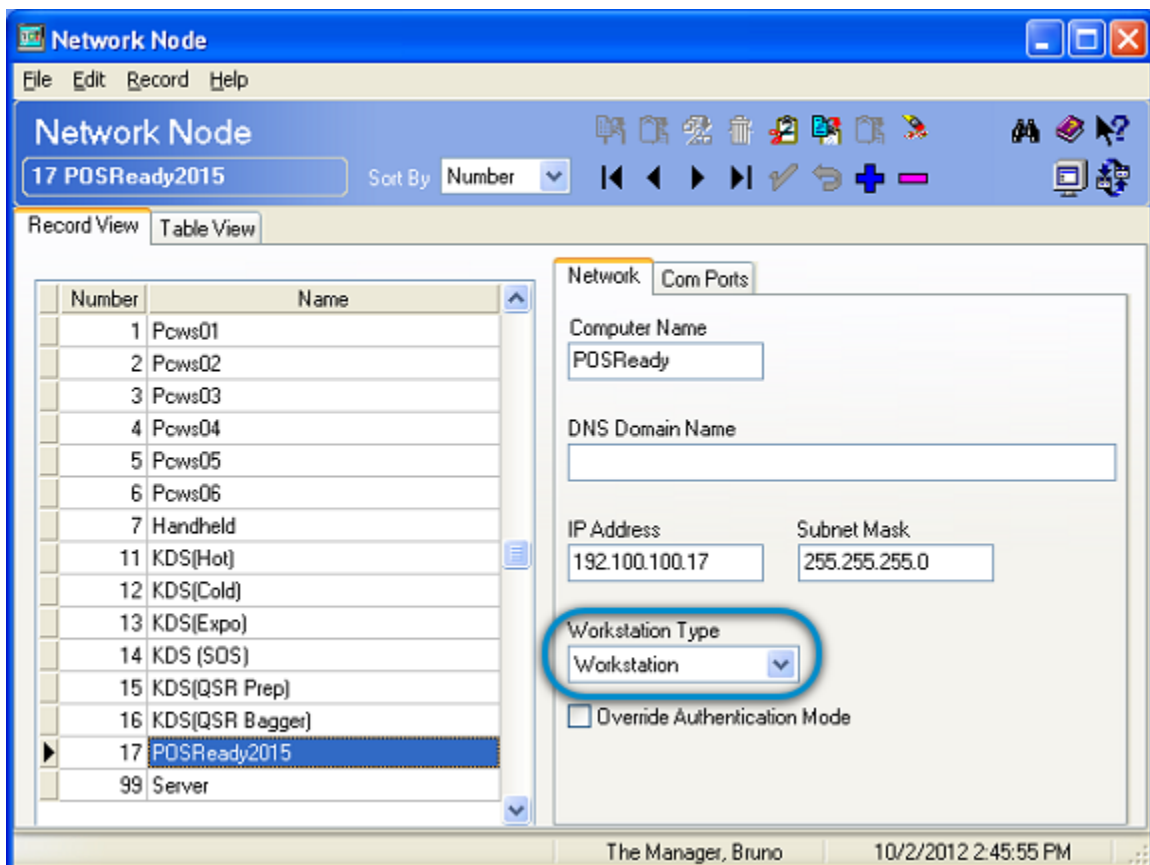
1. To start, navigate to ...\\MICROS\\Res\\Pos\\Bin on the Micros Server and open **poscfg**. This opens the **POS Configurator**. The Merchant will need to enter their Micros Username and Password at this time.

Network Node

- Once logged in, select the **Devices Tab**, and then **Network Node**.



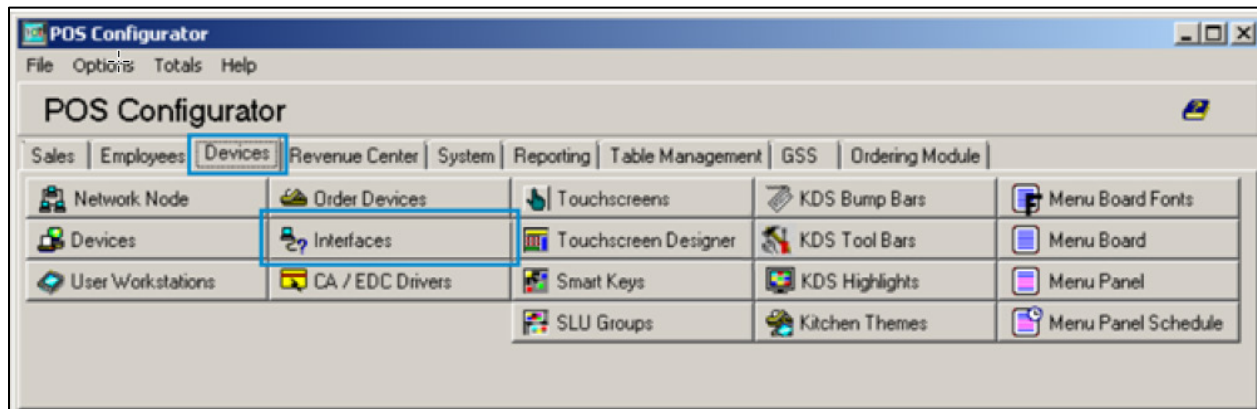
- Click on each Record listed here to identify the Workstation Type.



- Anything listed as Server, record the Record Number and Record Name.
- Anything listed as Workstation, record the Record Number and Record Name.

Interfaces

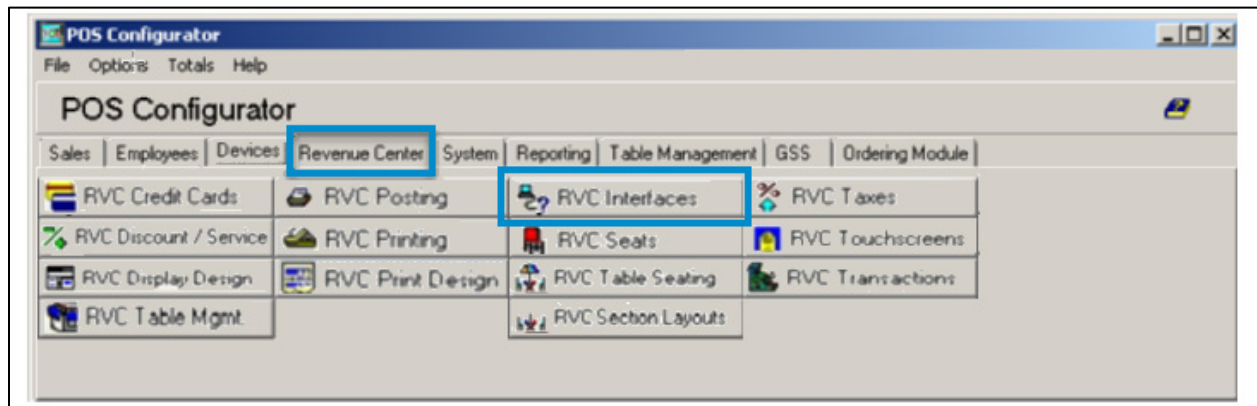
1. Return to the POS Configurator and select **Interfaces**.



2. Press **+** to add an interface record, and configure the following:
 - Outgoing Message Name: Shift4
 - Timeout: 120 (Can be lower for testing, but this must be 120 for live setup.)
 - Network Node: Set to Micros 3700 Server Name
 - Number ID Digits: 9
 - Interface Type: TCP
 - SIM Interface: Enabled
3. Now select the **Interface Tab** and configure the following:
 - TCP Server Name: 127.0.0.1
 - TCP Port Number: 277
4. Save the Config when done by pressing **✓** (the green check mark).

RVC Interfaces

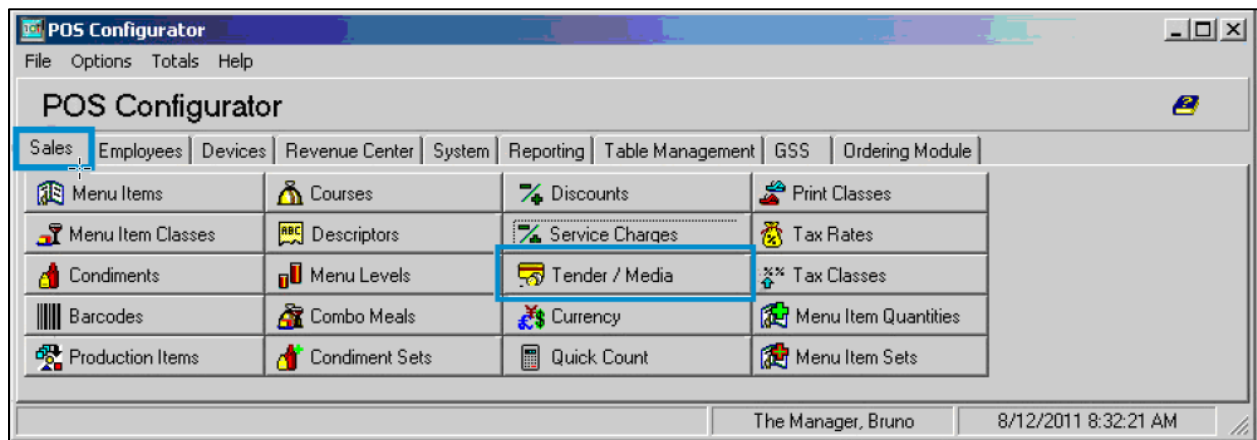
1. Return to the POS Configurator and select the **Revenue Center** tab, and then **RVC Interfaces**.



