PixelPoint®

QSR Configuration

Publication Details

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

Table of Contents

Overview

This document has been written with the expectation that users understand QSR systems and how to install and program an ePic Video Display System by QSR. Its purpose is to provide you with the information needed to make it work with the PixelPoint POS System.

QSR CSK required installed:

1. ControlPoint Server
2. ControlPoint Client
3. ControlPoint Builder
4. Kitchen Server
5. Kitchen Builder Pro
6. QSRSock.DLL v14.0.5.0

Requirements

- Windows 8 Pro
- PixelPointPOS V12.3.X+
- SystemSet V12.3.X+
- PixelKDS.exe V12.3.x
- QSR CSK Software V5
- All required hardware for customer site
    - xCeed Kitchen Controller

Tested Devices

- QSR Bump Bar Model KP-7500
- QSR Box Model DE-4100

Notes

- The following configuration was tested using the PixelPoint install defaults except for noted changes in SystemSet.exe.
- The POSServer will need to be using a Static IP address
- All QSR questions should be referred to the QSR group http://www.qsrautomations.com/

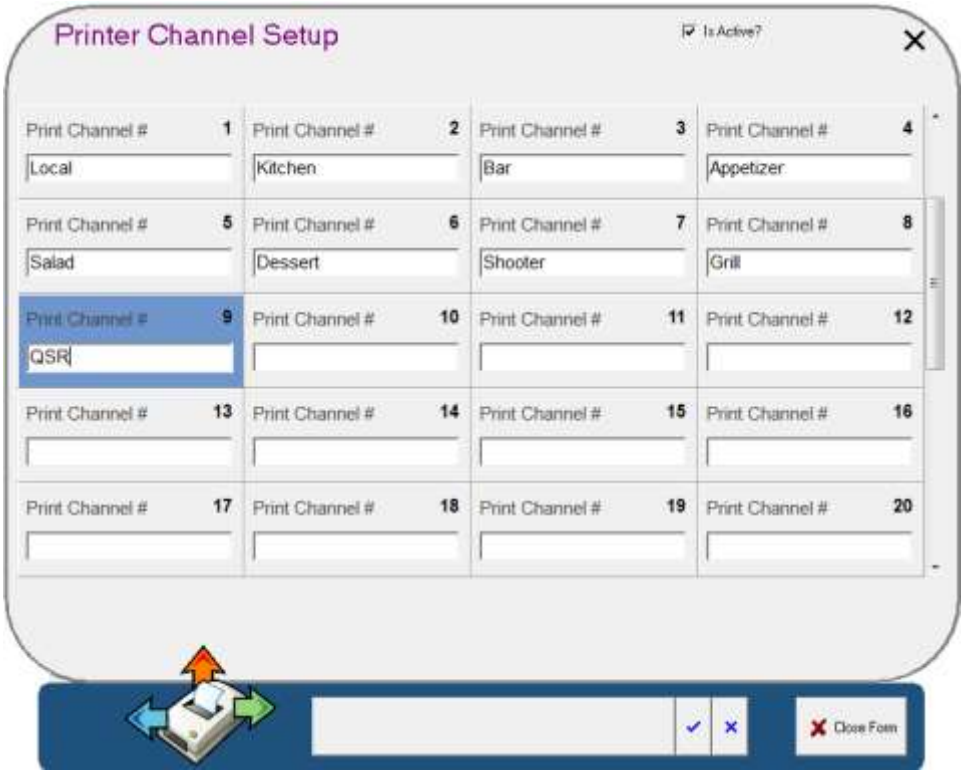
PixelPoint POS Configuration

The following configuration in PixelPoint POS will all be done in the SystemSet.exe

For the following example we will be using PixelPoint default DB from the install CD. To better show how to setup QSR with PixelPoint. The **"Demo Changes"** are made so the document can show two report categories**. (Demonstration Purpose Only**) the rest of the instructions will need to be followed.

Creating a Printer Channel

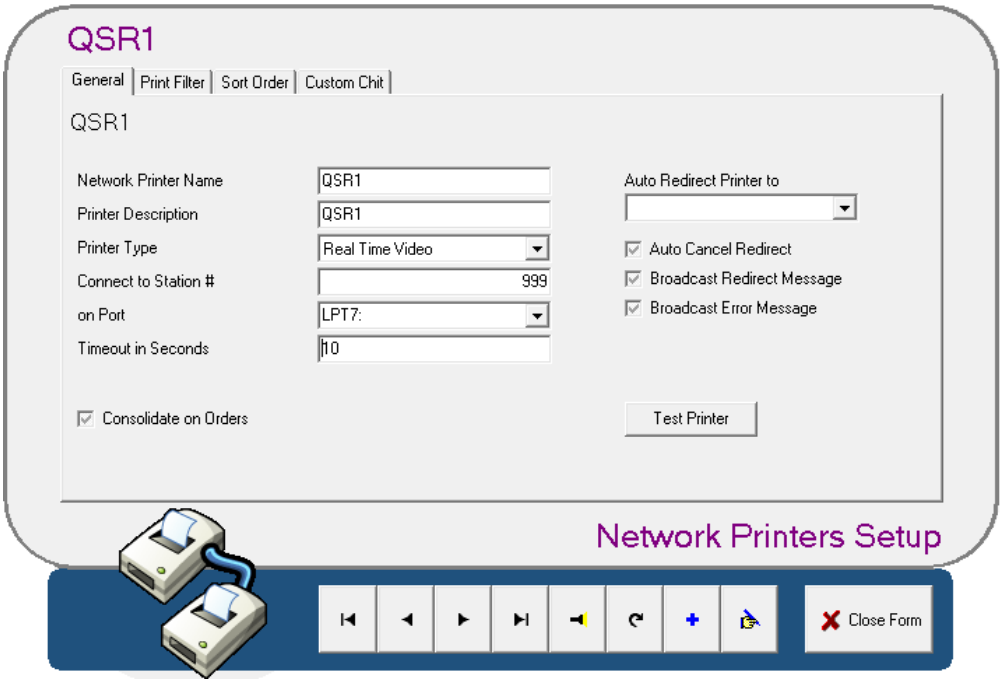
1. Open BackOffice > Administrator> Setup Printer Channels.
2. Add a channel for the KDS monitor. In the below example the channel is named 'QSR'.



Creating a Network Printer

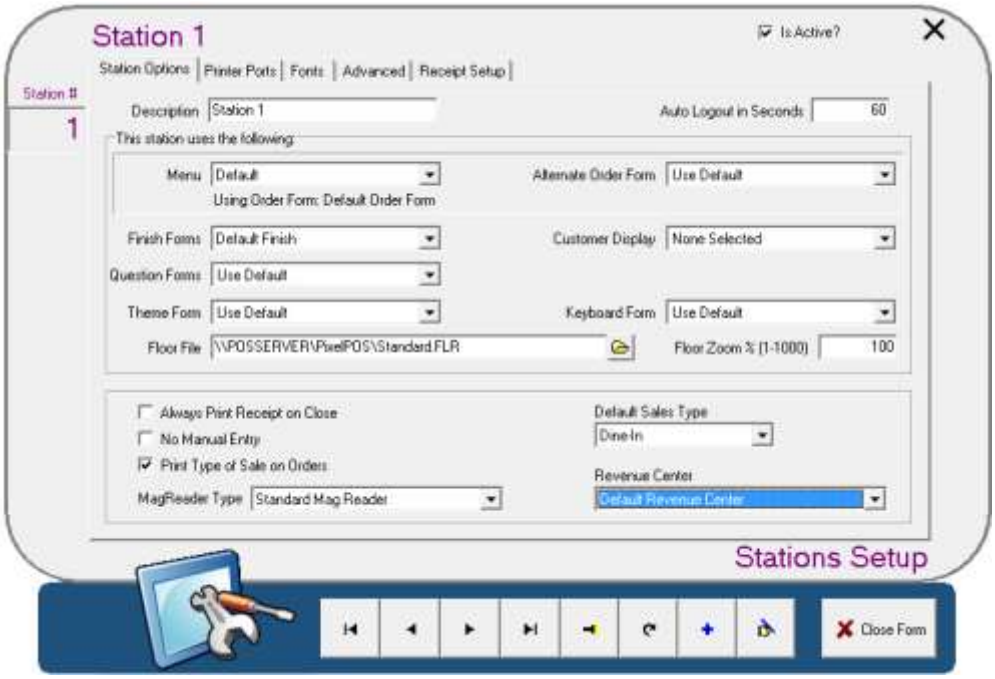
1. In BackOffice, select Setup Network Printers on the Administrator pull-down menu.
2. Create a new printer record.
3. Choose a name for the network printer (no spaces, maximum of 8 characters). "QSR1" is used in the below example.
4. Set the printer type to 'Real time Video'. This option MUST be selected.
5. Specify a station number not currently in use (ex. 999) in the Connect to Station # field.
6. Select any COM in the on Port section.

7. Enter a value in the Timeout in Seconds field.



Station Configuration

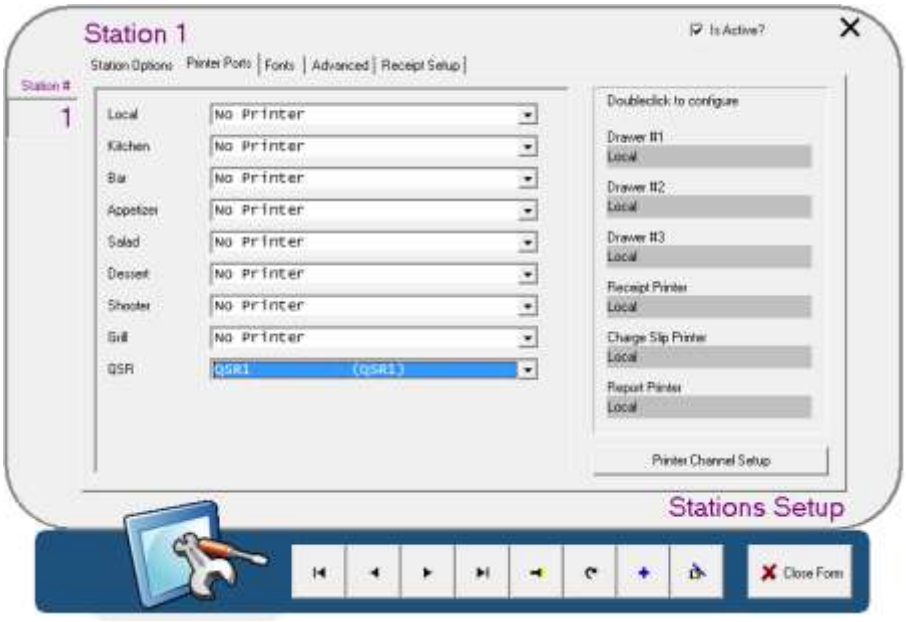
1. In BackOffice, select Setup Station from the Administrator pull-down menu.
2. Ensure that ALL stations that will be used have the option Print Type of Sale on Orders checked.



Station Printer Ports Setup

1. In BackOffice, Select Setup Stations on the Administrator pull-down menu.

2. Select the Printer Ports tab.
3. Use the drop-down box next to the newly created printer channel (named QSR1 in the below example).
4. Repeat steps 1-3 on each station using the Kitchen Display System. The left and right arrows on the bottom of the screen can be used to switch between station records.

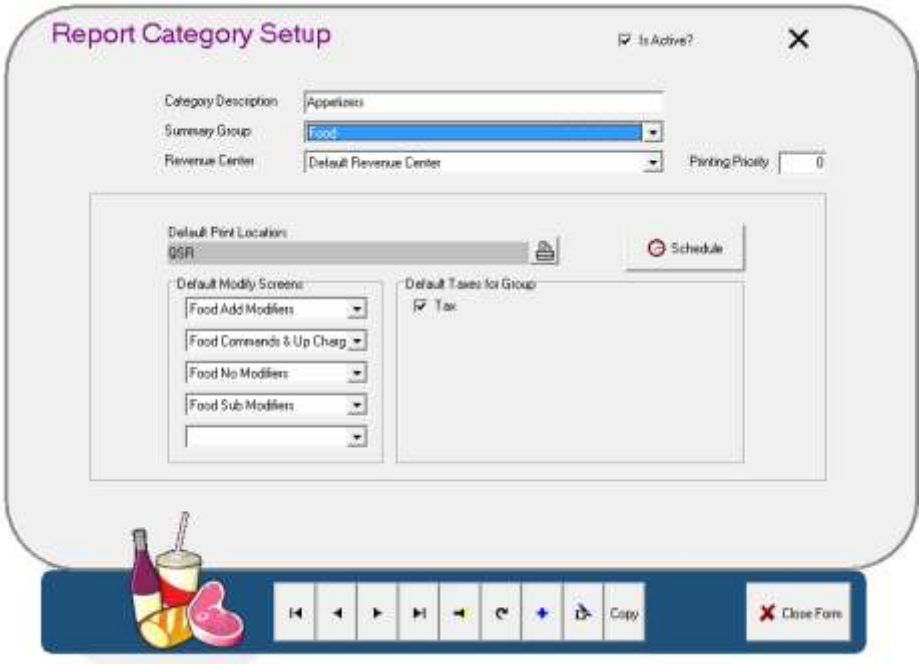


Report Category & Product Setup

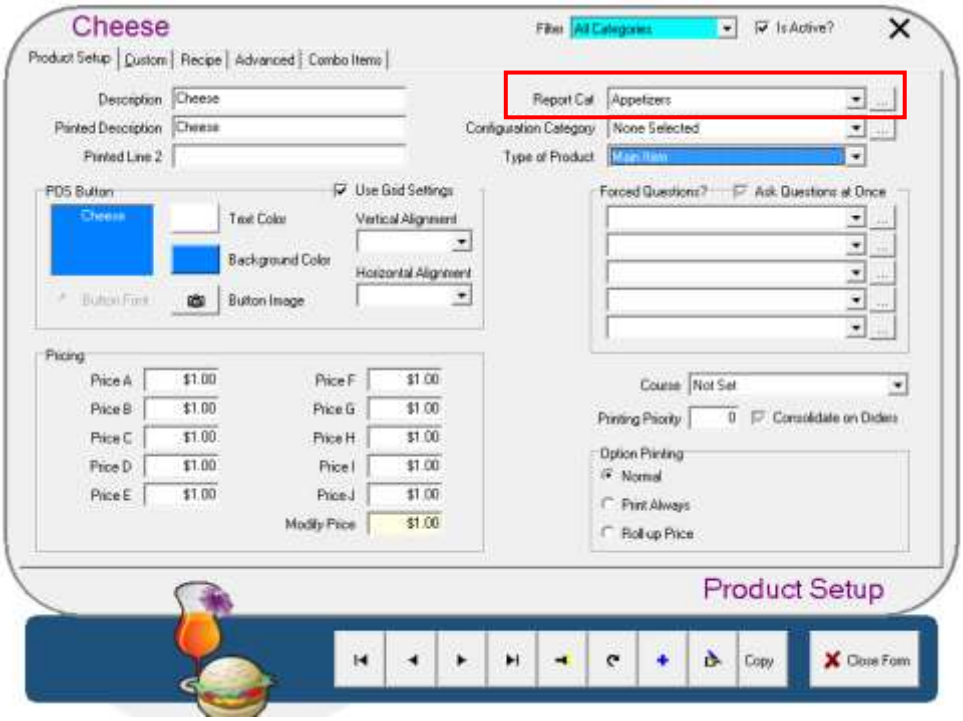
Items are directed to QSR displays using Report Categories. To setup Report Categories to be routed to the KDS:

1. In BackOffice, select Setup Report Categories from the Products pull-down menu.

2. Create or select an existing report category to send to the display.



3. Select the printer button under Default Print Location and select the QSR printer channel.
4. Repeat Steps 1-3 for each additional report category you wish to send to the KDS.
5. In BackOffice, select Product Setup from the Products pull-down menu.
6. Assign products to the desired Report Categories.