2. Record the Record Number and Record Name associated with each Revenue Center.

Tender/Media

1. Return to the POS Configurator and select the **Sales** tab, and then **Tender/Media**.



2. Find the Auth Type Record, and configure with the following settings. Anything not listed should be disabled or blank.
 - General Tab > Type: Payment
 - General Tab > SLU: [BLANK]
 - General Tab > Print Class: Journal and Reports
 - General Tab > Menu Level Class: All Levels
 - General Tab > Privilege: 0
 - General Tab > Category: 1
 - Tender Tab > Charged Tip: [BLANK]

- PMS Tab > Post 0.00 Amounts To PMS: Enabled
 - PMS Tab > Allow 19 reference characters: Enabled
 - PMS Tab > Property Management Interface: (# Shift4)
 - Service TTL Tab > Send Order: Enabled
 - Service TTL Tab > Keep Held Status: Enabled
 - Printing Tab > Print Summary Totals: Enabled
 - Printing Tab > Print Check Trailer: Enabled
 - Printing Tab > Print-Multiple Checks/Receipts: Enabled
 - Printing Tab > Print Check: Enabled
 - Printing Tab > Print Memo Check: Enabled
 - Printing Tab > Reprint Check: Enabled
3. Save the Config when done by pressing  (the green checkmark).
4. Now find the following Card Type Record and click on it to edit:
- Visa
 - MC
 - Amex
 - Discover
 - JCB (Japanese Credit Bureau)
- o Configure the above with the following settings. Anything not listed should be disabled or blank.
- General Tab > Type: Payment
 - General Tab > SLU: [BLANK]
 - General Tab > Print Class: Guest Check
 - General Tab > Menu Level Class: All Levels
 - General Tab > Privilege: 0
 - General Tab > Category: 1
 - Tender Tab > Charged Tip: Charged Tips
 - Tender Tab > Post To Gross Receipts: Enabled
 - Tender Tab > Post To Charged Receipts: Enabled
 - PMS Tab > Post 0.00 Amounts To PMS: Enabled
 - PMS Tab > Allow 19 reference characters: Enabled
 - PMS Tab > Property Management Interface: (# Shift4)
 - Service TTL Tab > Fire Order: Enabled
 - Printing Tab > Print Summary Totals: Enabled
 - Printing Tab > Print Check Trailer: Enabled
 - Printing Tab > Print-Multiple Checks/Receipts: Enabled
 - Printing Tab > Print Check: Enabled
 - Printing Tab > Print Memo Check: Enabled
 - Printing Tab > Reprint Check: Enabled
 - (Repeat for each needed Tender Type.)
5. Save the Config when done by pressing  (the green checkmark).

6. When configuring the Shift4 Bridge there are three additional tenders that need to be configured within the Tender Media setting within the POS Configurator. If these tenders are not configured, the Shift4 UTG Bridge will not work:

- **Print:**
 - General Tab > Type: Service Total
 - General Tab > Print Class: Guest Check
 - General Tab > Menu Level Class: All levels/All-day
 - Service TTL Tab > Fire Order: Enabled
 - Printing Tab > Print Summary Totals: Enabled
 - Printing Tab > Print Check Trailer: Enabled
 - Printing Tab > Print on receipt printer: Enabled
 - Printing Tab > Print endorsement: Enabled
 - Printing Tab > Print Check: Enabled
 - Printing Tab > Reprint Check: Enabled
 - Save the Config when done by pressing  (the green checkmark).
- **Send & Exit:** Menu items are sent to the order device (e.g., kitchen) and the check is exited out of.
 - General Tab > Type: Service Total
 - General Tab > Print Class: Guest Check
 - General Tab > Menu Level Class: All levels/All-day
 - Service TTL Tab > Fire Order: Enabled
 - Printing Tab > Print Summary Totals: Enabled
 - Printing Tab > Print Check Trailer: Enabled
 - Printing Tab > Print on receipt printer: Enabled
 - Printing Tab > Print endorsement: Enabled
 - Printing Tab > Print Check: Enabled
 - Printing Tab > Reprint Check: Enabled
 - Save the Config when done by pressing  (the green checkmark).
- **Send & Stay:** Menu items are sent to the order device (e.g., kitchen) but the open check stays on the screen.
 - General Tab > Type: Service Total
 - General Tab > Print Class: Guest Check
 - General Tab > Menu Level Class: All levels/All-day
 - Service TTL Tab > Send Order: Enabled
 - Service TTL Tab > Fire Order: Enabled
 - Printing Tab > Print Summary Totals: Enabled
 - Printing Tab > Print Check Trailer: Enabled
 - Printing Tab > Print on receipt printer: Enabled
 - Printing Tab > Print endorsement: Enabled
 - Printing Tab > Print Check: Enabled
 - Printing Tab > Reprint Check: Enabled

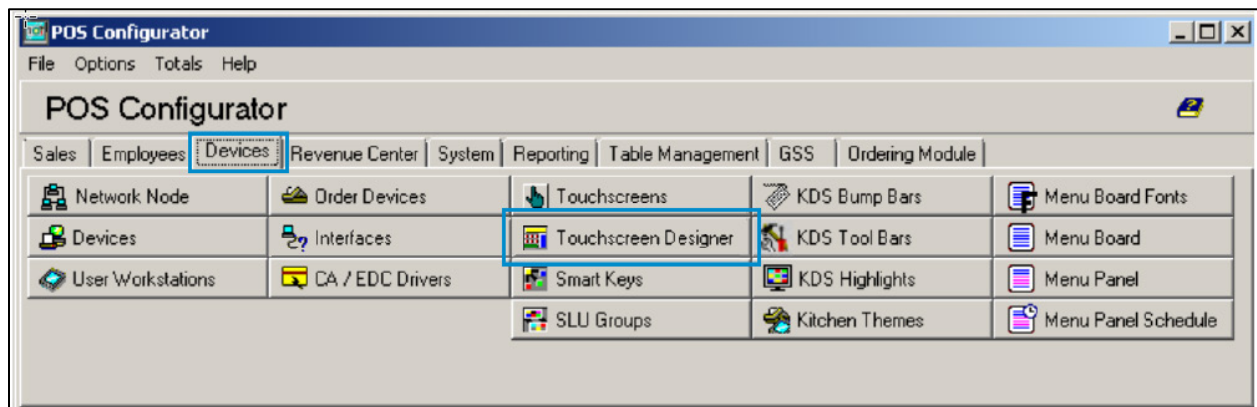
- o Save the Config when done by pressing ✓ (the green checkmark).



Requirement: Don't forget the Tender Type, Send & Stay, Send & Exit, and Print Record Numbers and Record Names! You will need this later during setup!

Touchscreen Designer

1. Return to the POS Configurator and select the **Devices Tab** and then **Touchscreen Designer**.



2. Configure each individual button with the following:
 - Button: Auth (CC Auth)
 - o **Category** = SIM/PMS Inquire.
 - o **Interface** = (# Shift4)
 - o **Inquire # 1**
 - o This function performs the basic credit card authorization.
 - Button: Manual Auth (Offline Auth)
 - o **Category** = SIM/PMS Inquire.
 - o **Interface** = (# Shift4)
 - o **Inquire # 2**
 - o This function performs the basic credit card authorization when a voice-auth has been obtained from Shift4.
 - Button: Final (CC Close)
 - o **Category** = SIM/PMS Inquire.
 - o **Interface** = (# Shift4)
 - o **Inquire # 4**
 - o This function performs the basic Capture to complete the payment based on an existing authorization.

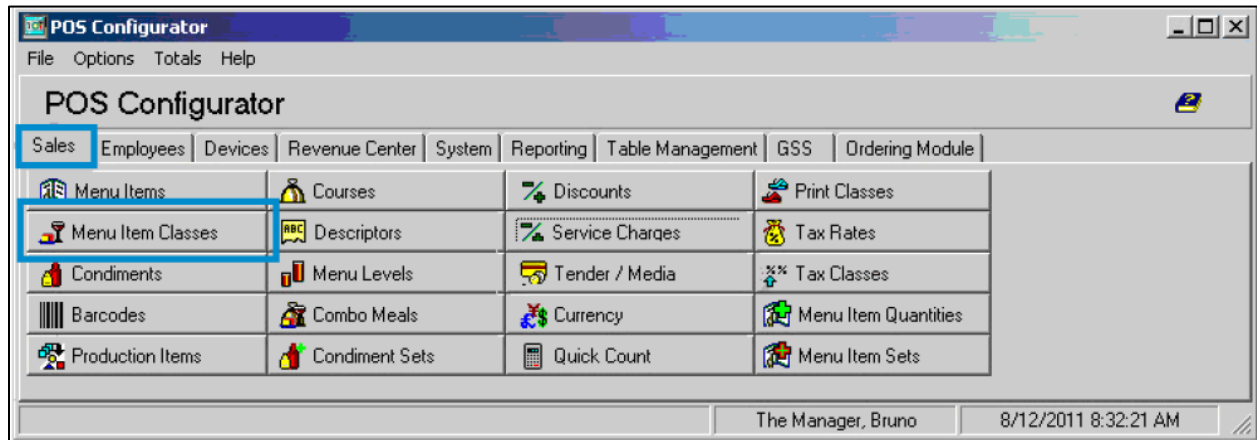
- **Button: Sale (CC Auth & Close)**
 - **Category** = SIM/PMS Inquire.
 - **Interface** = (# Shift4)
 - **Inquire # 5**
 - This function performs the basic Auth/Capture in one function to complete the payment. This would be used in a quick-service environment or other similar situations.
- **Button: Sale (No Tip)**
 - **Category** = SIM/PMS Inquire.
 - **Interface** = (# Shift4)
 - **Inquire # 15**
 - This function performs the basic Auth/Capture in one function to complete the payment. This would be used in a quick service environment or other similar situation.
- **Button: Manual Sale (Offline Auth & Close)**
 - **Category** = SIM/PMS Inquire.
 - **Interface** = (# Shift4)
 - **Inquire # 6**
 - This function performs the basic Auth/Capture in one function to complete the payment when a voice-auth has been obtained from Shift4. This would be used in a quick-service environment or other similar situations.
- **Button: Refund (CC Refund)**
 - **Category** = SIM/PMS Inquire.
 - **Interface** = (# Shift4)
 - **Inquire # 7**
 - This function performs a refund onto the card.
 - **Note:** The Refund Key MUST be placed on a screen that is only accessible to a Manager who can perform the following:
 - Ring Negative Checks
 - Direct Void
 - Pay Negative Checks
- **Button: Reprint Chits (CC Reprint)**
 - **Category** = SIM/PMS Inquire.
 - **Interface** = (# Shift4)
 - **Inquire # 8**
 - This function attempts to reprint the last chits that were printed for a specific transaction.
- **Button: Void**
 - Voids do not have a separate key. When a Sale or Capture is voided, the interface will process the void.