Policy Setup

It is recommended, though not necessary to enable the following Policy.

1. In BackOffice, select Policy Setup from the Administrator pull-down menu.
2. Locate the policy *RealTimeVideoMode*.
3. Turn this policy on by setting it to 1.

Configure PixelKDS.ini

PixelPoint will provide the file PixelKDS.ini. To configure:

1. Open this file and add the IP address of the host PC that will be running the QSR software in your environment in the line 'Host'.
2. Add the name of the network printer configured for QSR in the line 'Video1'.

Example Pixelkds.ini

```
[MAIN]
KdsSystem=1

[SPOOLDIRS]

[QSR]
Host=<IP Address of Host PC>
Port=32768
video1=<Printer Name>
```

This completes the necessary configurations within PixelPoint POS.

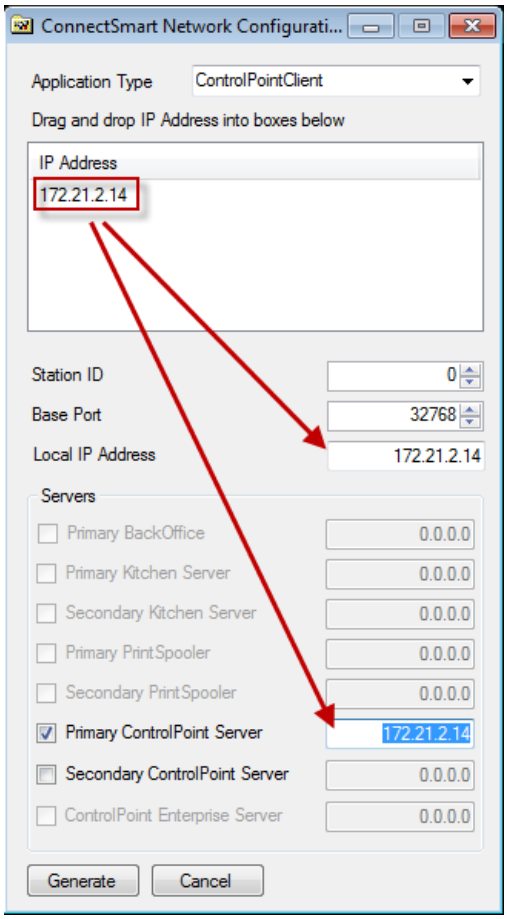
QSR Installation and Configuration

ControlPoint Client Installation

To install the required ControlPoint Client software, run the ControlPointClientSetup.exe file and proceed through the installation process.

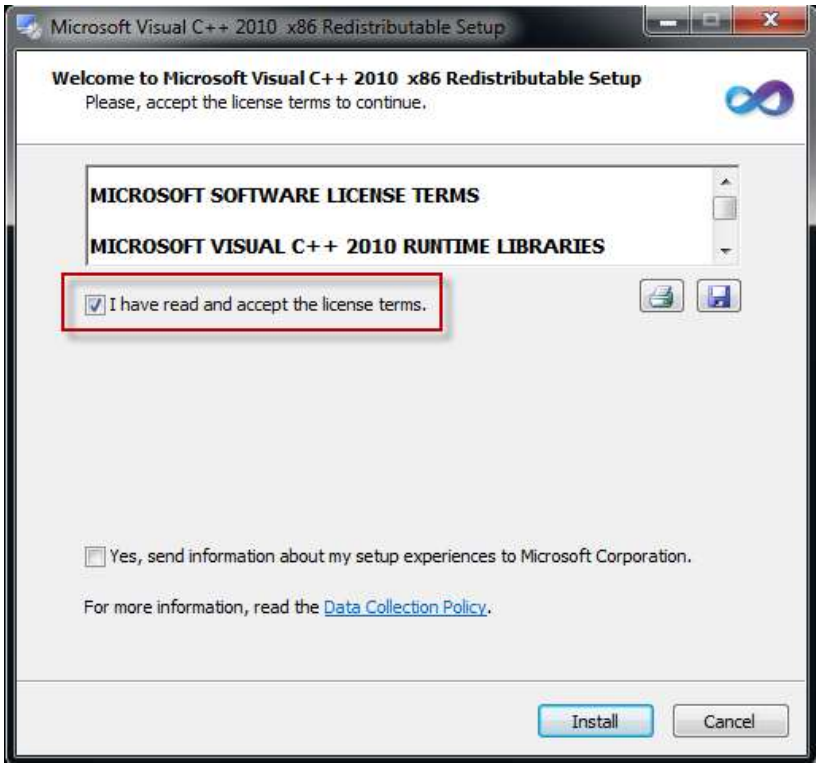
When prompted with the following screen, drag and drop the Server IP address into both the Local IP Address field as well as the Primary ControlPoint Server field (ensure the box is checked beside the second field, as shown in the example).

When finished, click Generate and save your settings.

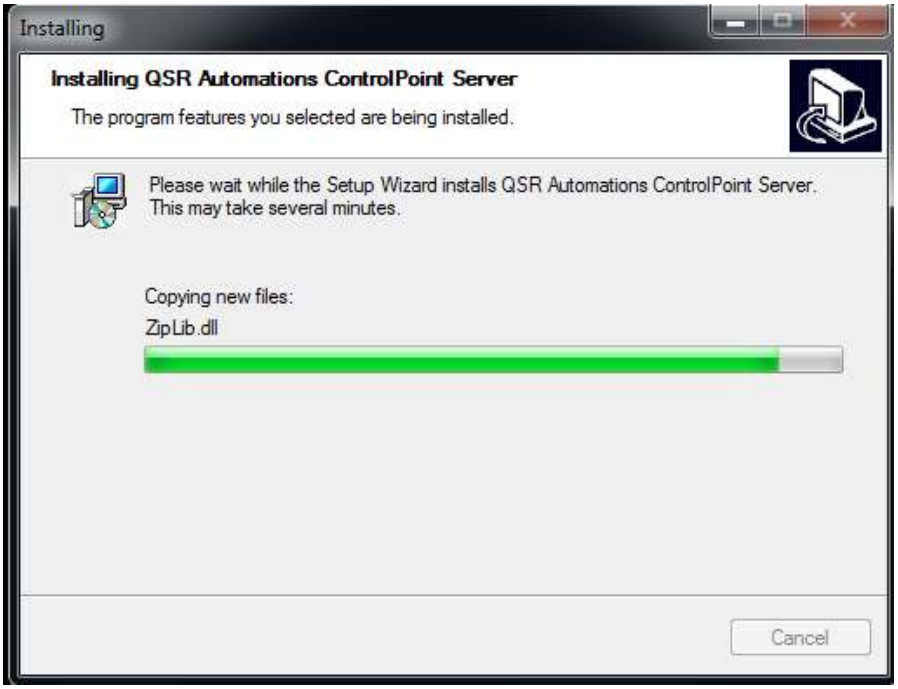


ControlPoint Server Installation

Microsoft C++ Runtime 2010 is required before installing the server portion of the ControlPoint software. If not already installed on your server, run the file Vcredit_2010_x86.exe from the QSR CSK installer CD and proceed through the installation process.



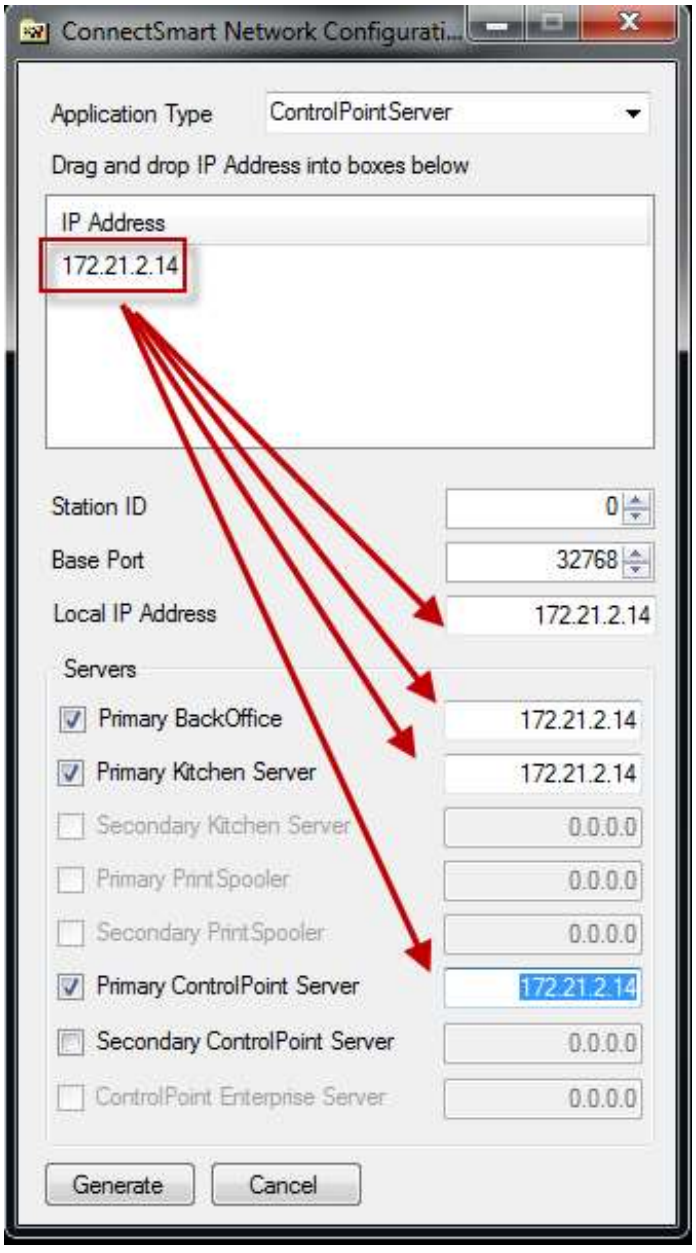
Once the installation is complete, run the file ControlPointServerSetup.exe and proceed through the installation process.



When prompted with the below window, drag and drop the Server IP address to the following four fields:

- Local IP Address
- Primary BackOffice
- Primary Kitchen Server
- Primary ControlPoint Server

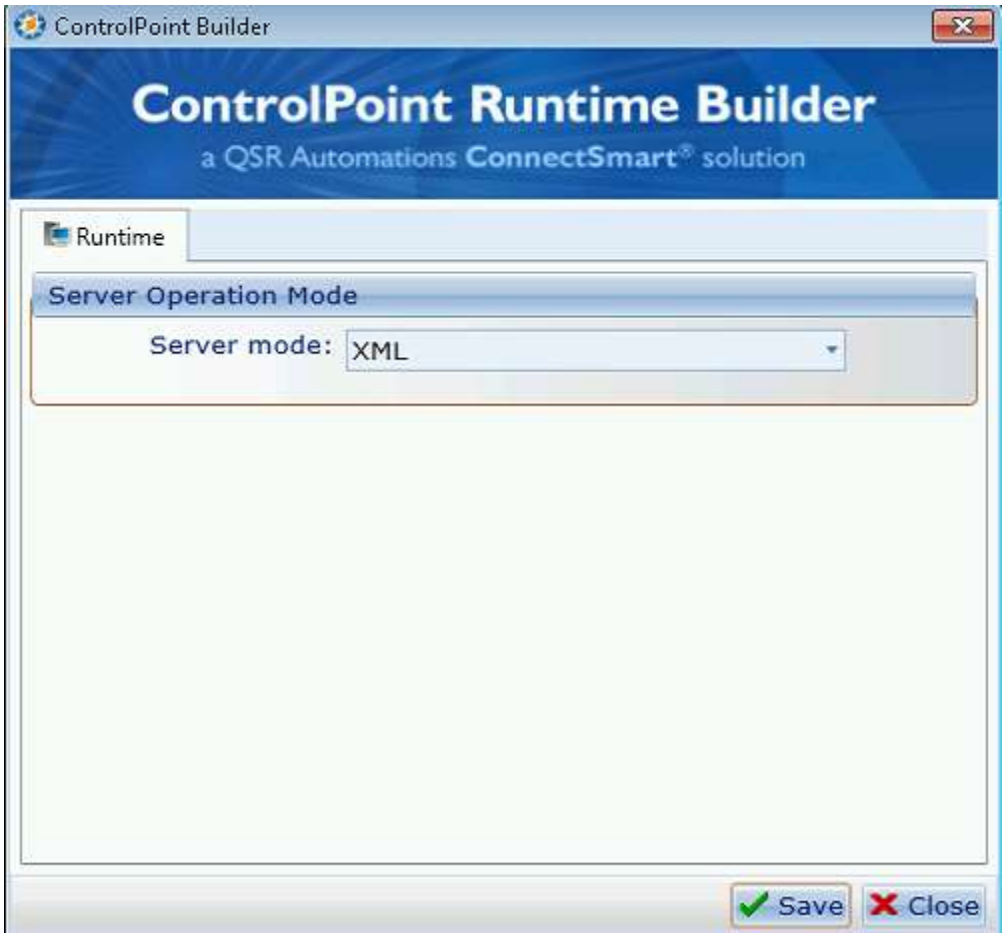
When finished, click Generate and save the settings.



ControlPoint Builder

After installing and running the ControlPoint Server and Client applications the ControlPoint Builder must be configured.

1. Open the file ControlPointBuilder.exe from *C:\Program Files\QSR Automations\ControlPoint\ControlPointServer\bin\ControlBuilder.exe*.
2. Select XML from the drop down menu in the Server Mode field.



QSRSock.dll

Copy the file QSRSock.dll and place it into *C:\Windows\System32* if you are running a 32 bit operating system. This DLL can be acquired from PixelPoint if needed.