3. Save the Config when done by pressing ✓ (the green checkmark).

(Optional) SkyTab Menu Item

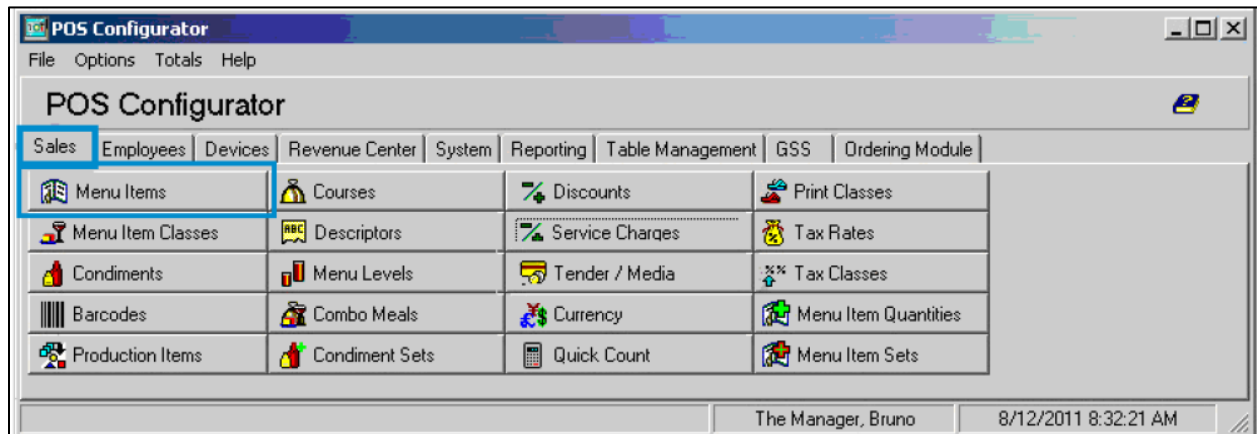
If you are not using SkyTab, skip to the next section.

1. Return to the POS Configurator and select the **Sales Tab** and then select **Menu Item Classes**.



2. Press + to add a class. This should be named \$0.00 / REF and configured as follows:
 - Description Tab > Sales Itemizer: Food
 - Description Tab > Tax Class: No Tax
 - Description Tab > Discount Itemizer: 1
 - Description Tab > Print Group: 3-
 - Description Tab > Service Itemizer: 1
 - General Options Tab > Retail Items: Enabled
 - General Options Tab > Reference Required: Enabled
 - Price/Totals Tab > Preset Prices: Enabled
3. Save the Config when done by pressing ✓ (the green checkmark).

4. Return to the POS Configurator, and on the Sales tab select **Menu Items**.



5. Press  to add an Item. This should be named SkyTab TrID and configured as follows:
 - Description Tab > Name1: SkyTab TrID
 - Description Tab > Menu Item Class: (# \$0.00 / REF)
 - Description Tab > Menu Level Class: All Levels
 - Description Tab > Print Class: Guest Check
 - Description Tab > SLU: [BLANK]
 - Reporting Tab > Major Group: Misc & Llaneous
 - General Options Tab > Family Group: Appetizers
 - Prices Tab > Fixed Pricing: Set All Price(s) to 0.00
6. Save the Config when done by pressing  (the green checkmark).

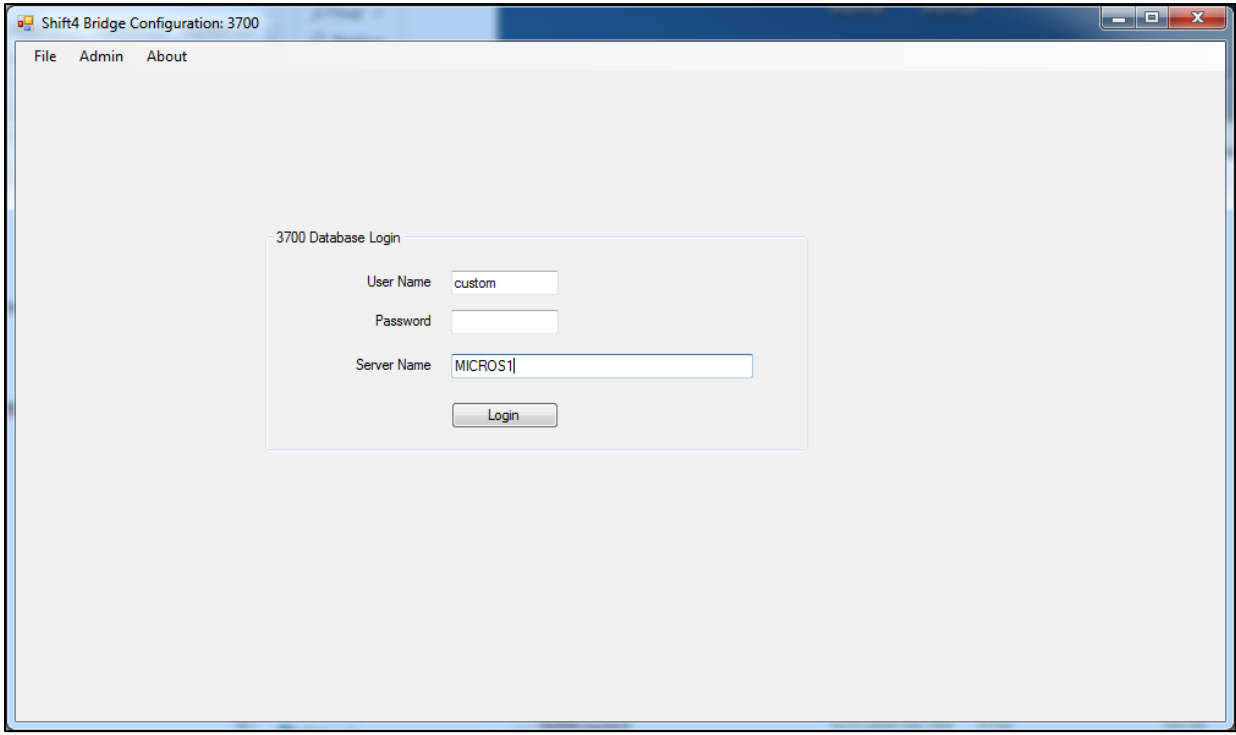
Installing and Configuring the Shift4 Interface

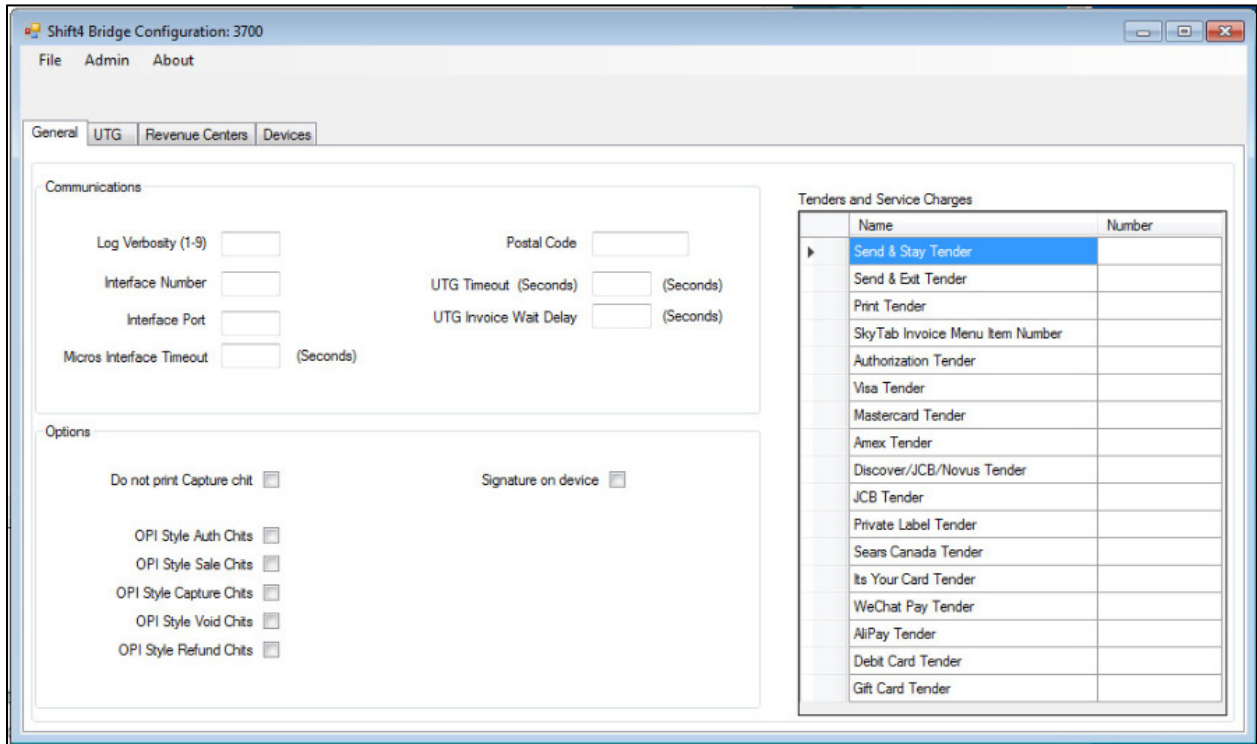
You need to enter the configuration settings that will be used by the Shift4Interface. This is done through the Shift4Config program, which is located in the ...\\Shift4Interface folder.