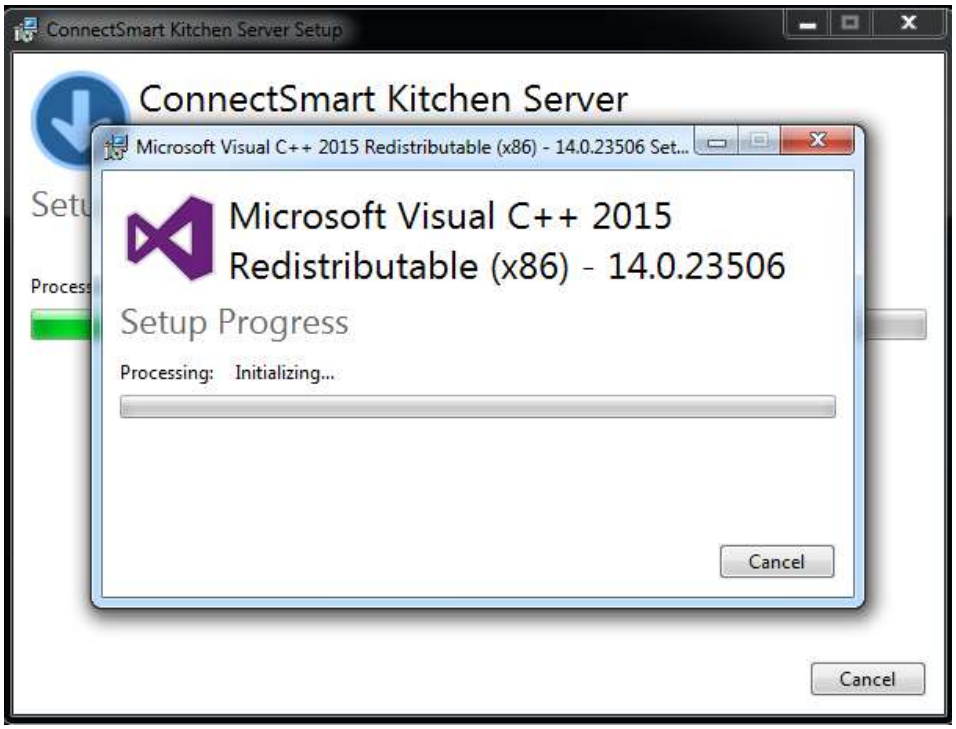
64 bit operating systems may require additional installers to be added to the System folder. This configuration has not yet been tested on a 64 bit system.

ConnectSmart Kitchen Server

To install and configure the Kitchen Server:

1. Run the file KitchenServerSetup.exe.
2. Check the corresponding boxes to install both the Kitchen Server and Kitchen Builder, as well as to accept the license terms and conditions. The Bin Editor and Reporting Services can also be installed if desired, but are not required for or supported by PixelPoint. Click Install when finished.

3. If not already present on your system, Microsoft Visual C++ will be installed. Select a location to save the Setup executable before it is run.

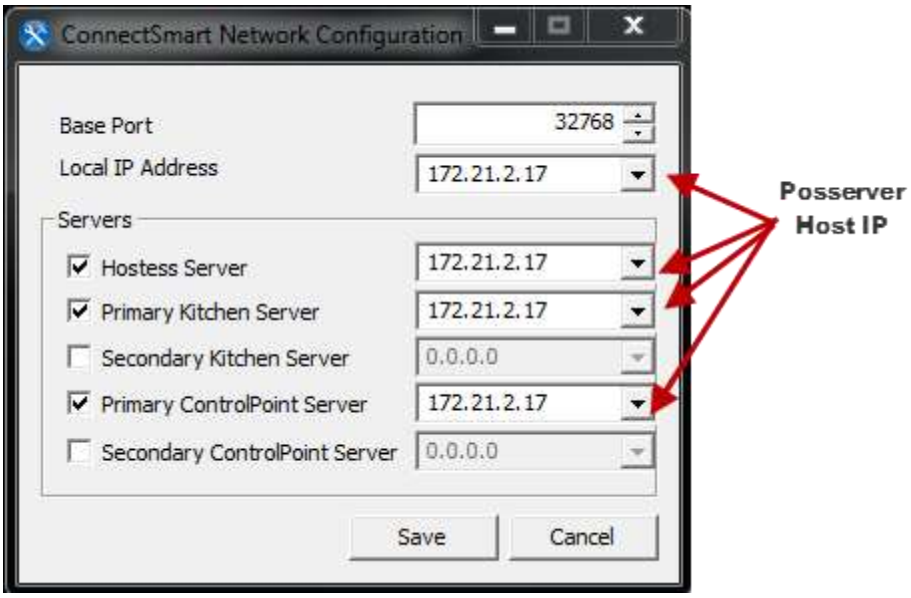


4. Once Visual C++ and the ConnectSmart Kitchen Server are finished installing, close the setup window.

Network Configuration Manager

To configure network settings:

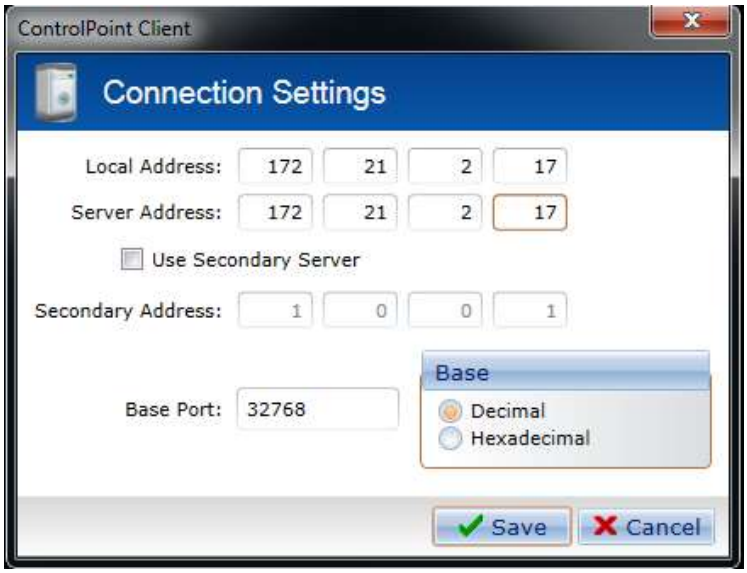
1. Open the Network Configuration application from *C:\Program Files (x86)\QSR Automations\ConnectSmart\KitchenServer\Common\Bin*.
2. In the configuration window, enter the POSServer Host IP address into the fields shown below. This should be the same IP address used by the Kitchen Server.



3. Select Save.

QSR Device Agent

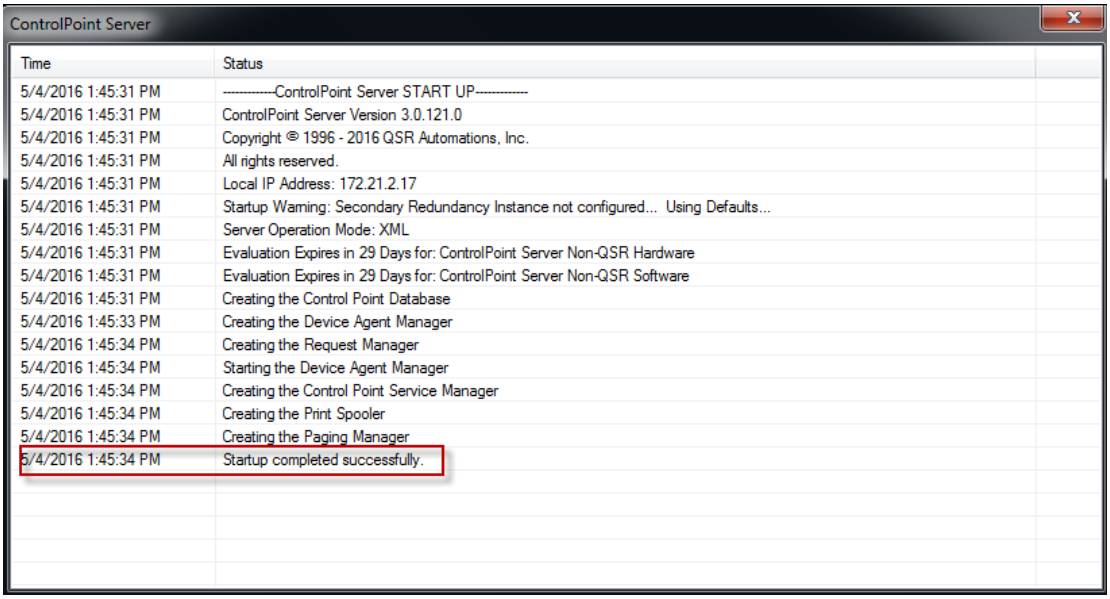
Install the QSR Device Agent by running the QSRDeviceAgent.exe file. This file will need to be placed on the Xceed controllers when configuring later in the documentation. When installation is complete, run the Device Agent and enter the POSServer Host server IP address into the Local and Server IP fields. The Base Port should stay at its default, 32768.



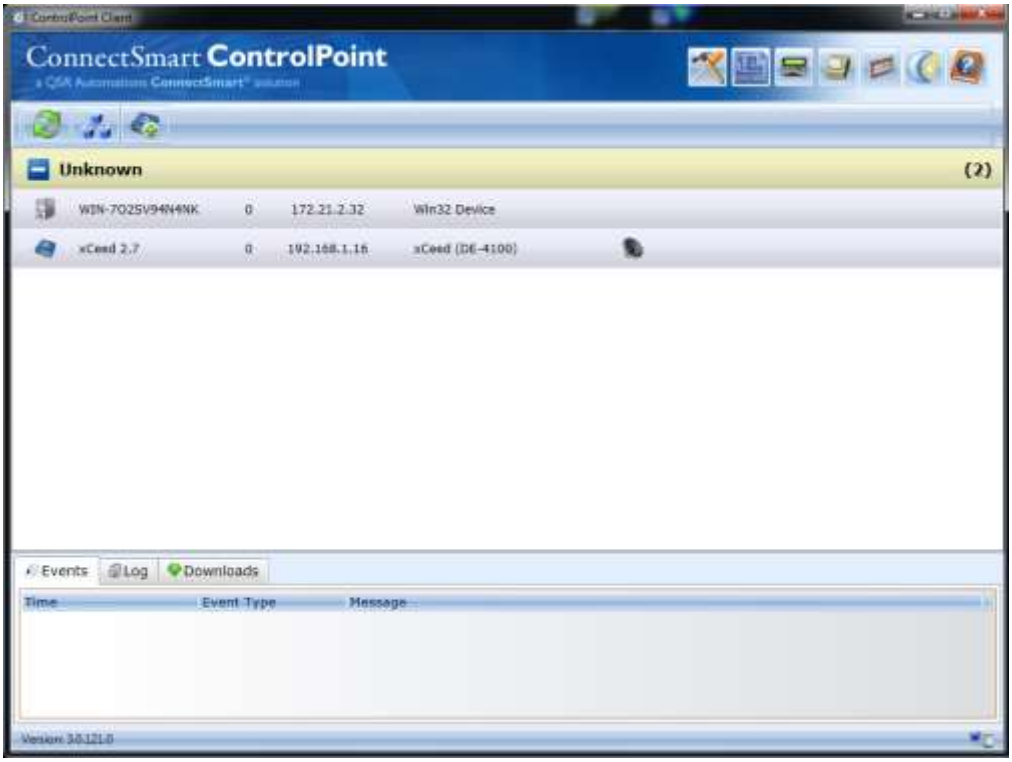
xCeed Kitchen Controller

To configure the QSR xCeed Kitchen Controller(s):

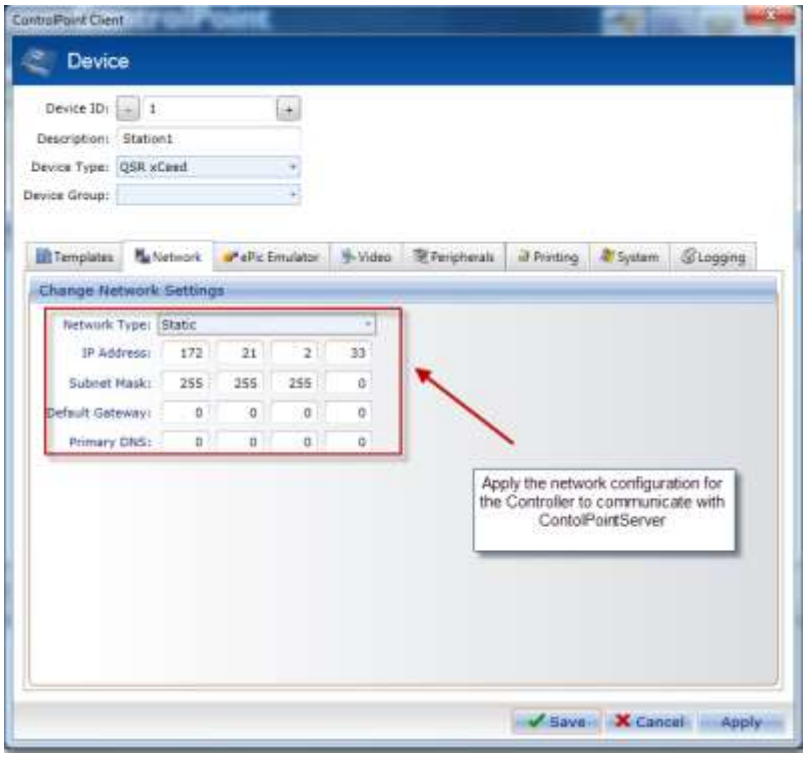
1. Connect the controllers to the network and power them on.
2. Start the ControlPointServer on the host server. Before moving on, verify that the Server software has started successfully.



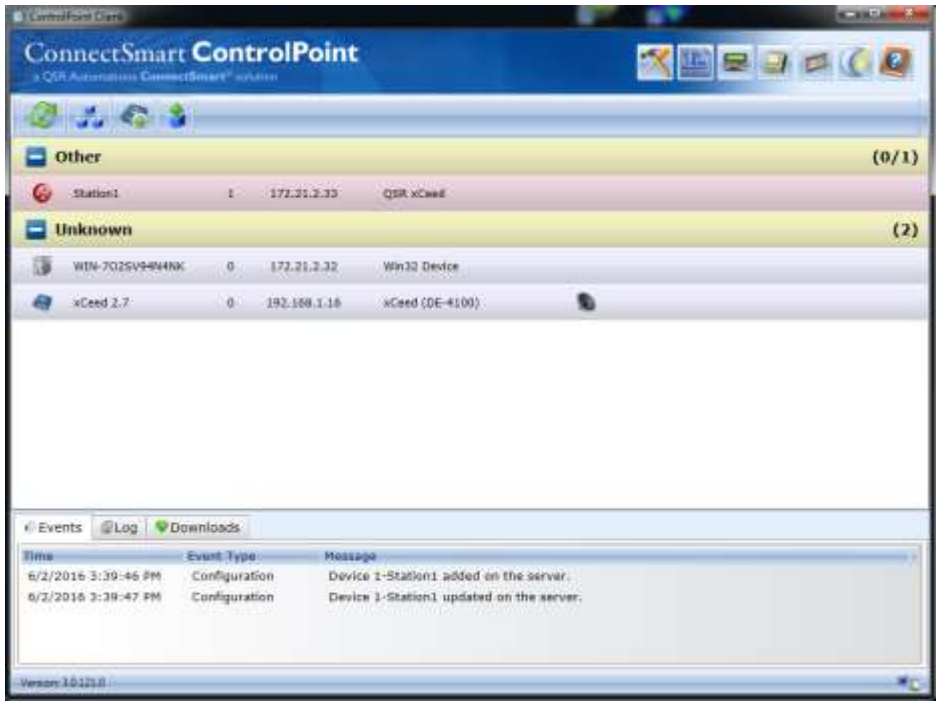
3. Start the ControlPoint Client. If the xCeed Controllers are turned on and connected, they should be displayed in the ControlPoint Client.