WARNING! Do not use a Database Administrator Login for this access. Use the Custom Database User or another user login with read only privileges to the SQL Anywhere Database.

1. Run the Shift4Config.exe program.
2. Log in using the Custom Database User.
 - User Name: custom
 - Password: custom
 - Server Name: If you are installing on the 3700 server, leave this blank. If you are installing on a different PC, then this is the computer name of the 3700 server.
 - o Note that to install on a PC other than the 3700 server, it is necessary to install the correct Sybase OCBD drivers. One way to achieve this is to install 3700 software on that PC (for example, installation so that the Configurator will run on the PC).





Name	Number
Send & Stay Tender	
Send & Exit Tender	
Print Tender	
SkyTab Invoice Menu Item Number	
Authorization Tender	
Visa Tender	
Mastercard Tender	
Amex Tender	
Discover/JCB/Novus Tender	
JCB Tender	
Private Label Tender	
Sears Canada Tender	
Its Your Card Tender	
WeChat Pay Tender	
Alipay Tender	
Debit Card Tender	
Gift Card Tender	

General Tab

Enter all configuration settings on the General tab once logged in.

Micros

- Postal Code
 - o The site's postal code.
- Log Verbosity (4)
 - o 1 = low, 9 = Very High
- Interface Number (# Shift4)
 - o The interface number you selected for this interface in POS Configurator.
- Interface Port (277)
 - o The TCP port you selected for this interface in POS Configurator.
- Micros Interface Timeout (118)

- o The timeout you selected for this interface in POS Configurator – configure two fewer seconds for this value.
- UTG Timeout (116)
 - o The timeout that the interface will wait for a response once a request has been sent to the UTG. Generally, set this to be two seconds less than the Micros Interface Timeout.
- UTG Invoice Wait Delay: (1)
 - o In Production, set this to 1 or 2 seconds. On a test platform, use 3, 4, or 5 seconds.

Print Options

- Do not print Capture chit (Enabled)
 - o This will suppress printing of the Capture chit after a Capture. However, it will still be available for reprint functions.
- OPI Style Auth Chits (Enabled)
 - o Checking these will use the UTG generated print receipt.
- OPI Style Sale Chits (Enabled)
- OPI Style Capture Chits (Enabled)
 - o UTG 3013 or above is required.
- OPI Style Void Chits (Disabled)
- OPI Style Refund Chits (Enabled)

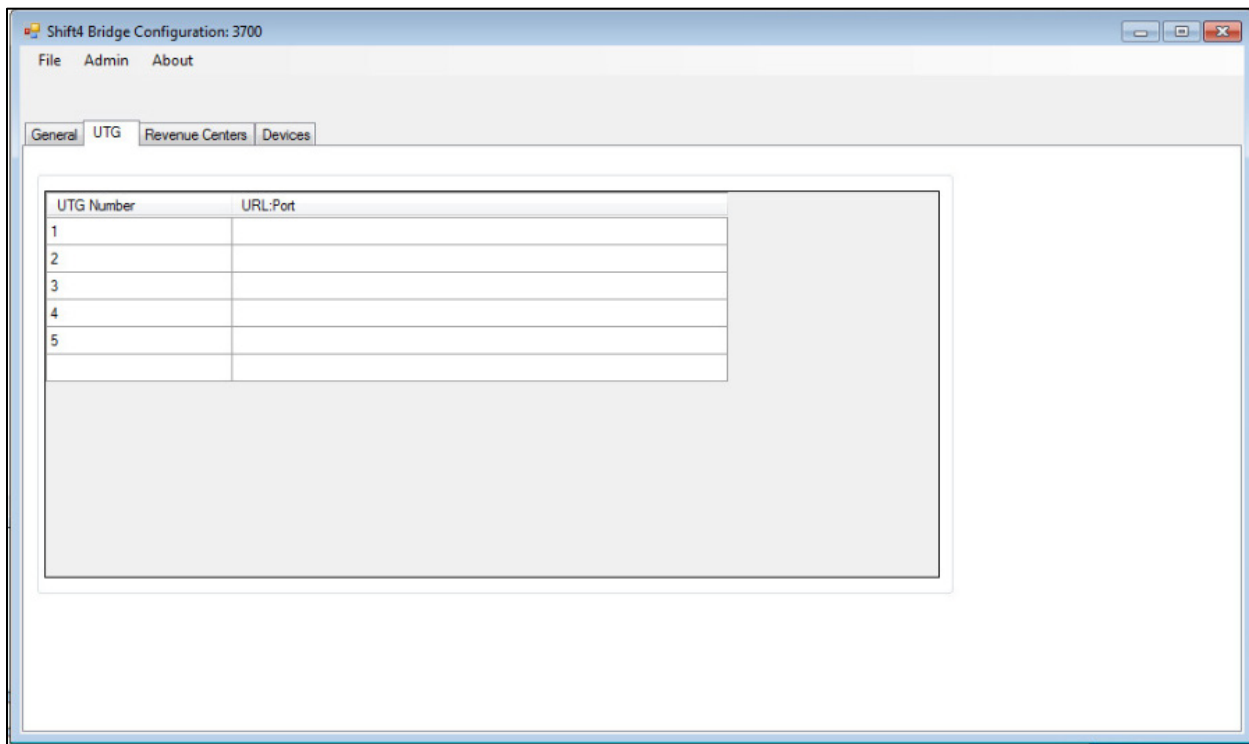
Tenders and Service Charges

- Send & Stay Tender (# Send & Stay)
 - o The record number of the Send and Stay service total defined in POS Configurator. Use one that preserves hold status.
- Send & Exit Tender (# Send and Exit)
 - o The record number of the Send and Exit service total defined in POS Configurator. Use one that preserves hold status.
- Print Tender (# Print)
 - o The object number of the Print service total defined in POS Configurator.
- [Option] SkyTab Invoice Menu Item Number (# SkyTab TrID)
 - o The record number of the Menu Item to hold the SkyTab payment Invoice Number.
- Authorization Tender (# Auth)
 - o The record number of the Authorization Tender you created in POS Configurator.

- Visa Tender (# Visa)
 - o The record number of the Shift4 Visa Tender you created in POS Configurator.
- Other Tenders
 - o (# MC)(# Amex)(# Disco)(# JCB)(# GC)(# Shift4 IYC)

UTG Tab

1. Enter in each UTG URL and port installed at the site that is used with this 3700 system on the UTG Tab.
 - UTG Number: 1 – 5 Read Only
 - URL:Port: The URL and port will be in <URL>:<Port> format. For example, if the URL is https://192.168.2.1 and port is 277, it would be entered as https://192.168.2.1:277.

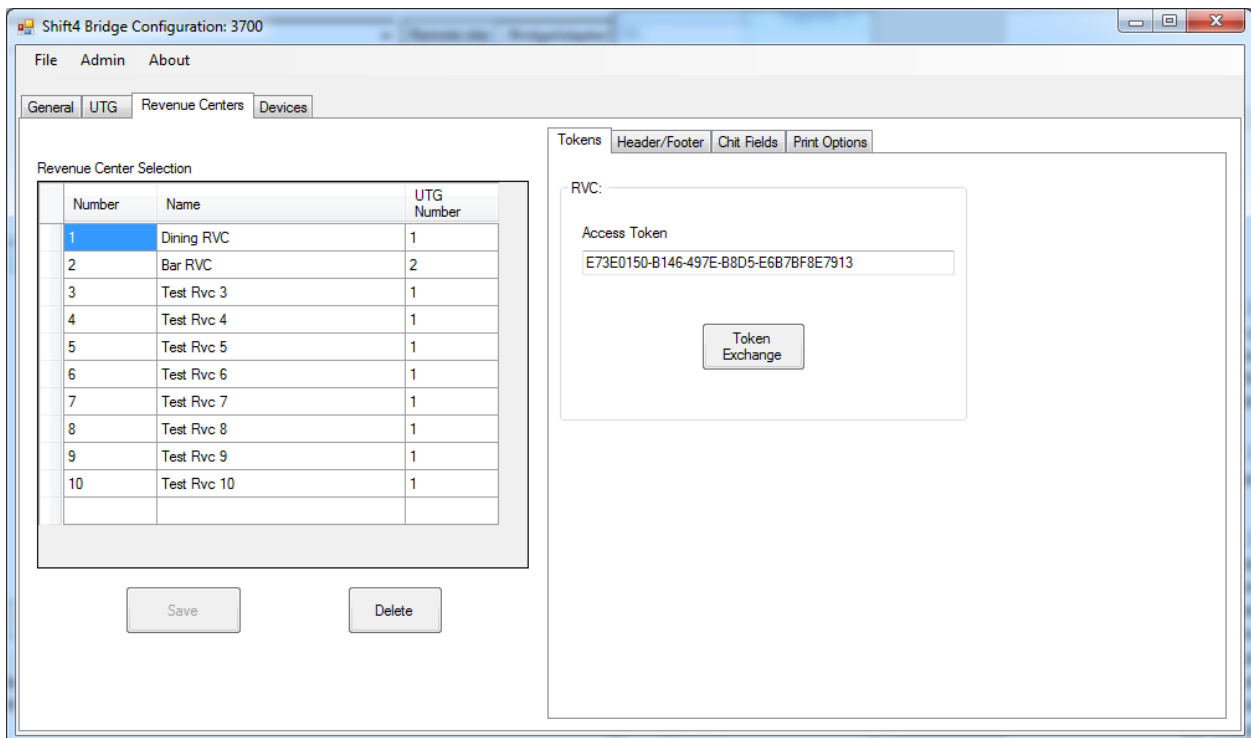


UTG Number	URL:Port
1	
2	
3	
4	
5	

Revenue Centers Tab

1. Enter the settings for each Revenue Center and its assigned UTG Number that this 3700 system will use.

- Number (# Revenue Center Number)
 - The Revenue Center Record Number.
- Name (# Revenue Center Name)
 - The Revenue Center Record Name.
- UTG Number
 - 1 – 5, depending on the UTG tab screen.
- Access Token
 - This will be filled in automatically when you use the Token Exchange function.
- Header
 - Enter any custom header lines you want on the Shift4 chits.
- Trailer
 - Enter any custom trailer lines you want on the Shift4 chits. This may conflict with custom print trailers, particularly tip suggestion SIM trailers that are included.



Shift4 Bridge Configuration: 3700

File Admin About

General UTG Revenue Centers Devices

Revenue Center Selection

Number	Name	UTG Number
1	Dining RVC	1
2	Bar RVC	2
3	Test Rvc 3	1
4	Test Rvc 4	1
5	Test Rvc 5	1
6	Test Rvc 6	1
7	Test Rvc 7	1
8	Test Rvc 8	1
9	Test Rvc 9	1
10	Test Rvc 10	1

Save Delete

Tokens Header/Footer Chit Fields Print Options

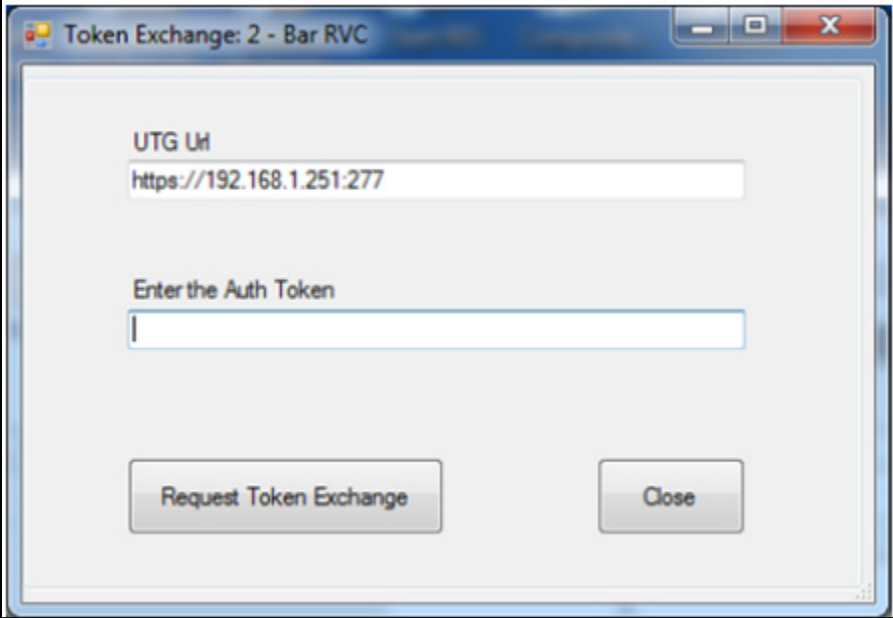
RVC:

Access Token

E73E0150-B146-497E-B8D5-E6B7BF8E7913

Token Exchange

- Token Exchange
 - o Press this to do a token exchange for the selected revenue center. You will need the site's Auth Token to run this. (Repeat for each revenue center as needed.)



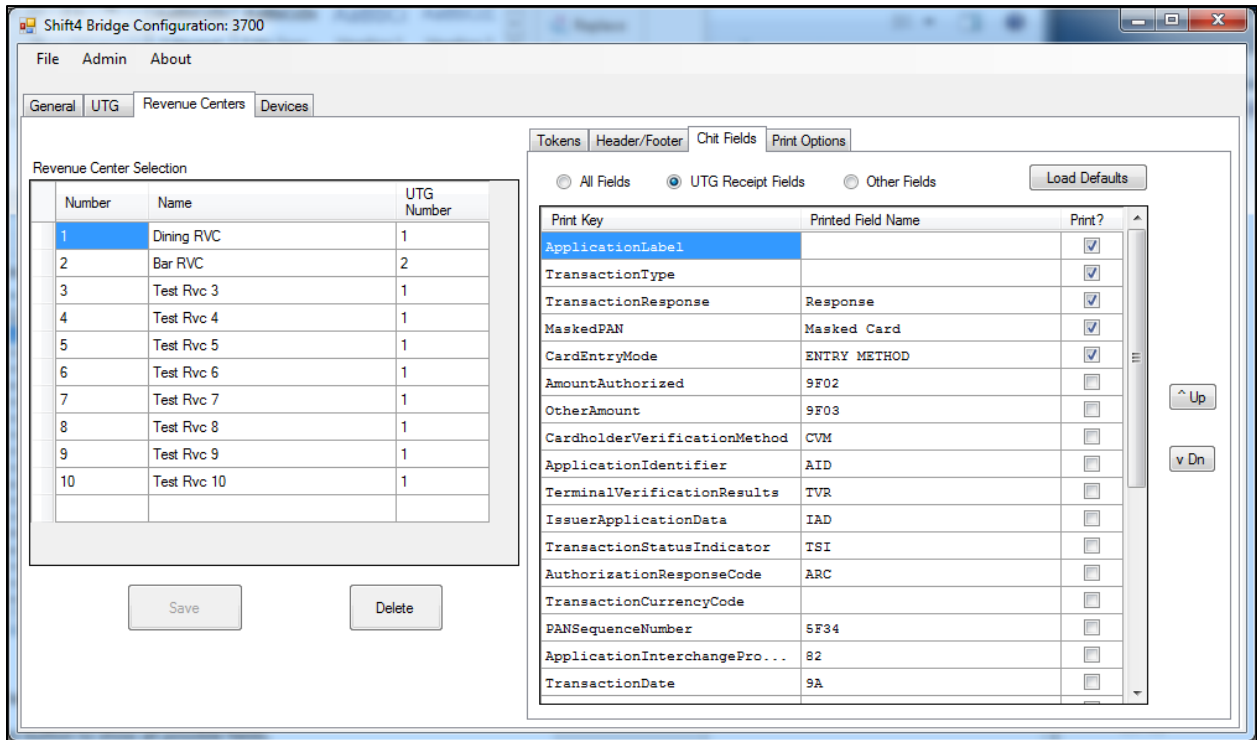
Token Exchange: 2 - Bar RVC

UTG Uri

Enter the Auth Token

Revenue Centers Tab: Chit Fields

This form allows you to enable/disable fields that may appear on the chits.



Shift4 Bridge Configuration: 3700

File Admin About

General UTG Revenue Centers Devices

Revenue Center Selection

Number	Name	UTG Number
1	Dining RVC	1
2	Bar RVC	2
3	Test Rvc 3	1
4	Test Rvc 4	1
5	Test Rvc 5	1
6	Test Rvc 6	1
7	Test Rvc 7	1
8	Test Rvc 8	1
9	Test Rvc 9	1
10	Test Rvc 10	1

Save Delete

Tokens Header/Footer Chit Fields Print Options

☐ All Fields ☒ UTG Receipt Fields ☐ Other Fields Load Defaults

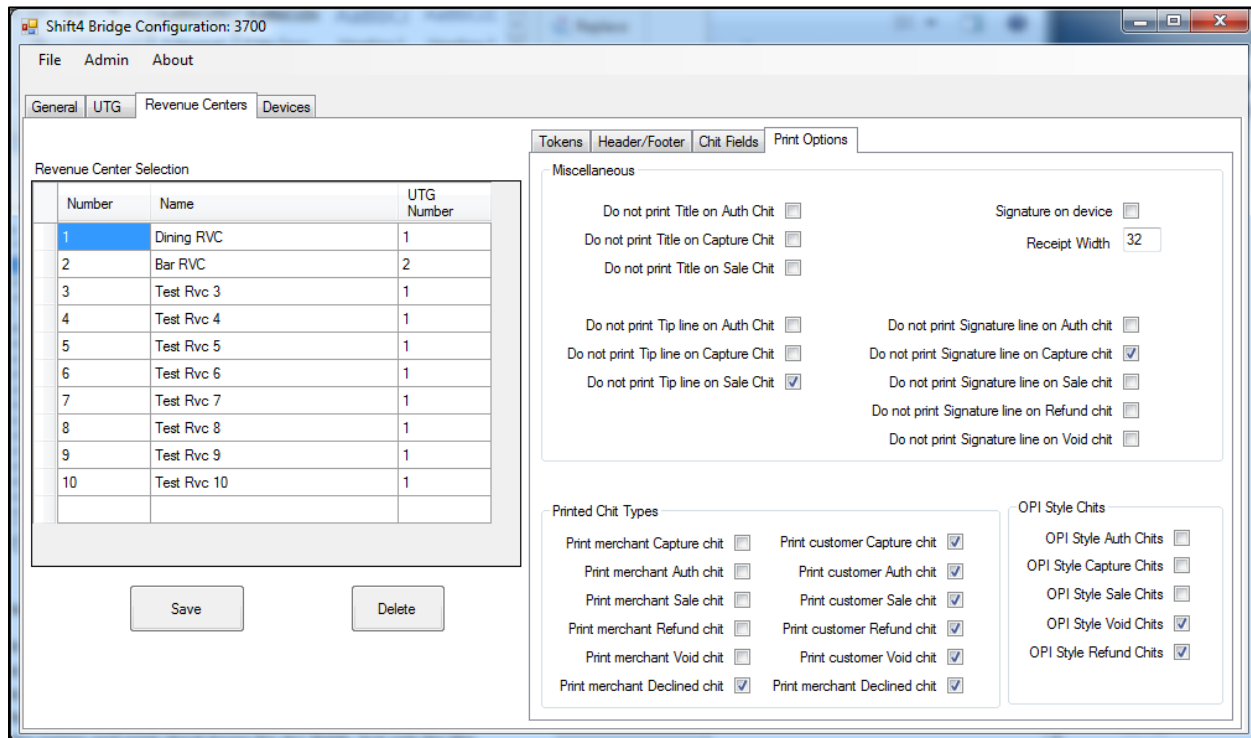
Print Key	Printed Field Name	Print?
ApplicationLabel		☒
TransactionType		☒
TransactionResponse	Response	☒
MaskedPAN	Masked Card	☒
CardEntryMode	ENTRY METHOD	☒
AmountAuthorized	9F02	☐
OtherAmount	9F03	☐
CardholderVerificationMethod	CVM	☐
ApplicationIdentifier	AID	☐
TerminalVerificationResults	TVR	☐
IssuerApplicationData	IAD	☐
TransactionStatusIndicator	TSI	☐
AuthorizationResponseCode	ARC	☐
TransactionCurrencyCode		☐
PANSequenceNumber	6F34	☐
ApplicationInterchangePro...	82	☐
TransactionDate	9A	☐