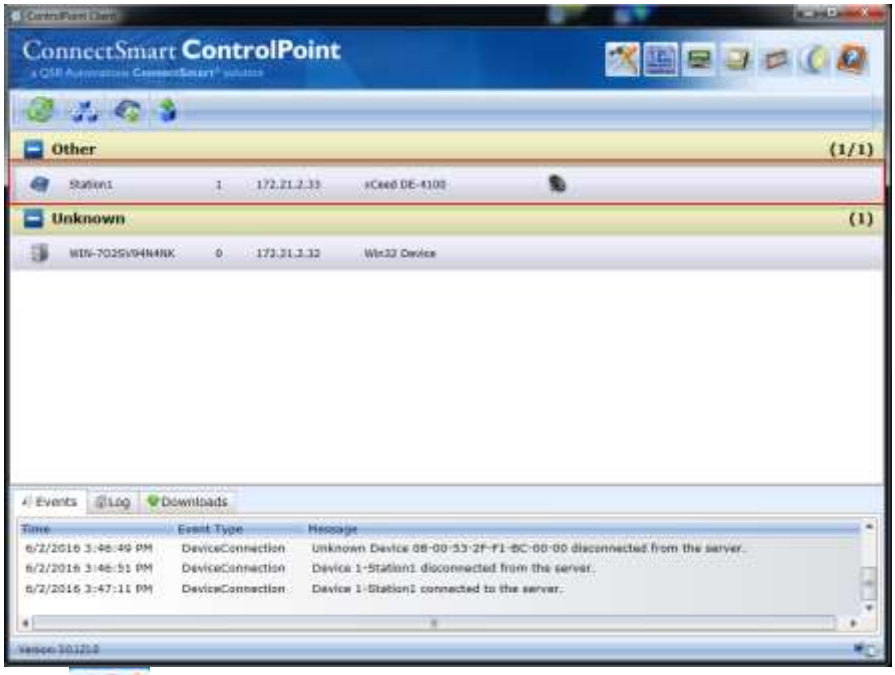
4. Click the  icon to begin the process of assigning a new device.
5. Enter a description or name for the device (ex. Station1).
6. Click the Network Tab.
7. Set the Network Type to Static and enter the POSServer Host IP address into the IP Address field.



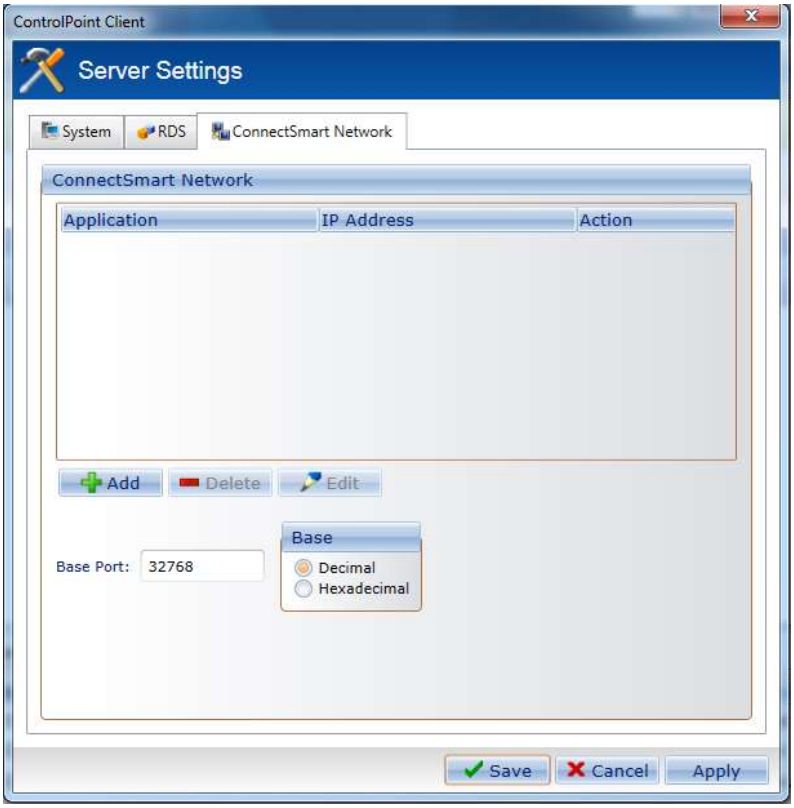
8. Apply and save these settings. The newly created Device 'Station1' is now displayed in the ControlPoint window.



9. Select the xCeed Controller Box and click the  button to assign the device to a station.
10. Select the newly created station and click the Assign button. The main ControlPoint window will update to show the device as Station1.

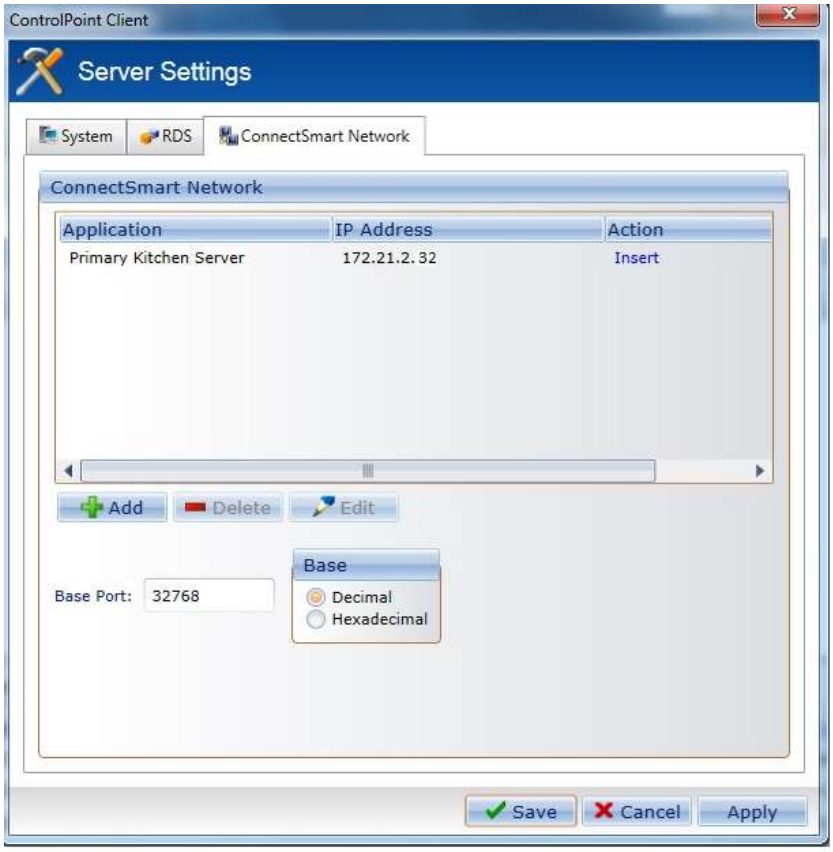


11. Click the  button to access the Server Settings.
12. Click the ConnectSmart Network tab and click Add.



13. Select Primary Kitchen Server from the Product drop down menu.
14. Enter the IP address of the server.

15. Click Save.
16. Click Apply in the ControlPoint client main window.

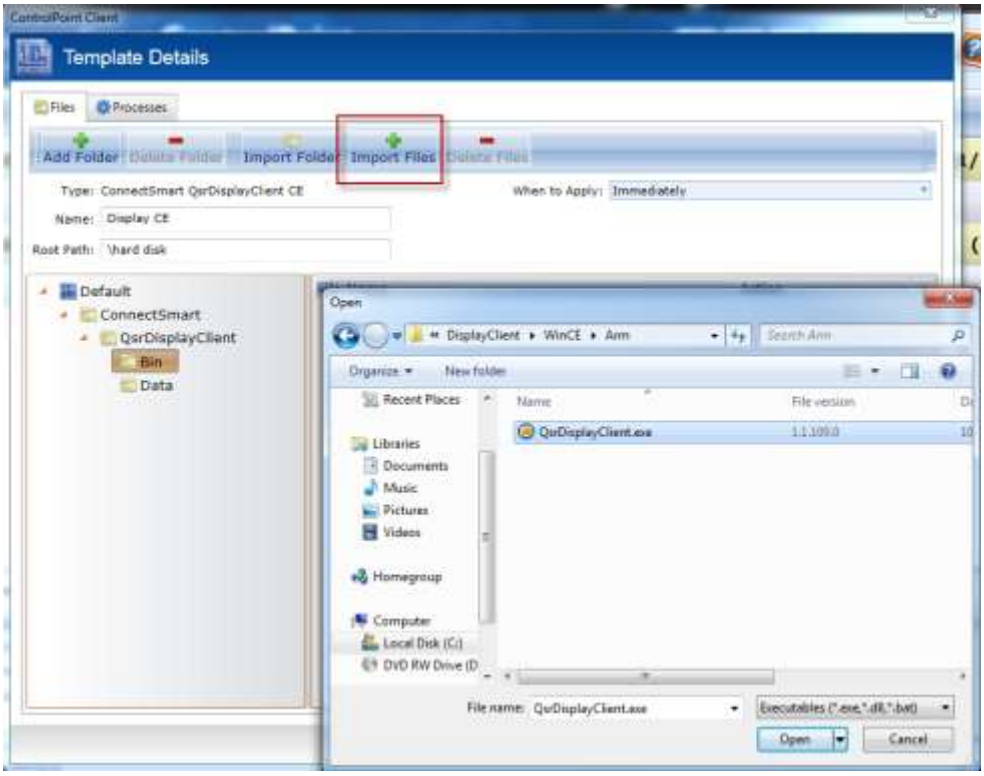


17. Click Save and close the window.

Assigning a Template to a Device

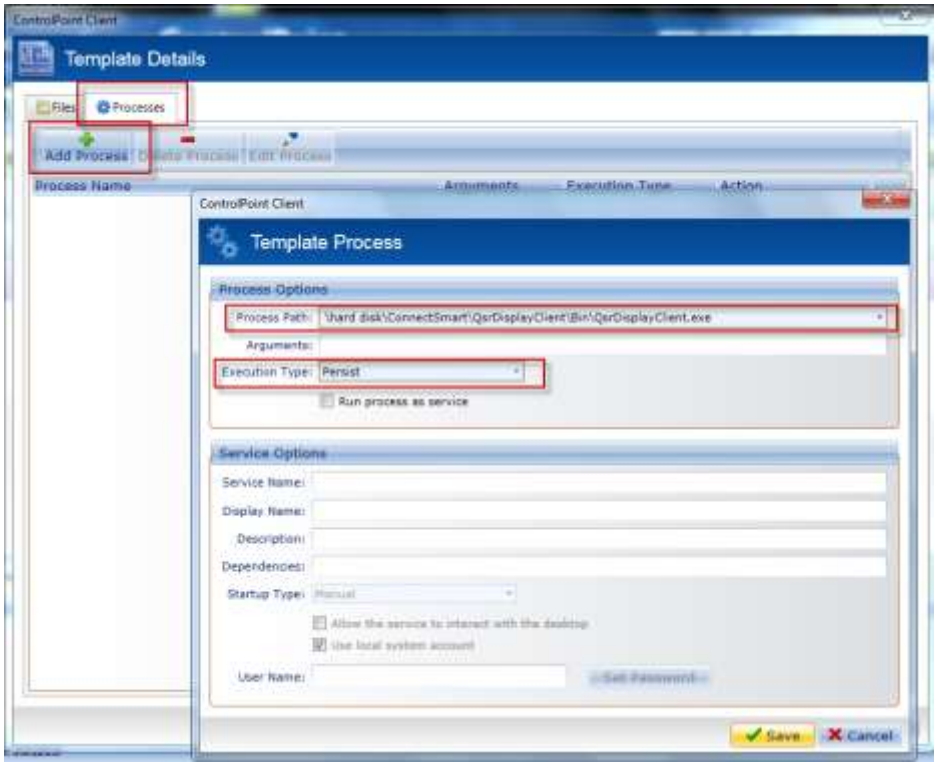
1. Click on the  button to open the Templates window.
2. Click the Add button.
3. Name the template.
4. In the Type field, select ConnectSmart QSRDisplayClient CE.

5. Click Apply and Save.
6. Once saved, the Template Details screen will appear. Click on the folder titled Bin. The folder tree may need to be expanded to expose this folder, as shown below.

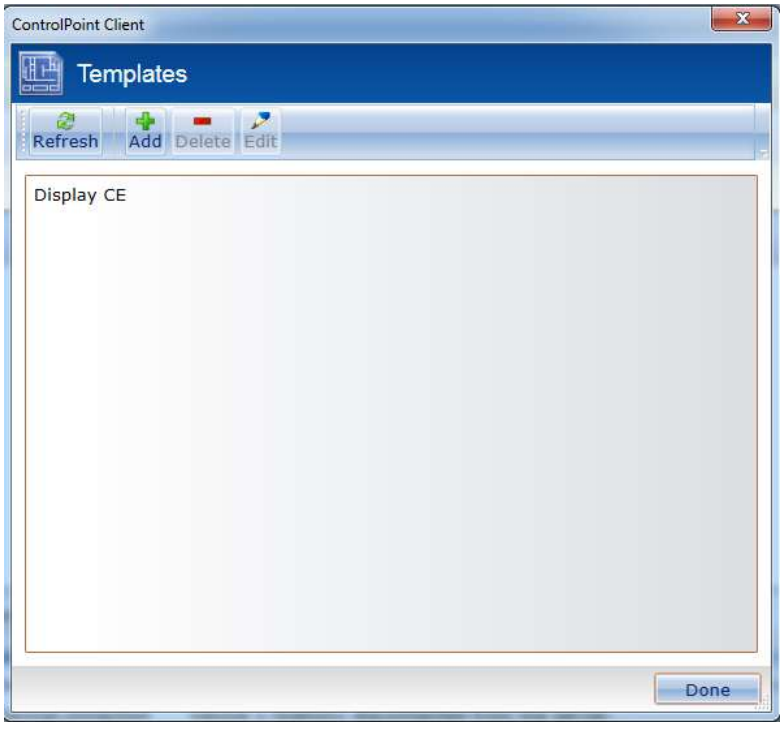


7. Click Import Files.
8. Select the file QSRDisplayClient.exe located in *C:\ProgramData\QSR Automations\ConnectSmart\KitchenServer\ClientInstalls\DisplayClient\WinCE\Arm* and click Open.

9. Open the Processes tab and click Add Process.



10. Using the Process Path drop down, select *\hard disk\ConnectSmart\QSRDisplayClient\Bin\QsrDisplayClient.exe*.
11. Using the Execution Type drop down, select Persist.
12. Click Save.
13. Click Apply on the Template Details window.
14. Click Save.
15. Click Done from the Templates window.