^ Up v Dn

- All Fields - Check this radio button to show all possible fields.
- UTG Receipt Fields – Check this radio button to show only UTG Receipt fields.
- Other Fields – Check this radio button to show only Non-UTG Receipt fields. Some of these are POS values, and others are from UTG but are not part of the “Receipt” data.
- Load Defaults – This will reset the names and print checkboxes for ALL fields, but only for the selected revenue center.
- Save Button – Saves the settings for the current revenue center.
- Delete Button – This DELETES the entire revenue center and its settings.
- Printed Field Name – If you edit this column, then the Chit will show that name, not the value from UTG. For the “Other Fields,” the value in this form is always used as the printed name.
- Print on Chit? – Check this to cause the field to show on the chits. Unchecked to suppress printing of this field.
- Up/Dn buttons – These only work on the UTG Receipt Fields. Use these to move rows up or down to alter the order that these items appear on the chit.

Revenue Centers Tab: Print Options

With the new version, if OPI Style Chits are selected, this will override all other customizations made via the Chit Fields tab and the Miscellaneous options under the Print Options tab.



The screenshot shows the 'Shift4 Bridge Configuration: 3700' window with the 'Revenue Centers' tab selected. The 'Print Options' sub-tab is active, showing various settings for chit printing.

Number	Name	UTG Number
1	Dining RVC	1
2	Bar RVC	2
3	Test Rvc 3	1
4	Test Rvc 4	1
5	Test Rvc 5	1
6	Test Rvc 6	1
7	Test Rvc 7	1
8	Test Rvc 8	1
9	Test Rvc 9	1
10	Test Rvc 10	1

Miscellaneous

- Do not print Title on Auth Chit ☐
- Do not print Title on Capture Chit ☐
- Do not print Title on Sale Chit ☐
- Signature on device ☐
- Receipt Width
- Do not print Tip line on Auth Chit ☐
- Do not print Tip line on Capture Chit ☐
- Do not print Tip line on Sale Chit ☒
- Do not print Signature line on Auth chit ☐
- Do not print Signature line on Capture chit ☒
- Do not print Signature line on Sale chit ☐
- Do not print Signature line on Refund chit ☐
- Do not print Signature line on Void chit ☐

Printed Chit Types

- Print merchant Capture chit ☐
- Print merchant Auth chit ☐
- Print merchant Sale chit ☐
- Print merchant Refund chit ☐
- Print merchant Void chit ☐
- Print merchant Declined chit ☒
- Print customer Capture chit ☒
- Print customer Auth chit ☒
- Print customer Sale chit ☒
- Print customer Refund chit ☒
- Print customer Void chit ☒
- Print merchant Declined chit ☒

OPI Style Chits

- OPI Style Auth Chits ☐
- OPI Style Capture Chits ☐
- OPI Style Sale Chits ☐
- OPI Style Void Chits ☒
- OPI Style Refund Chits ☒

- Receipt Width – 32 or 40 to match the POS.
- Signature on Device – Check this if you are using Signature Capture UTG Devices.
- Do not print Title on Auth Chit – This will suppress printing of the “Authorization” line on the auth chit.
- Do not print Title on Capture Chit – This will suppress printing of the “Capture” line on the capture chit.
- Do not print Title on Sale Chit – This will suppress printing of the “Sale” line on the sale chit.
- Do not print Tip line on Auth/Capture/Sale Chit – This will suppress printing of the tip line on the chit.
- Do not print Signature line on Auth/Capture/Sale/Refund/Void chit – This will suppress printing of the signature line on the chit.
- Print Merchant Capture/Auth/Sale/Refund/Void/Declined chit – Print the Merchant Copy of the chit.
- Print Customer Capture/Auth/Sale/Refund/Void/Declined chit – Print the Customer Copy of the chit.
- OPI Style Auth Chits – Checking these will use the UTG generated print receipt.
- OPI Style Capture Chits – UTG 3013 or above is required.
- OPI Style Sale Chits
- OPI Style Void Chits – Recommended to always check this.
- OPI Style Refund Chits

To replicate the OPI Style Chit without having the options selected, select the following under Chit Fields

- TransactionType
- TransactionResponse
- ApplicationLabel
- MaskedPan
- CardEntryMode
- CardholderVerificationMethod
- ApplicationIdentifier
- TerminalVerificationResults
- IssuerApplicationData
- TransactionStatusIndicator
- AuthorizationResponseCode
- TransactionCurrencyCode
- Date time
- Amount
- Card Type
- Card Num
- Last Name
- First Name
- Invoice
- AuthCode
- Mic_CheckNum
- Mic_CheckId
- Mic_Table
- Mic_Server
- TerminalActionCodeDefault
- TerminalActionCodeDenial
- TerminalActionCodeOnline
- ReferralPhone
- ReferralAcct

Your receipt will look like this:

Header

Authorization

Check Name: HGFF
Check: 9441
Table: /0
Server: 199 temp T

Time: 03/13/20 02:47:12 PM
Amount: 0.01
Card Type: MC
Card: XXXXXXXXXXXX2055
Last Name
First Name: _____
Invoice: 0000000126
Authorization Code: 013868

AID: A0000000041010
TVR: 0000008000
IAD:0110A04001220000000000000000
TSI: E800
ARC: Z3
CVM: SIGN
MASTERCARD
Masked Card: XXXXXX
ENTRY METHOD: CHIP

TAC Default: DC4000A800
TAC Denial: 0010000000
TAC Online: DC4004F800

Amount: 0.01
Tip _____
Total _____

Signature

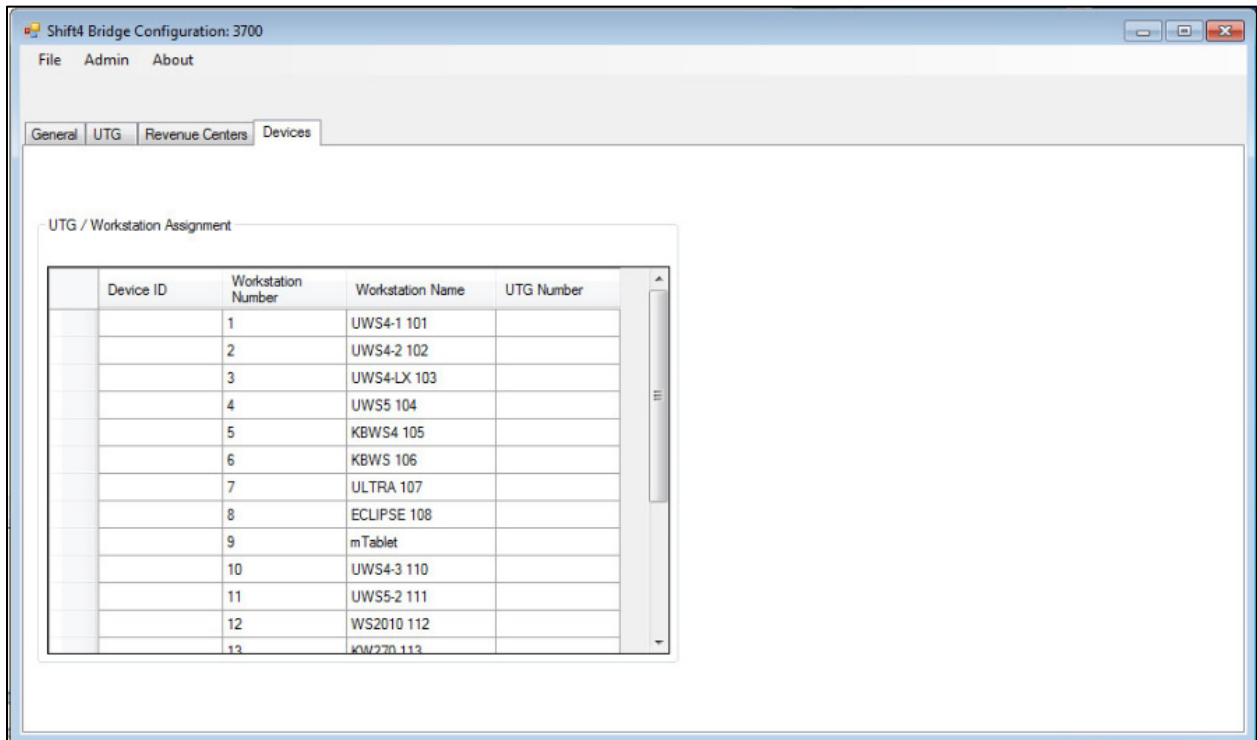
*** CUSTOMER COPY ***

Footer

18% is \$0.00
20% is \$0.00
22% is \$0.00

Devices Tab

1. Enter each Ingenico device and its assigned workstation and UTG that this interface will use.
 - Device ID (API TID)
 - o The API Terminal ID value provided on your Shift4 Configuration Sheet. This number must be entered with no leading zeros. The Device ID in the bridge interface must match the API TID displayed in LTM and UTG.
 - Workstation Number (# Workstation Number)
 - o The Workstation Record Number.
 - Workstation Name (# Workstation Name)
 - o The Workstation Record Name.
 - UTG Number
 - o 1 – 5, depending on the UTG tab screen.



Device ID	Workstation Number	Workstation Name	UTG Number
	1	UWS4-1 101	
	2	UWS4-2 102	
	3	UWS4-LX 103	
	4	UWS5 104	
	5	KBWS4 105	
	6	KBWS 106	
	7	ULTRA 107	
	8	ECLIPSE 108	
	9	mTablet	
	10	UWS4-3 110	
	11	UWS5-2 111	
	12	WS2010 112	
	13	WS220 113	

2. This completes the Shift4Interface setup you should now go to **File > Save**.

SIM File Setup

The interface includes SIM files in the ...\\Shift4Interface folder (the Shift4.isl and Shift4Include.isl).

On the 3700 Server, you will need to rename the Shift4.isl to the correct pms###.isl name, and place the renamed file in various locations to be copied to the workstations. You only need to copy the renamed Shift4.ISL to the folder for their workstation models.

In the pms###.isl file name, ### is the Shift4 Interface Number you recorded earlier at the start of the Micros setup. If you used (2 Shift4) you would rename Shift4.isl to pms2.isl. It is a good idea to save a copy of the Shift4.isl file before you rename the file.

For OPS on Server, copy the renamed “shift4.isl” and “Shift4Include.isl” to:

- ...\\MICROS\\Res\\Pos\\Etc\\...
- ...\\MICROS\\Res\\CAL\\WS5A\\Files\\CF\\Micros\\Etc\\...
- ...\\MICROS\\Res\\CAL\\WS5\\Files\\CF\\Micros\\Etc\\...
- ...\\MICROS\\Res\\CAL\\WS4LX\\Files\\CF\\Micros\\Etc\\...
- ...\\MICROS\\Res\\CAL\\WS4\\Files\\CF\\Micros\\Etc\\...
- ...\\MICROS\\Res\\CAL\\Win32\\Files\\Micros\\Res\\Pos\\Etc\\...

Above are common examples of CAL Workstations. But, the site may have different workstations and these files may be needed in another folder location.

Once all files are in place, start the service “Shift4 3700 Interface” and test a transaction.

USAGE

Authorization

Start a check and ring up some items. Do NOT do this with a \$0 balance check.

1. Press the Authorization Key.
 - If you enter an amount first, then press the key, that amount will be used.
 - If you do not enter an amount first, you will be prompted for the amount and the default total due will be shown in parentheses. It will be used if you just press **Enter** at this prompt.



2. After pressing **Enter**, go to the Ingenico PinPad.
 - You will be prompted to confirm the amount on the device. Confirm the amount .
 - Then you will be prompted to swipe/insert the card.
 - If successful, the Auth info will be stored on the check and the check will be Service Totaled. This is a requirement of the interface.

3. You should get a printed chit that will look something like this:

Beaches Header	
Authorization	
APPROVED	
Table:	65
Server:	1 Samantha
Check:	9905
Time:	03/18/19 05:01:37
Amount:	6.50
Card Type:	DISCOVER
Card:	XXXXXXXXXXXX3429
Invoice:	0000000003
Token:	3429bjy64htpqj22
Device:	0001
Response: APPROVED	
ENTRY METHOD: SWIPED	
TAC Default: DC4000A800	
TAC Denial: 0010000000	
TAC Online: DC4004F800	
Amount	6.50
Tip	_____
Total	_____

Signature	
*** CUSTOMER COPY ***	
Beaches Trailer	

4. If you pick the check up again, you should see something like the following:



The screenshot shows the 3700 POS Operations interface. The top section displays the transaction details for 'Seat 1: Ready For Your Next Entry'. The items listed are 1 NY / Strip medium (29.95) and 1 Lg. Pellegrino (6.50). The total amount is 36.45. The interface also shows the Shift4 Auth amount of 0.00. The bottom section features a keypad with buttons for Auth, Manual Auth, Final, Sale, Manual Sale, Refund, and a numeric keypad. The transaction summary on the right includes the date and time (Mar18'19 10:23PM), the subtotal (36.45), tax (0.00), service charge (0.00), and the total payment (0.00). The final total is 36.45.

The tender reference on the check will contain several important numbers.

XXX...	This will be the masked card number.
Key: 000...	This will be the Invoice Number sent to Shift4.
T:...	This is the Auth Token provided from Shift4 for this transaction.
Amount:...	This is the Authorized amount.
Shift4 Auth 0.00	This is the Auth Tender. It will always show the 0.00 to the right as the amount.

Re-Authorization

1. To increase the amount of an authorization, pick up the check and press the Auth key again. The interface will prompt you to select a new card, or use an existing authorization.



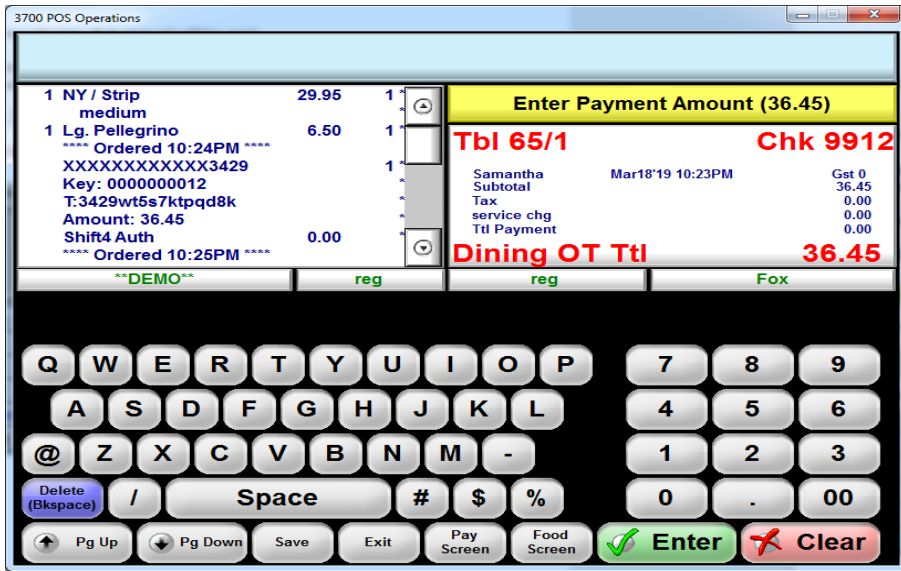
2. If you select the exiting Authorization (pressing 2 and then Enter in this case), you will be prompted for the new amount. This should be the new Total, not the amount to add.
 - Follow the same process you did for the original Auth from here.
 - If successful, you will get a new chit and another Auth tender on the check.
 - Note that the interface will always select the most recent auth to use. So, if you re-authorized five times, the last one will be used by the Capture or subsequent Re-Authorizations.

Manual Authorization

This is done after you have called the voice number and received an approval code. This can really only happen when there has been a Referral after attempting a regular Authorization or Re-Authorization.

Finalize

- To complete the payment, pick up the check and press the Final key. The interface will prompt you to select a new card, or use an existing authorization.
 - If you enter an amount first, then press the key, that amount will be used.
 - If you do not enter an amount first, you will be prompted for the amount. The default total due will be shown in parentheses, and it will be used if you just press **Enter** at this prompt.
 - If you are entering a charge tip, you should enter the amount of the check to pay + the tip amount.



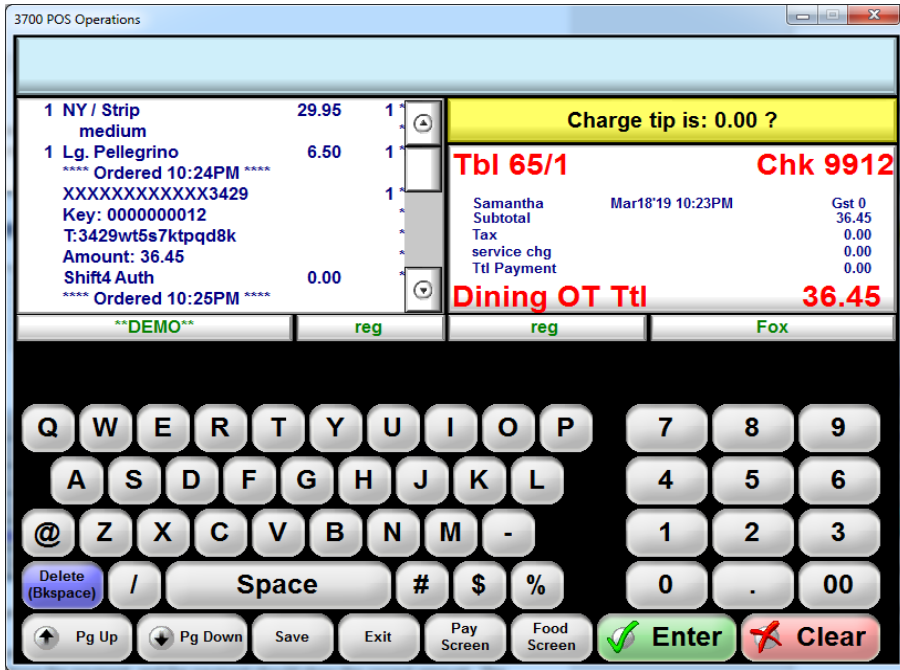
3700 POS Operations

1 NY / Strip medium 29.95 1 Lg. Pellegrino 6.50 **** Ordered 10:24PM **** XXXXXXXXXXXXX3429 Key: 0000000012 T:3429wt5s7ktpqd8k Amount: 36.45 Shift4 Auth 0.00 **** Ordered 10:25PM ****	Enter Payment Amount (36.45) Tbl 65/1 Chk 9912 Samantha Mar18'19 10:23PM Gst 0 Subtotal 36.45 Tax 0.00 service chg 0.00 Ttl Payment 0.00 Dining OT Ttl 36.45
---	--

DEMO reg reg Fox

Q W E R T Y U I O P 7 8 9
 A S D F G H J K L 4 5 6
 @ Z X C V B N M - 1 2 3
 Delete (Bkspc) / Space # \$ % 0 . 00
 Pg Up Pg Down Save Exit Pay Screen Food Screen Enter Clear

- If you entered less than the total due, you will be prompted for a tip.
 - If you entered more than the total due, you will be prompted to confirm the charge tip.
- o Enter the tip or confirm the amount.