ConnectSmart Kitchen Builder PRO Configuration

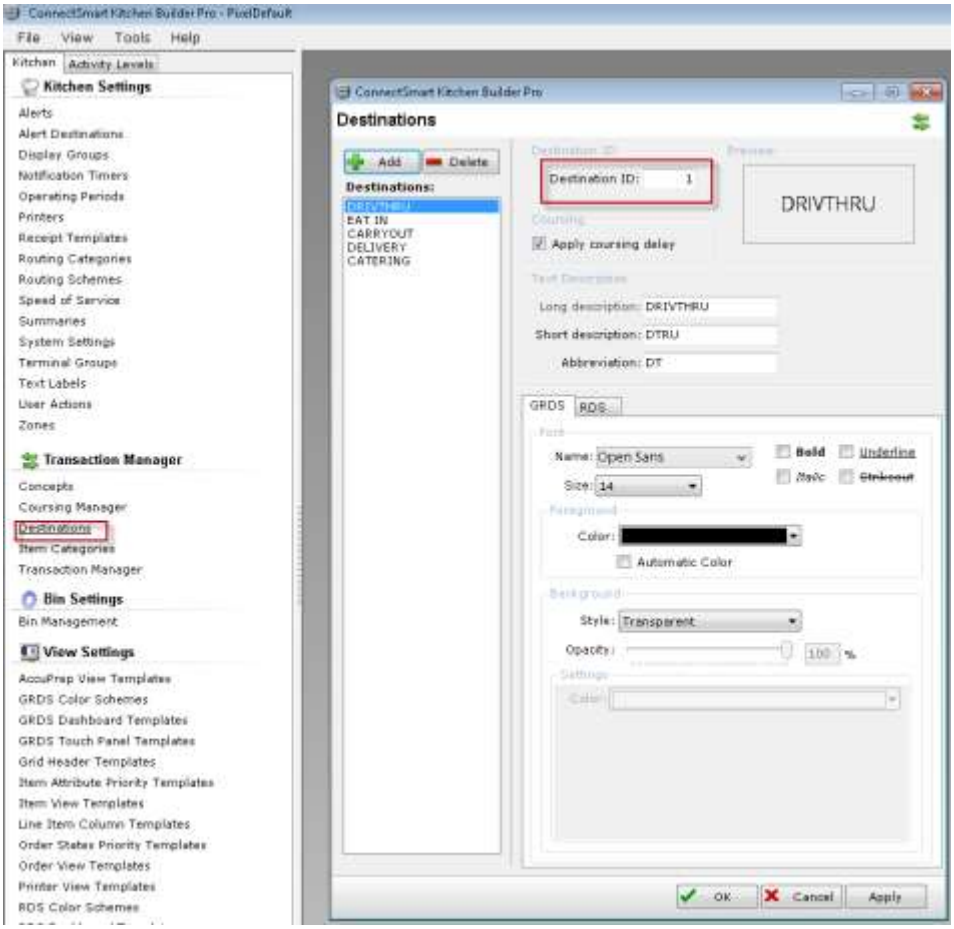
The following configuration will be used for basic communications between the QSR software and PixelPoint using the default database provided in a fresh install of PixelPoint. Please refer to QSR support for information regarding other configurations available in the ConnectSmart Kitchen Builder.

To configure the ConnectSmart Kitchen Builder for use with PixelPoint:

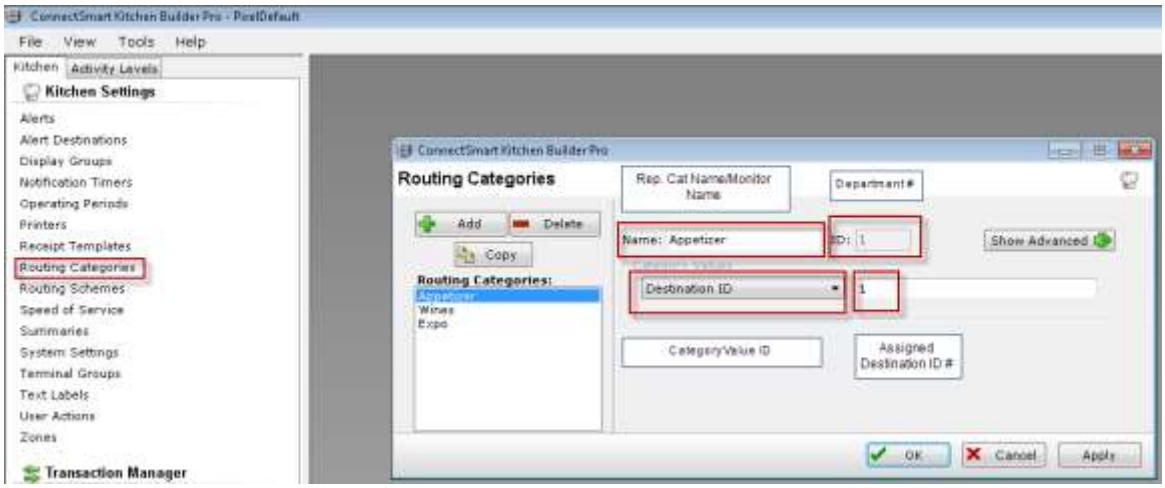
1. Start the ConnectSmart Kitchen Builder application.
2. Select Create a new dataset and name the configuration to be created.

3. Click Continue.
4. Under the Transaction Manager menu, select Destinations.
5. Click the Add button to add a new Destination. Destination IDs are numbered automatically in the order they are created and should be named to match their corresponding sales types in PixelPoint. For example:

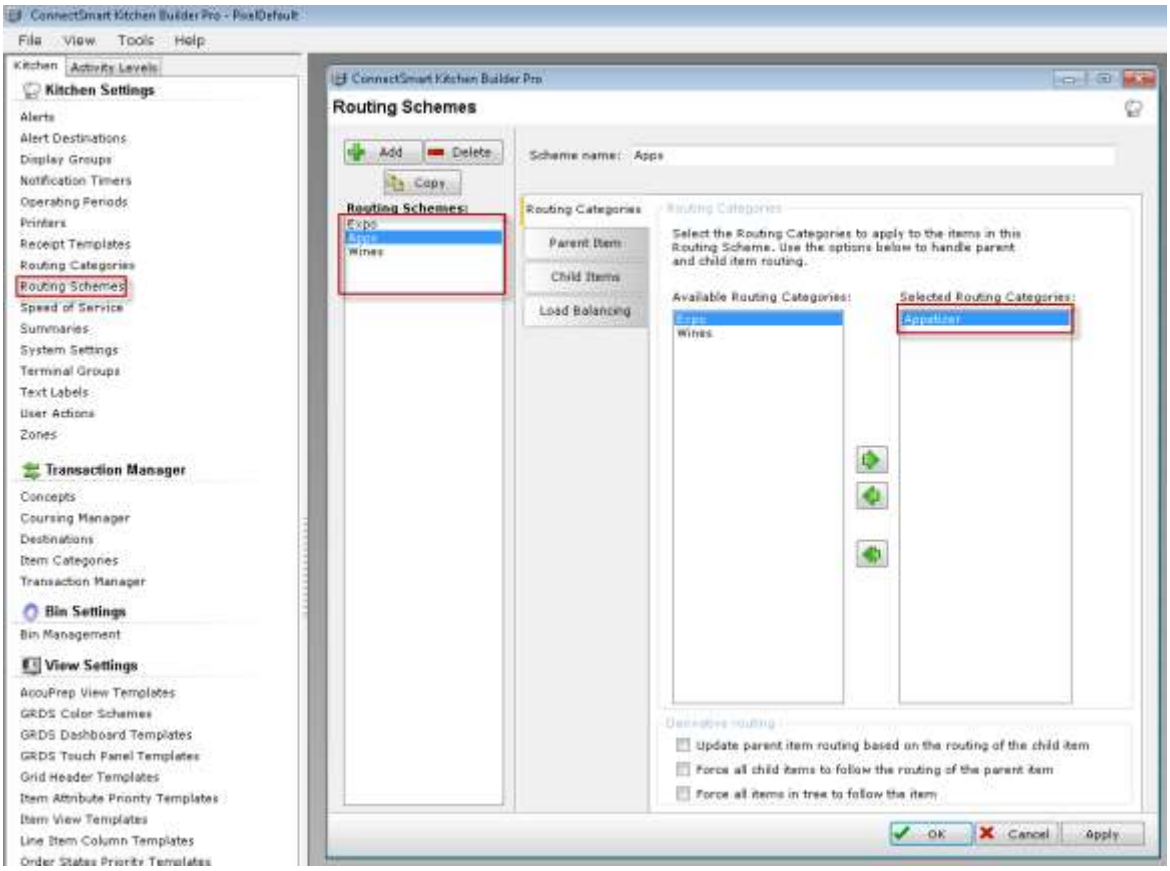
Destination ID	Sample Pixel Sales Types
1	DRIVE THRU
2	EAT IN
3	CARRY OUT
4	DELIVERY
5	CATERING



7. Click Apply and OK when finished.
8. Under the Kitchen Settings menu on the left, select Routing Categories.
9. Create a new Routing Category by clicking the Add button. Name each Routing Category to match its corresponding POS Report Category (for example, Appetizer, Wine, etc.).
10. For each created Routing Category, set the Category View to Destination ID, and enter the ID # that will be used later in the PixelKDS to match with the PixelPoint Report Category.



11. When all required Routing Categories have been created, click Apply and OK.
12. Under Kitchen Settings, select Routing Schemes.
13. Use the Add button to create a new Routing Scheme. For ease of use, each Scene should be named to match with each Routing Category that was just created.



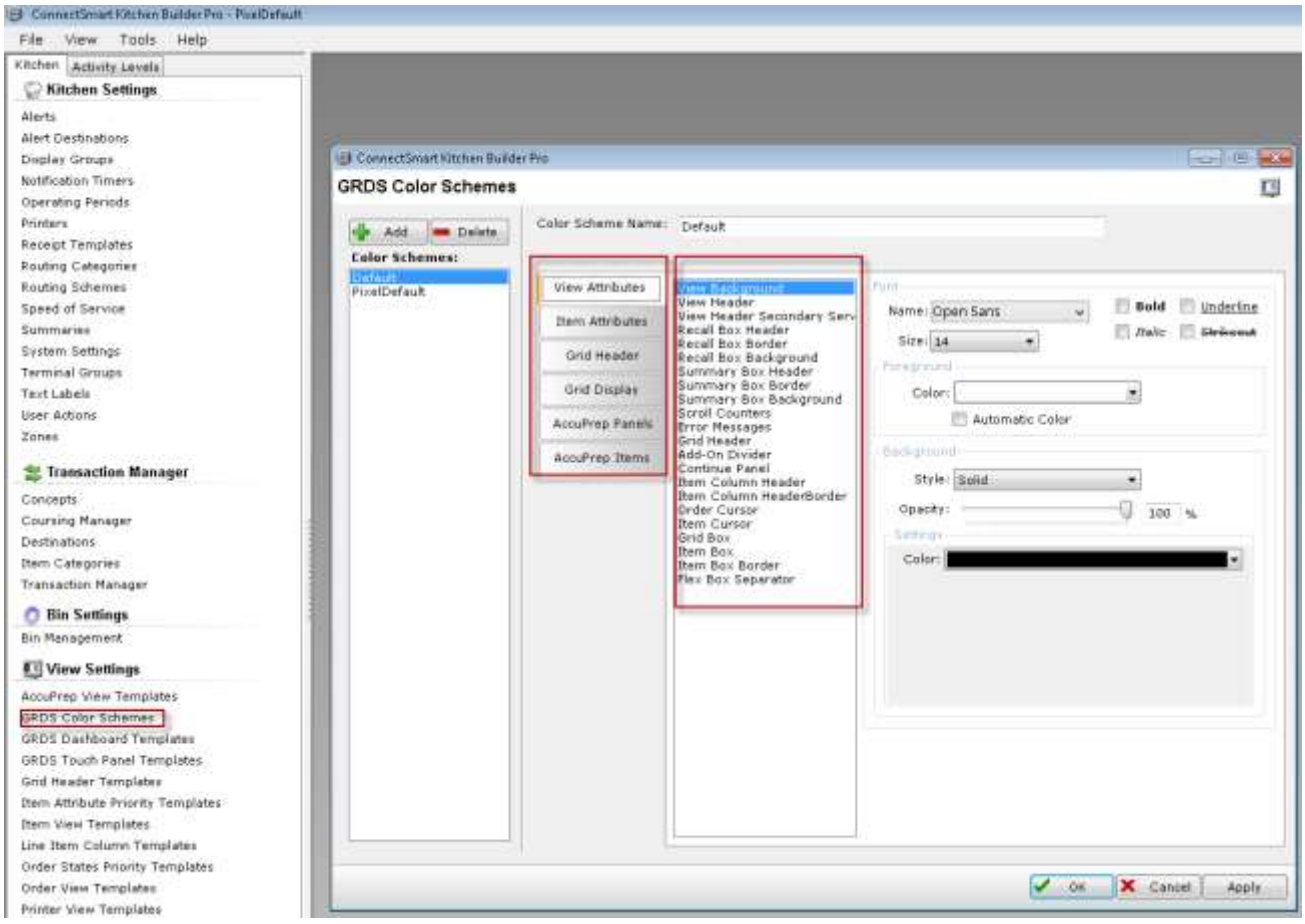
14. Match each Routing Scheme to its corresponding Routing Category.
15. When finished, click Apply and OK.

Additional Kitchen Builder Pro Settings

The following settings have been modified from their default state. These settings are not required for the integration of PixelPoint with the QSR software, though are being pointed out as they may be useful depending on the specific needs of the customer site.

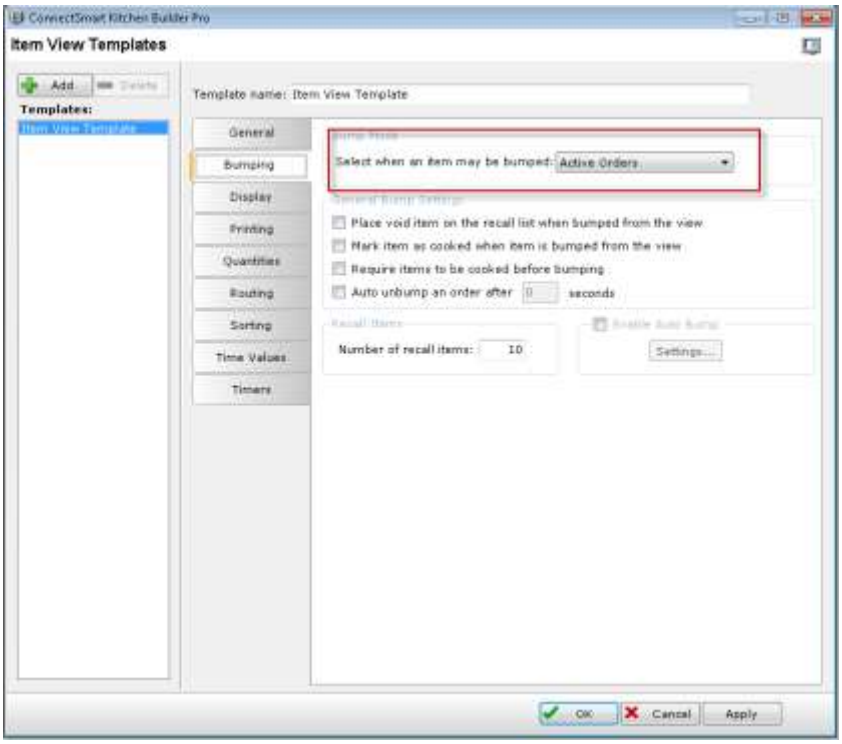
Color Schemes and View Templates

Under the View Settings heading in the Kitchen Builder Pro interface, and a number of selections exist which control the various display settings that the kitchen monitor will use to display orders. The sections GRDS Color Schemes, Grid Header Templates and Item View Templates should all be configured to the preference of the customer site.



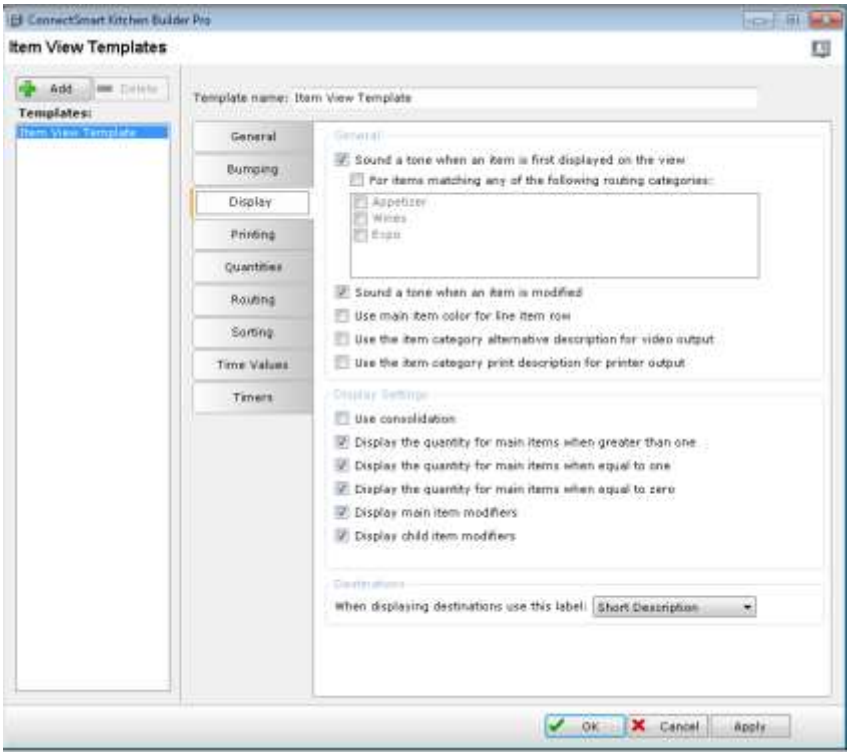
Bumping

Within the Item View Templates window, there is a tab titled Bumping. We suggest that the Bump Mode be set to Active Orders.



Display

Within the same window, the Display tab offers a number of options controlling how items are displayed. Some reccomended settings are shown as selected.



Quantities

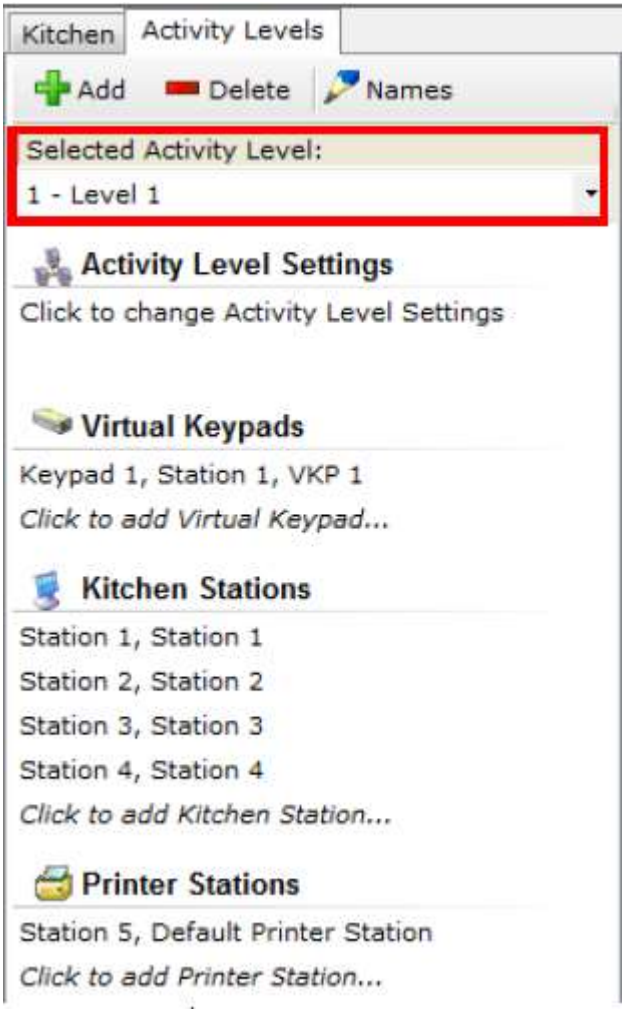
In the Item View Templates window, we suggest that all selections within the Quantities tab be checked to always display the quantities of all items on the KDS.

Routing

In the Item View Templates window, we suggest setting the Routing Mode in the Routing tab to On the Fly.

Activity Levels

Activity levels provide a way to configure the Display Client to operate differently as store conditions change throughout the day or week. As sales volume and staffing levels change, it may be beneficial to change the configuration of CSK. The major components of an activity level are: Routing Schemes, Virtual Keypads, Kitchen Stations and Printer Stations.



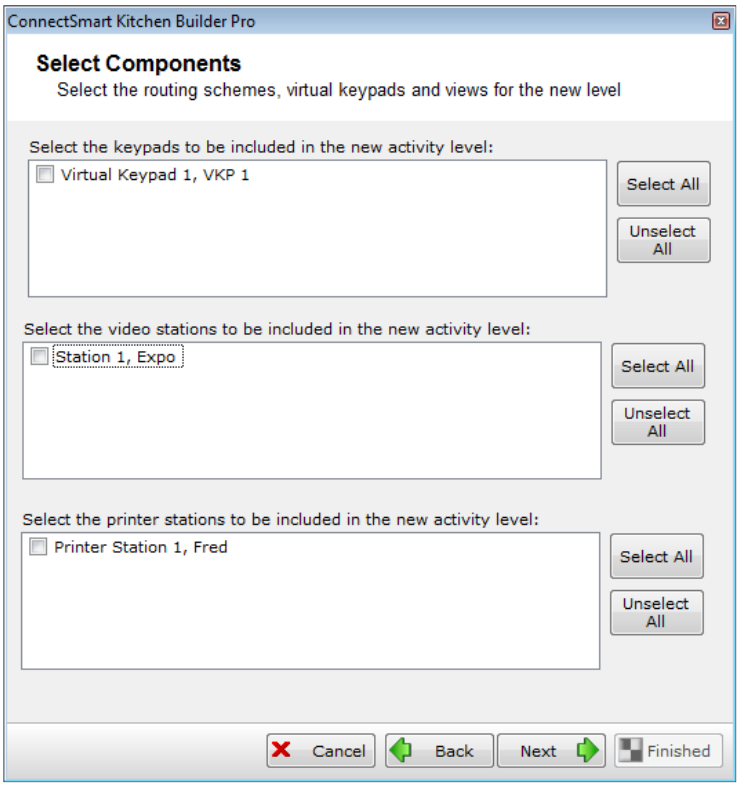
In addition to being able to navigate each component of the Activity Level individually, you can edit and manage the entire Activity Level on the Activity Levels tab in Kitchen Builder Pro.

To create a new activity level, select the Add button. Activity Levels can be created from scratch, or existing activity levels can be copied and modified.

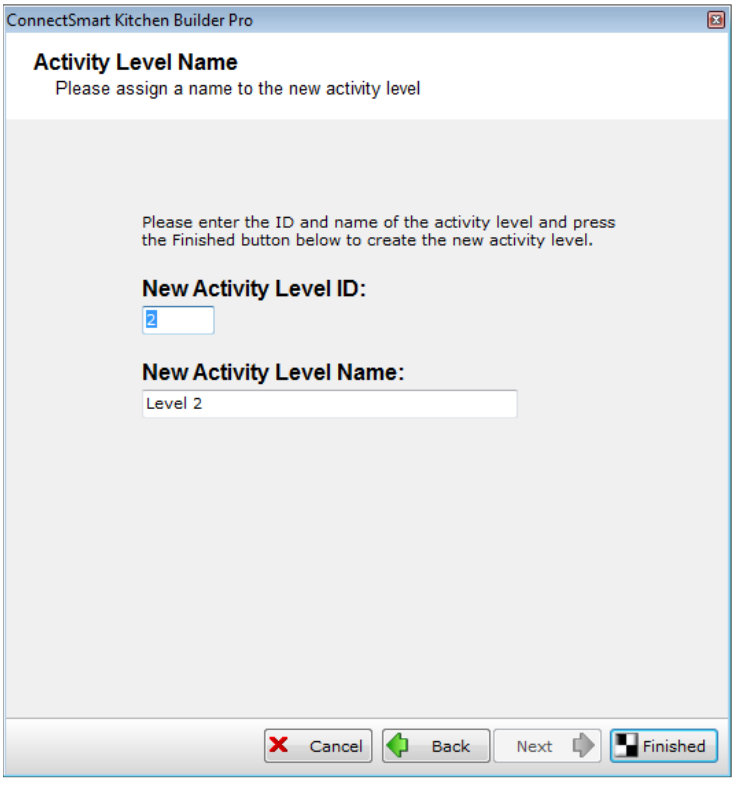
Select an existing activity level (primary level or split screen) from which to base the new activity level on. select Next.

The select components screen appears.

Select the routing schemes, virtual keypads, and station views that you want to include in the new activity level. Each component can be individually selected, or the Select All and Unselect All buttons can be used to select or unselect all components in any given section. select Next to advance to the last step, the Activity Level Name screen.



Enter the new Activity Level ID and name and select Finished. The new activity level is now created.

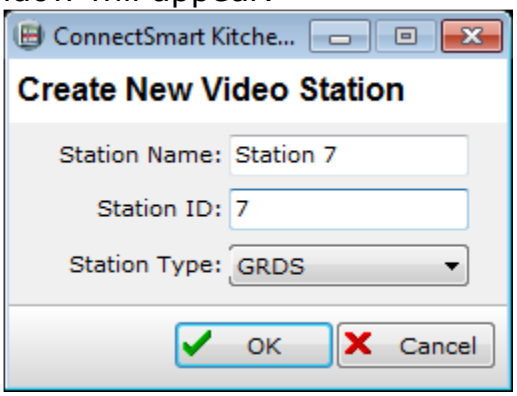


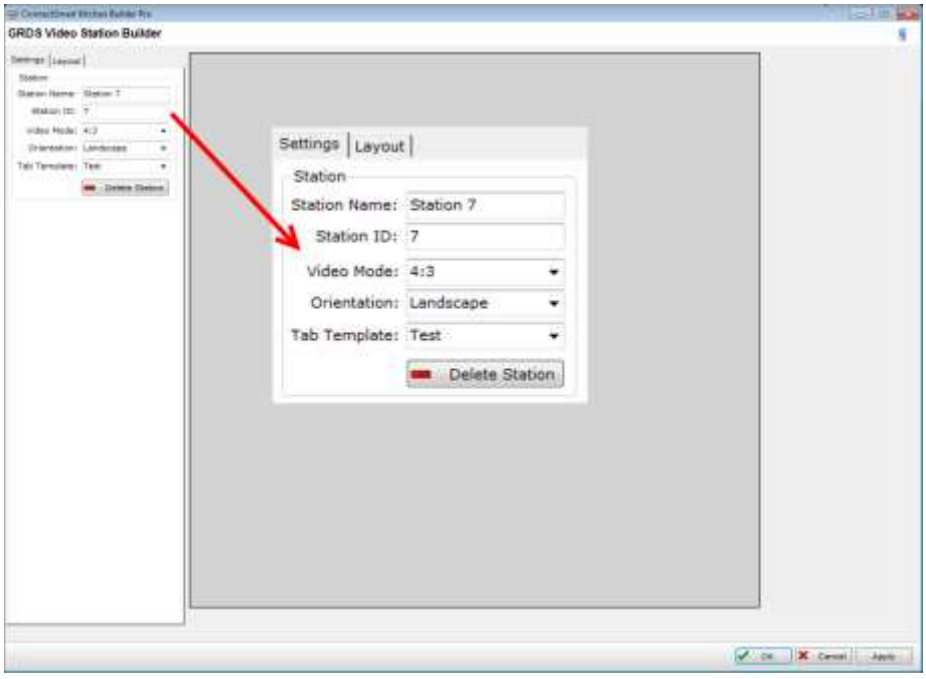
Creating and Editing Stations

CSK provides a high level of flexibility in creating and editing kitchen stations and virtual views. Prep, Expo and Assembly stations are all examples of kitchen stations which many users may find useful.

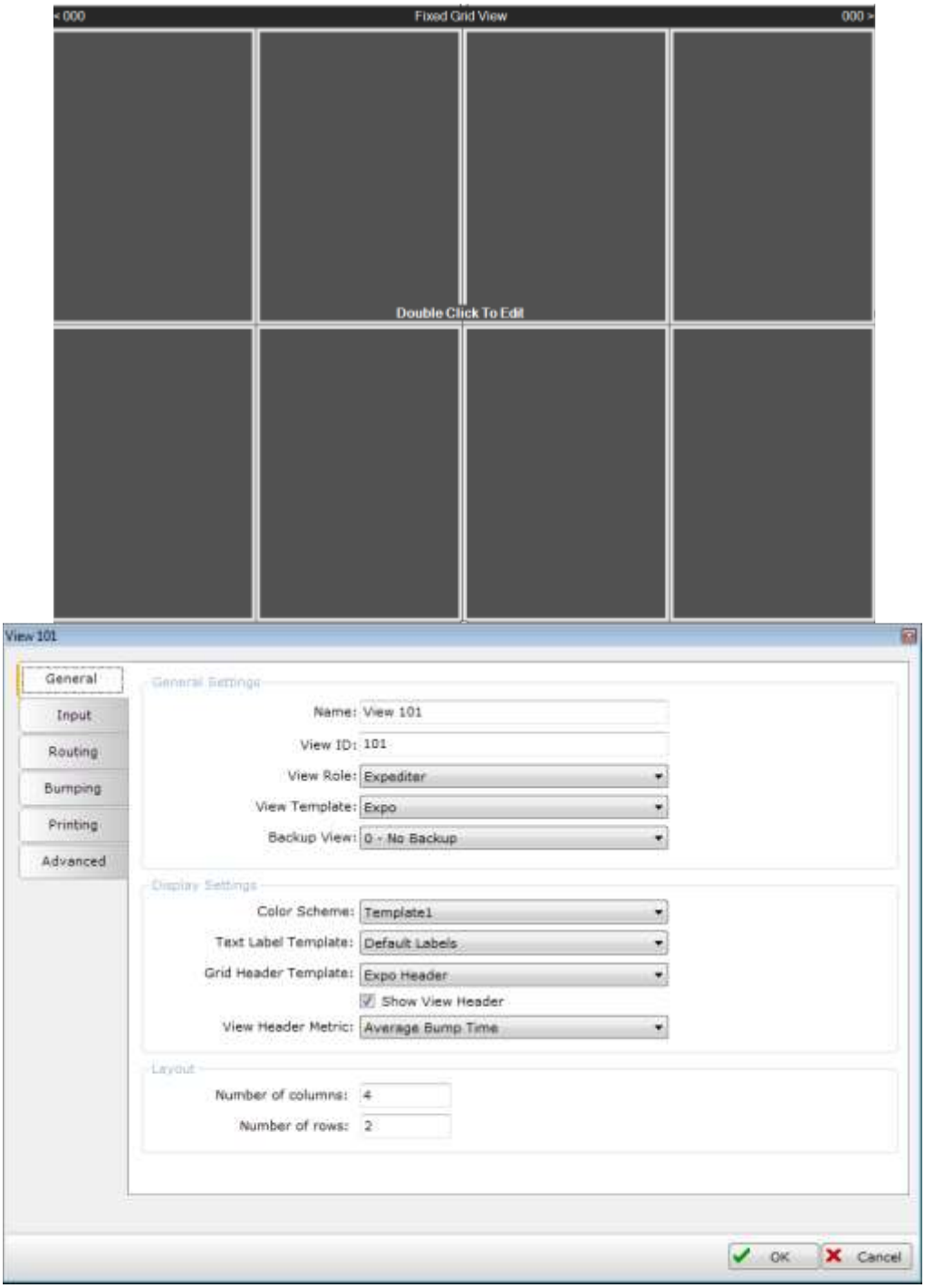
To create a new Video station:

1. Navigate to Activity Levels>Kitchen Stations>Click to Add Kitchen Station.
2. In the Create New Video Station window, name the station and assign a Station ID. Station IDs must be unique and are used for both video and printer stations.
3. Select the Station Type. GRDS settings are for QSR devices that are capable of displaying higher quality graphics, fonts and styles, while RDS settings are typically used for legacy QSR devices.
4. Click OK. The GRDS Video Station Builder window will appear.
5. Select the Video Mode (aspect ratio) of the monitor in use. 16:10 and 16:9 are most often used for widescreen displays
6. Select Landscape or Portrait for the Orientation of the monitor.
7. Select a Tab Template to use. Tabs are useful, as they allow users to check multiple views from one screen. For example, if a manager using a bar station wants to check the progress of orders in the kitchen.
8. In the Layout tab, enter a name and ID for the Tab.
9. Click Apply and OK.