3700 POS Operations

1 NY / Strip medium	29.95	1	Charge tip is: 0.00 ? Tbl 65/1 Chk 9912 Samantha Mar18'19 10:23PM Gst 0 Subtotal 36.45 Tax 0.00 service chg 0.00 Ttl Payment 0.00 Dining OT Ttl 36.45
1 Lg. Pellegrino	6.50	1	
***** Ordered 10:24PM *****			
XXXXXXXXXXXX3429		1	
Key: 0000000012			
T:3429wt5s7ktpqd8k			
Amount: 36.45			
Shift4 Auth			
***** Ordered 10:25PM *****	0.00		

DEMO reg reg Fox

Q W E R T Y U I O P 7 8 9
 A S D F G H J K L 4 5 6
 @ Z X C V B N M - 1 2 3
 Delete (Bkspc) / Space # \$ % 0 . 00
 Pg Up Pg Down Save Exit Pay Screen Food Screen Enter Clear

2. If successful, you should get a printed chit and the check will be service totaled.

3. If you pick the check up again, you should see something like the following:

- The Charge Tip should appear above the payment, and the payment should show the correct amount. The Key and Card should match those of the Auth.
- In this example, the card was a Discover card, so the “Shift4 Disco” payment was applied to the check.



The screenshot shows the 3700 POS Operations interface. The top section displays 'Seat 1: Ready For Your Next Entry'. Below this, a summary of the current check is shown, including items like '1 NY / Strip medium' for \$29.95 and '1 Lg. Pellegrino' for \$6.50. The subtotal is \$36.45, and the total payment is \$36.45. The payment method is 'Shift4 Disco'. The bottom section shows a grid of buttons for various functions, including 'Change To Floor', 'Change # Guests', 'Split Check', 'MIVI Sel', 'Food Screen', 'Change To Bar', 'Change Table #', 'Add Transfer', 'Reopen Clsd Chk', 'Server Liquor', 'Change To Go', 'Add Guest Name', 'Merge Tables', 'Edit Clsd Chk', 'Wine', 'Change Delivery', 'V.I.P.', 'Transfer Request', 'Future orders', 'Bartender', 'Price Ovr', 'Rush Order', 'Block Xfer', 'Previous Screen', 'SIM', 'Pickup Checks', 'Edit Seat', 'QuickStart Till', 'Start Till', 'Close Till', 'TransVoid', 'Filter Seat', 'Delivery', 'GSS', 'Next Check', 'Return MI', 'Pay', 'Trans Cancel', 'Print', 'Contest & 86', 'Lunch Level', '7', '8', '9', 'Brunch Level', 'Dinner Level', '4', '5', '6', 'Employee Report', '1', '2', '3', '0', '.', '00'.

Sale

The Sale function does a one-stop payment. It will only put the Sale tender on the check and not an Auth. Follow the same exact flow as the Final, but you will not be prompted to select from existing Authorizations.

Manual Sale

This is done after you have called the voice number and received an approval code. This can really only happen when there has been a Referral after attempting a regular Sale.

Refund

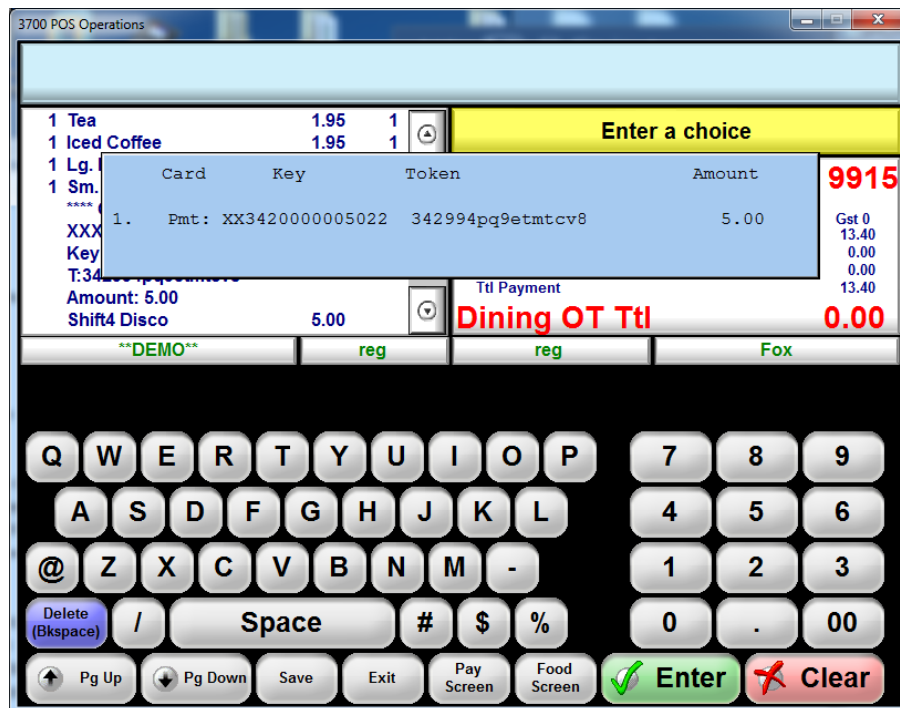
1. To do a refund to a card, create a Negative Check. Then press the Refund key.

- The Refund function does a one-stop refund. It will only put the Sale tender on the check and not an Auth.
- Follow the same basic flow as the Sale and Final, but you will not be prompted to select from existing Authorizations.
- The Refund will not prompt for a tip amount. The payment will be for the amount you enter, and it will not figure out or add a tip.

Reprint Chits

Existing Check

1. Pick up a check with a Shift4 transaction.
2. Press “Reprint Chits”.
3. You will be prompted to confirm the transaction to reprint.
4. Enter the number of the transaction to reprint. If a saved chit is still available, it will reprint. Chits are generally available for 24 hours.



Outside of a Check

1. Press “Reprint Chits”.
2. You will be prompted to enter the Invoice Number. This is the 10-digit “Key” or “Invoice” number from a previous chit or Micros check.
3. If a saved chit is still available, it will reprint. Chits are generally available for 24 hours.

Voids

1. Authorizations cannot be voided.
2. Refunds cannot be voided.
3. For a Final or Sale, pick up the check and select the payment to void.

- The 3700 has limitations about handling voids. It is necessary to make sure that the correct payment Invoice is voided, and this cannot be accurately determined by the interface alone under all circumstances.
 - Therefore, you will be prompted to confirm the payment to void. If the transaction being shown is the correct one, press 1 and Enter to confirm. If not, press Clear/No.
 - If the void was successful, a chit will print and the payment will be removed from the check.
4. If there are two or more Sales or Captures with the same total amount, you will not be allowed to void them. There are two options:
- Ring up a negative check and do a Refund.
 - You can try to split the check so that the payment is on a separate check. Then you should be able to void it when it is the only payment to void.

Referral

In some instances, an Authorization or a Sale will not be approved or declined, but will be referred to a voice phone number. When this occurs, you will see a message on the screen, and a chit will print. The chit will contain the phone number to call. If this happens, you can simply stop there, and refuse to accept the card. Or, you can do the referral.

1. You will be prompted to Enter the Manual Auth Number.
 2. Do NOT exit the transaction. Sit at this prompt and wait if you choose to do the referral.
 3. Call the number for the authorization. They will ask for information that is printed on the chit.
 4. If you get an approval, write down the approval code.
 5. Enter the approval code at the prompt that is waiting for you on the workstation (from 2 above).
- This will either be approved or declined.

If approved, then the appropriate payment will be applied to the check as if it was a normal "Final".

APPENDIX

Non Revenue Service Charges

- The Sale function will work with a Non Revenue Service Charge. As with all checks, the NRSVC must be the only thing on the check, and tips are not allowed.

Tax Exempt Sales

- If you need to do Tax Exempt sales, the procedure listed here works. Other methods may be just as good. Note that in this procedure, you are basically applying tax exempt status through a \$0.00 payment, and then doing your actual payment.
- The Shift4 No-Tip function should be used to perform tax exempt sales.
- Create a Cash-like tender in the Configurator. Call it something like "Tax Exempt Check" or whatever is appropriate. Set it so that it does NOT require amount and does NOT Assume paid in full.

1. Create a check in the POS.
2. Press the Micros Tax Exempt key, and follow the prompts.
3. Press the “Tax Exempt Check” tender from above. This will apply a \$0.00 payment. And if you entered reference info, it will appear as reference.
4. Use the Shift4 Sale-No Tip function to pay the check.