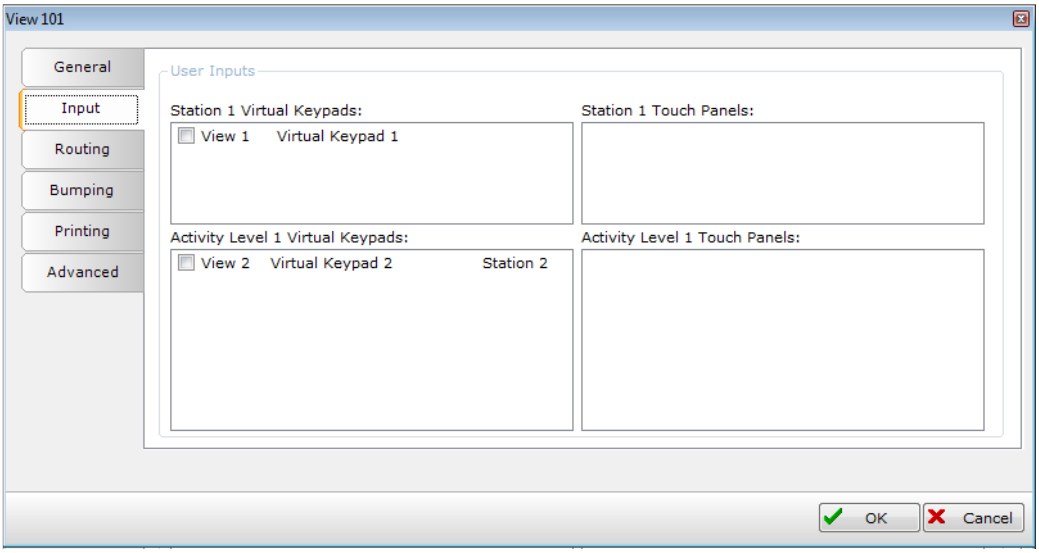
10. Select a View and drag it to the area on the right.
11. Double Click in the View area to open the View Editor and edit preferences for the selected view.



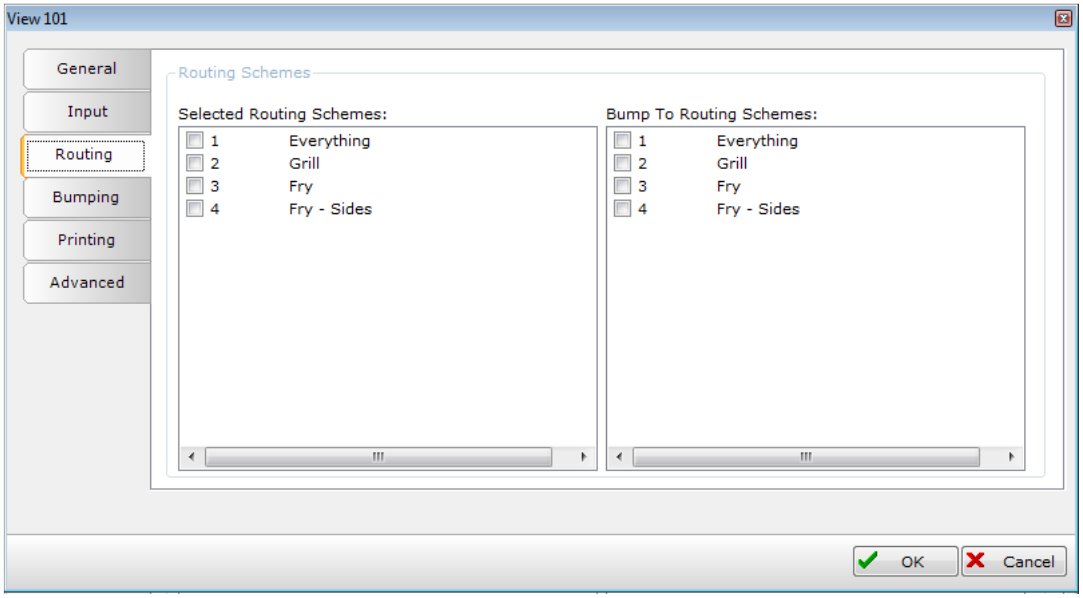
12. Name the view for its intended use.
13. Set a View ID unique to this view, or use the default.

14. Select a View role for this view. The options are as follows:
    - **Expediter** (Expo) - Show the entire order. This allows you to view the status of each order and sort the orders according to their status. Typically, order views are expo stations and item views are prep stations. This is the default role for Fixed Grid and Flex Grid views.
    - **Prep** - Show items from orders that are being prepped specifically at that location. For example, you may have grill, fry, and salad stations in your kitchen. The items specific to that station are the only ones that appear on their respective displays. When a cook bumps an item off their prep station, the color attributes of an order can change at the expo station.
    - **Assembler** - Stations are intended to act as a "middle expo." Typically uses order views, allowing an order to be prepared prior to becoming assembled at the expo station.
    - **OrderReady** - Views are customer-facing displays designed to display order level information for orders that are currently in progress and/or completed and ready to be picked up by the customer. The order level information displayed can be any or all of the order level details provided by the POS including customer name and order number as well as the elapsed time since the order was first entered or prepared.
15. Select a View Template.
16. Select a Backup View, or choose the current View to disable this function. This options provides a redundancy in the event of a monitor going offline.
17. Select a Colour Scheme.
18. Select a Text Label Template to assign to this view. Text tables are a group of text labels that are defined on the Text Labels form.
19. Select a Grid Header template and choose whether or not you want the header to appear on the view.
20. If you are using a Grid Header, select a View Header metric. The View Role dictates the options in this field. If your role view is Expediter or Assembler, select None, Average Bump Time, Average Expediter Time, Average Prep Time, Moving Average Bump Time, or Moving Average Expediter Time. If your view role is Prep, select None, Average Bump Time, or Moving Average Bump Time.
21. Select the number of columns of order cells you wish to display. The preview window reflects the selection. If you are setting up a Fixed Grid view, select the number of rows, up to 3, of order cells you wish to display.

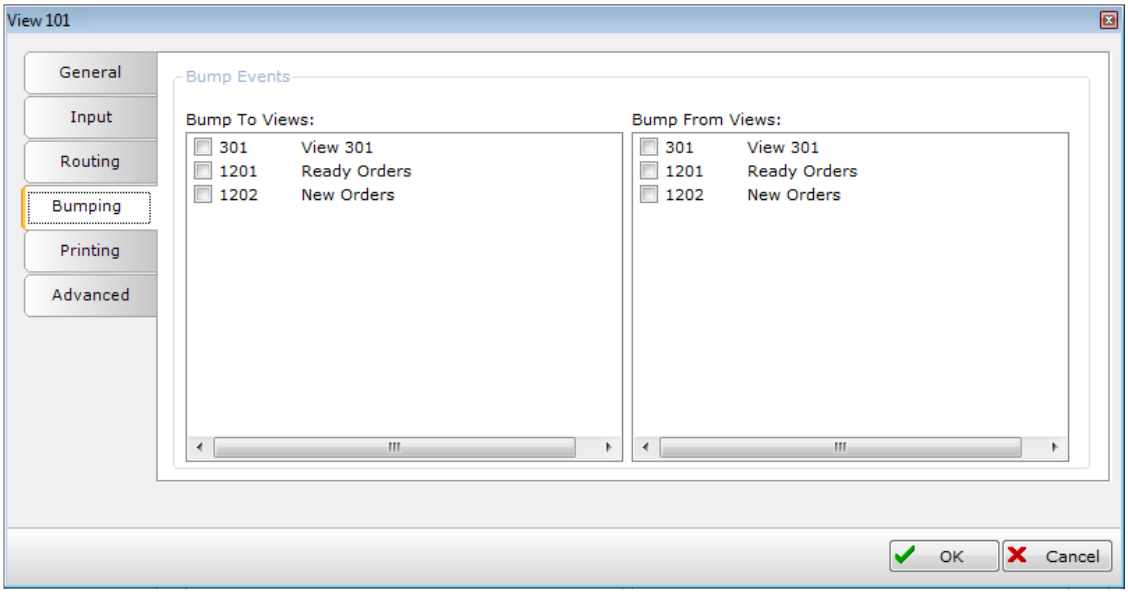
22. Using the Input tab, select any Virtual Keypads you wish to use with this view. This tab will show only Keypads that are assigned to the current station. New Keypads can be assigned in the Physical Device ID field on the Virtual Keypads form.



23. In the Routing tab, select the routing scheme you want to route to the station being set up. In the Bump To Routing Schemes section, select a routing scheme to bump and item/order to. An example of the use of the Bump to column would be if if Station 1 has 'RoutingScheme1' selected under *Bump To Routing Schemes*, and Station 2 has 'Routing Scheme1' included in its *Selected Routing Schemes*, once the order/item (that was routed via a different routing scheme that included items not in RoutinScheme1) is bumped from Station1, it will appear on Station2 and any other view that has RoutingScheme1 configured under *Selected Routing Schemes*.

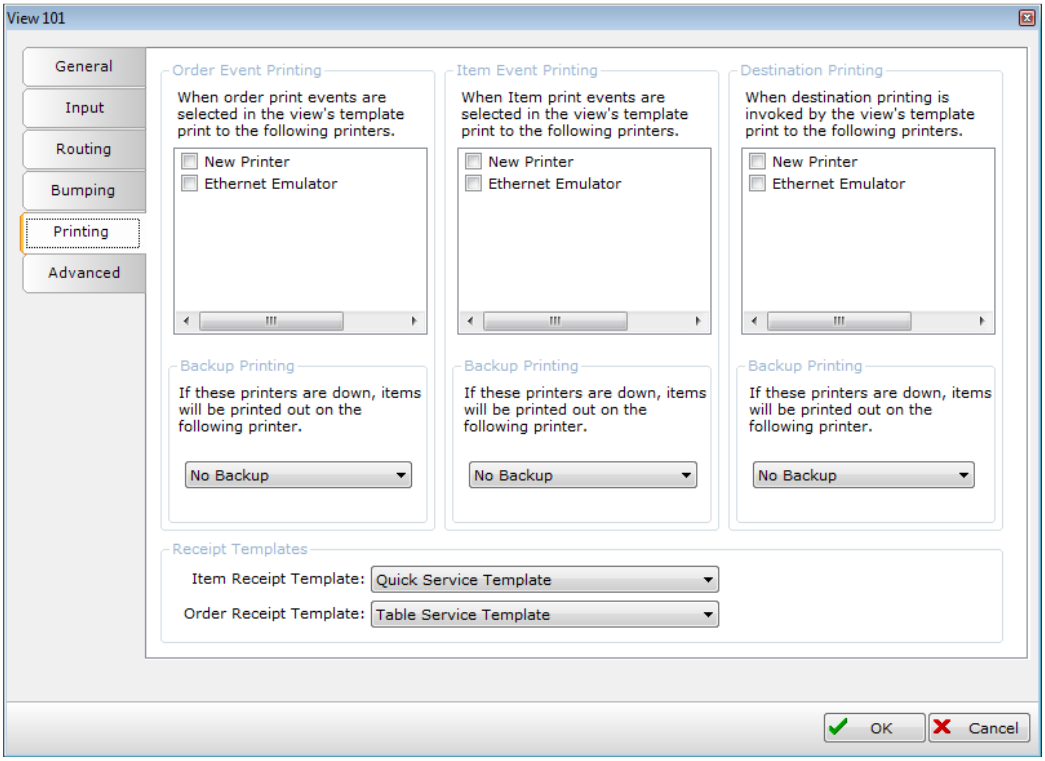


24. In the Bumping tab, select which views to bump to and from (what is bumping?).
    - **Bump To Views** – When an item bump is received from a virtual keypad, the item will be bumped to a the specified view or views.
    - **Bump From Views** – Bumps the same order off the selected view(s). Both order and item views are included in this list. For instance, your views might include Grill Prep, Fry Prep, and Drive Thru Expo. For example, if you want to configure a specific routing scheme to route to Station 1 but want the order/item to appear on Station 2 after it is bumped from Station 1 (and the same item routing scheme is not configured to route to station 2), select the view to bump to in the Bump To Views section. If you want to bump an item/order from Station 2 automatically when it is bumped from Station 1, go to the View Editor on Station 1 and select Station 2 in the Bump From Views section.



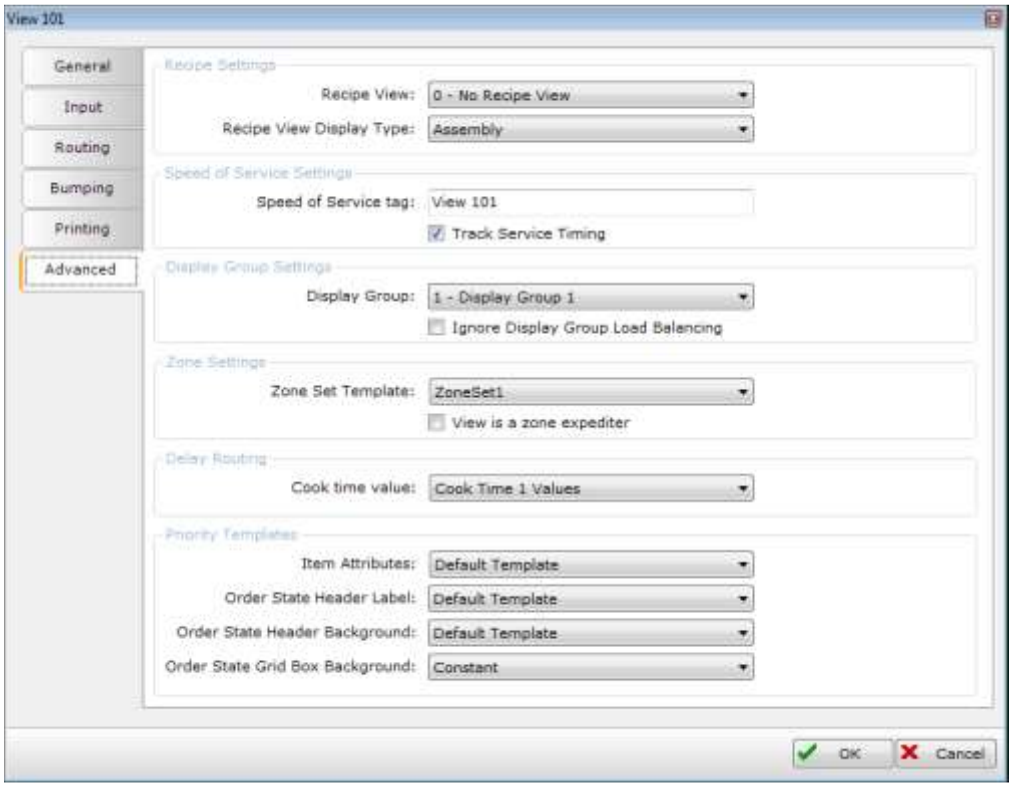
25. In the Printing tab, there are three sections:
    - **Order Event Printing** – Prints when an order is bumped and when an order is prepared.
    - **Item Event Printing** – Prints once all routed items have been tagged by user, when an item is tagged and when all items routed to view are prepared.
    - **Destination Printing** – Destination printing occurs when any order on a station view with the selected destination is bumped off that view. Any combination of configured destinations can be selected.

26. Select a Backup printer for each, if desired, to assign a secondary printer should the main printer for each selection go offline.



27. Select the required Item and Order Receipt templates to be printed.
28. In the Advanced tab, select a button on the keypad to assign the Recipe View to.
29. In Recipe View Display Type, select Assembly or Prep:
    - **Assembly** - Users of this presentation style are usually expediters who need to plate or "assemble" food a certain way before it is given to a customer.
    - **Prep -** Users of this presentation style are usually cooks and kitchen employees who must know ingredients and preparation specifics.
30. Enter a speed of service tag. With the speed of service tag, you can create a common identifier in the speed of service timing record for one or more views. The text that is entered in this tag will be saved in the actual speed of service record for order/items that are bumped from this view. Some common values for the speed of service tag include "Grill" and "Fryer" to designate prep displays associated with each. Another option may be to set the value to displays associated with a particular restaurant concept like "Burger Bungalow" and "Pizza Palace."
31. Select Track Service Timing to track Speed of Service data for each view. Selecting this option filters out all spy (also known as phantom or mirror) views and views used for advanced purposes such as routing and printing.

32. Select a display group. The display group value allows you to associate one or more prep stations with an expo station. This concept is useful in kitchens with separate cook-lines and in restaurants with multi-concepts and prep areas. If no display groups are configured, all of the views will automatically belong to the same display group. These are created on the Display Groups form.



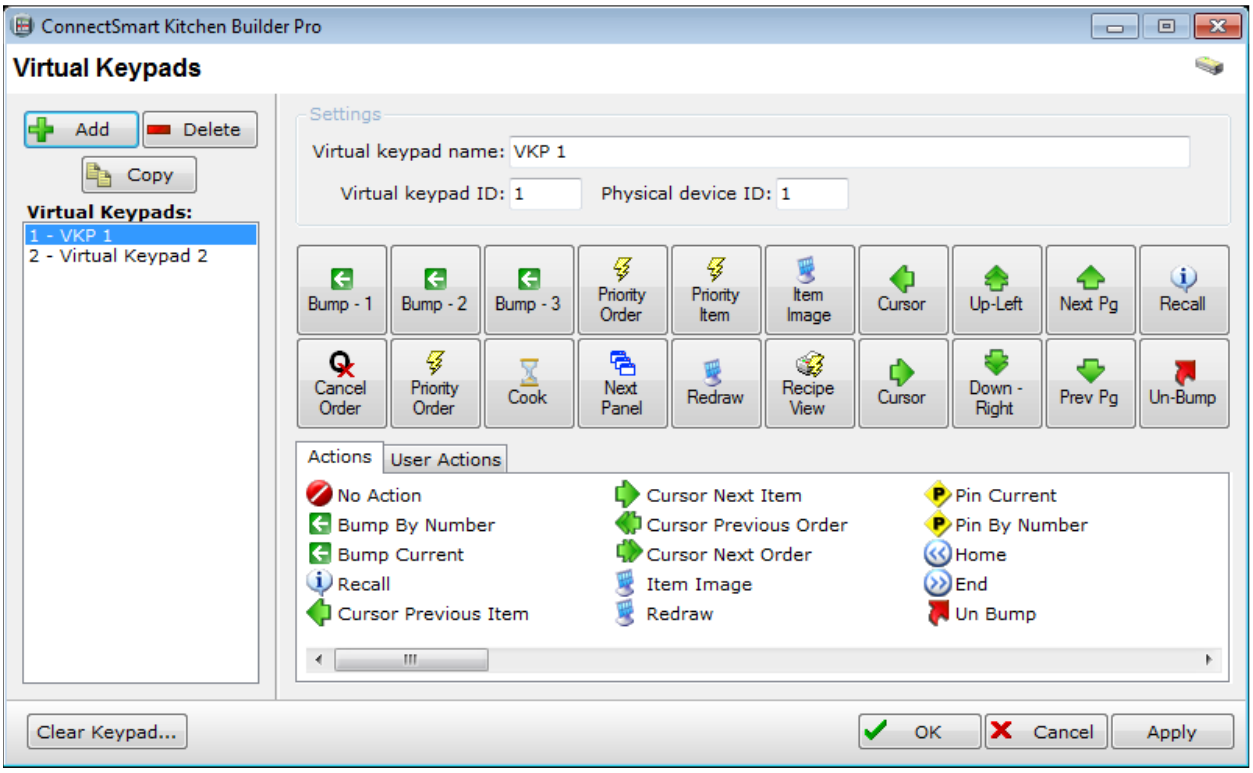
33. Select Ignore Display Group Load Balancing if you do not want zone set load balancing to occur on this view. That means this view does not factor into load balancing calculations. An example of this would be if there are two Grill views that you want to balance, but you also want the orders to stay together on each of the Grill views. Thus, you only want to include the Grill views for load balancing and not have any other routed items impact the balance between the two grill views (e.g. an order with 10 fry items would have no bearing on the load balancing). In this case, you would select Ignore Display Group Load Balancing on all views except the Grill views.
34. Select a zone set template. The view will follow the behavior of the zone set that is selected.
35. Select View is a zone expediter to activate zone functionality on the view. This will ensure that the zone counts are properly decremented when orders/items are bumped.
36. Select which Cook Time value will be used for the view. Cook times are set up on the Item Categories form.
37. Select an item attribute priority template.

38. Select an order state header label.
39. Select an order state header background: Constant or Default.
40. Select an order state grid box background: Constant or Default.
41. Select OK when finished.

Virtual Keypad Configuration

A Virtual Keypad (VKP) is a set of 20 actions that can be assigned to a physical keypad (bump bar). Typically, no more than two VKPs are assigned to one physical keypad. In most cases, several keypads at any given site will contain the same set of functions.

Access the Virutual Keypad setup in Kitchen Builder Pro by following Actiity Levels>Virtual Keypads>Click to Add Virtual Keypad. The following window appears:



Click Add to create a new virtual keypad. Default values are assigned to the keypad when it is created. Keypads can be edited, copied and modified as needed.

The template keypad grid shows the list of commands assigned to the keypad, with each button corresponding with its matching button on the physical pad. Actions can be dragged and dropped from the Actions or User Actions list below, and dragged and dropped to different keys to reorder them.

Some commonly used actions are shown below:

 No Action

 Bump By Number, Bump Current. etc.

 Recall

 Item Image, Redraw

 UnBump

 Summary Table, Summary Table By Number, Item Summary, AccuPrep Cooking Summary, etc.

 Next AccuPrep Panel

 Pass Order

Touch screen forms appear on the display if you select the following base actions: Change Table Form, Order Lookup Form, Order Combination Form, Waste Form, Drop In Bin Form, Cook Bin Item Form, and Use Bin Items Form. These forms allow you to quickly find and jump to a check on an Order View display.

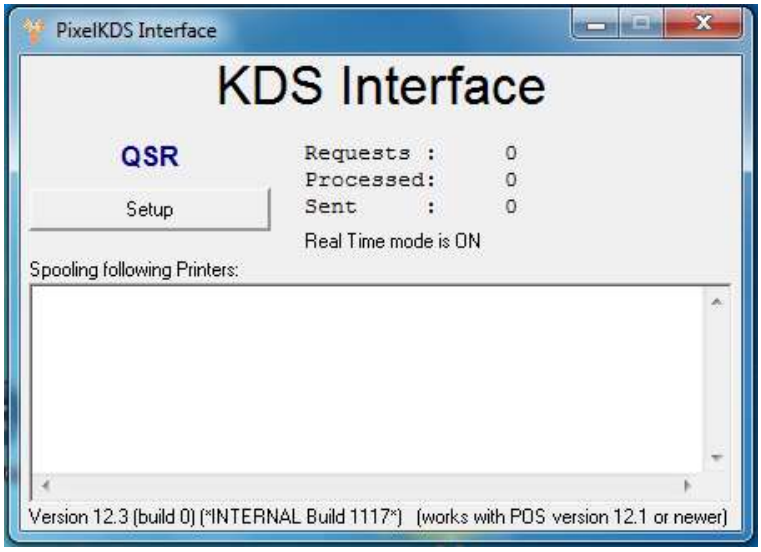
User actions are created on the User Actions tab of the Kitchen Actions Settings form.

Once the desired actions have been loaded, click Apply.

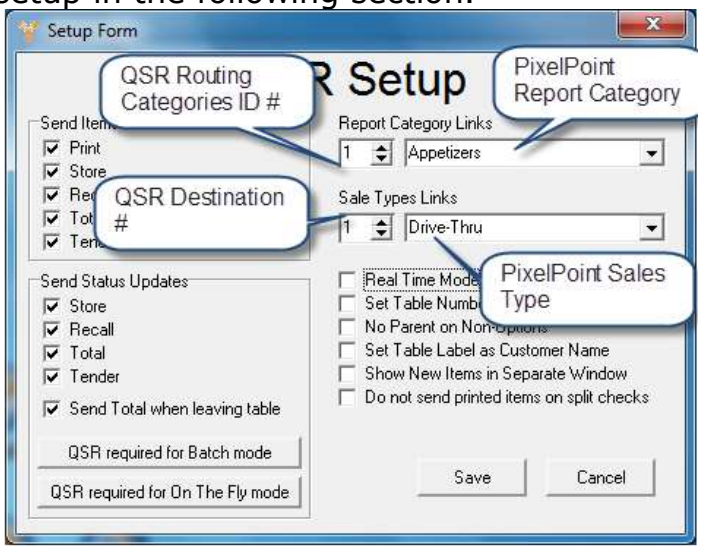
PixelKDS.exe Configuration

The PixelKDS interface sends information between the POS and the QSR system. Once configured, this exe should be running at all times. To configure PixelKDS to communicate with the QSR software:

1. Run the PixelKDS.exe file from the PixelPOS folder. Maximize the window once the application is open.
2. Select Setup.



3. In the section on the right of the resulting window, assign PixelPoint Report Categories and Sales Types to Category IDs and Destination numbers to allow for proper routing of items within the KDS.
   - Make note of what Category ID numbers and Destination numbers are chosen to match with which Report Categories and Sales Types within Pixel. These numbers will be used again in the Kitchen Builder setup in the following section.



4. When finished, save the settings and restart PixelKDS.

Send Items On

Once PixelKDS has restarted, open the Setup menu again. The Send Items On section controls at what point in the ordering process items are sent to the KDS. Ordered items will be sent to the KDS on tender, regardless of the options checked here. The options in this section are explained below:

- **Print** – Orders will display on the KDS when the POS prints to a receipt printer.
- **Store** – Orders will display when the Save Check or Leave functions are used in the POS.
- **Recall** – Orders will display when the Get Check function is used, or when a table is reopened.
- **Total** – Orders will display on the KDS when the Finish function is used.
- **Tender** – Orders will display when a payment method is applied.

Note: These options do not apply when Real Time mode is enabled in the PixelKDS interface.

Send Status Updates

The Send Status Updates section of the PixelKDS interface controls what type of order status updates get sent to the KDS. Tender status upates are always sent, regardless of selection. The options in this section are explained below:

- **Store** – Status will be updated when the Save Check or Leave functions are used.
- **Recall** – Status will be updated when the Get Check function is used.
- **Total** – Status will be updated when the Finish function is used.
- **Tender** – Status wil be updated when a payment method is applied.
- **Send Total when leaving table** – The POS will send Amount Due when the Save Check, Leave or Finish functions are applied. To be used when status updates are enabled for Store, Total or Tender.

Additional Options

- **Real Time Mode** – Enables/disables Real Time Mode. Refer to the Real Time Mode section below for more information on this function.
- **Set Table Number as Tent Number** – Converts a table number to be sent as a Tent number. Some systems will require that POS send a tent number instead of a table number.
- **No Parents on Non-Options** – If checked, products that do not have an Option (ex. Hold) Product Type will not be associated with a master parent item, even if they are answers to forced questions or in other circumstances where the POS would normally indent them on a the Item List. Modifier products will display like master items.
- **Set Table Label as Customer Name** – Uses the label on the check (if one is present) as the customer name on the KDS.
- **Show New Items in Separate Window** – Displays items that are added to an existing transaction in a separate window on the KDS instead of applying them to the orders original transaction window. Note that this feature is disabled if Real Time Mode is enabled.
- **Do Not Send Printed Items on Split Checks** – Prevents items that have already been printed from being re-sent to the KDS when a check is split.

QSR Automation Mode Settings

QSR reccomends that one of the following options be applied when configuring PixelKDS.exe. Using these options will cause information to be saved that could be valuable when troubleshooting issues with the QSR software with their support team.

- **QSR Required for Batch Mode** – this option should be applied if the customer site is using Bacth mode or in a non real-time environment.
- **QSR Required for On the Fly Mode** – This option should be applied if the customer is using a Real Time environment.

Real Time Mode

When enabled, Real Time Mode will cause the KDS to display items as soon as they are ordered and added to the guest check. When disabled, items are displayed on the KDS when the order is sent to the kitchen. Using this feature may cause other selected options to become disabled, as noted in their respective descriptions.

When enabling or disabling Real Time Mode, the PixelKDS interface must be restarted after the changes are saved in order for the change to take affect.

The setup process is now complete and the POS should be sending order information to the KDS.

For further assistance completing the setup with Kitchen Builder Pro or customizing the KDS interface to the preferances of the user, consult QSRs ConnectSmart Kitchen Builder Pro User Guide or contact QSR Support directly.