



111-38-URM-007

KDS Configuration Utility

User Manual

STANDARD	
Rev. No.	2.50
Notes	LDC0111-38


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1. Introduction

The Epson KDS Configuration Utility is a tool for configuring the Epson Kitchen Display System. The KDS should be setup and configured by a qualified technician. This document goes into details of how this tool works and which options are available to the technician in order to configure the KDS.

1.1. Definitions

KDS – Epson Kitchen Display System.

POS – Point of Sale Station that takes in orders.

Display – A monitor that displays order information.

Bump Bar – A device that allows orders to be bumped from the KDS along with other abilities.

KDS Printer – An Epson OmniLink® printer that is running the KDS software. TM-T88V-i, TM-U220-i, and TM-L90 LFC-i are supported.

KDS Controller – An Epson module (KD-IB01) that can drive a Display – no printing ability.

KDS Device(s) – Refers to either KDS Printers, KDS Controllers, or both.

Master – One KDS printer or controller is considered the master in the system. This is usually the printer or controller that is connected to the POS and receiving the orders (KDS Menu Routing.) Some POS's can send orders directly to their respective stations -> POS Menu Routing. In this case it's the printer or controller that is not connected and receiving orders from the POS.

LAN – Local Area Network.

1.2. Installation

The KDS Configuration Utility is a standalone application and thus does not require to be installed. It can be copied to any convenient folder and executed from there.

1.3. System Requirements

- Microsoft Windows PC/laptop/tablet with network access to the KDS devices
- Operating System: Windows 8.1, Windows 10
- .NET 4.5 or Higher
- RAM: 4GB Minimum

1.4. Network Setup Requirements

- LAN connection should support broadcast service through the network.
- TCP Port 80 open and unblocked.
- UDP Port 3290 open and unblocked.
- Firewall on the PC must be disabled.
- PC must be connected to the same network as the KDS devices.
- Internet Connectivity is not required for KDS configuration.

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1.5. System Overview

The following 'Figure 1' shows a sample Epson Multi-station KDS setup. The KDS devices (Printer and controllers) are connected over the LAN and are usually configured with DHCP enabled out of the box. The Configuration Utility is able to easily discover all of the devices and allow them and the system to be configured.

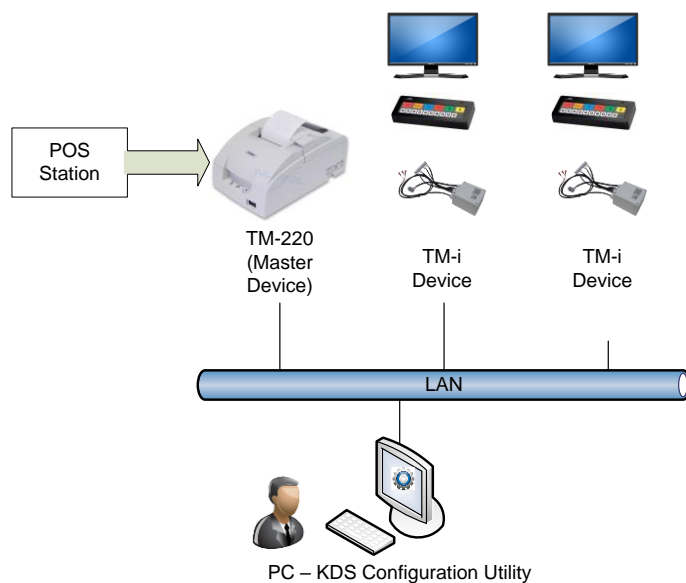


Figure 1 – Sample Multi-Station KDS Setup

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2. KDS Configuration Utility Operation

2.1. Log In Screen

Upon startup the user will be presented with a login screen. The Configuration Utility is a tool that can alter the behavior of the KDS environment. It is therefore protected by a login system. It is up to the administrator who and which sections of the configuration utility a user will be allowed to interact with.

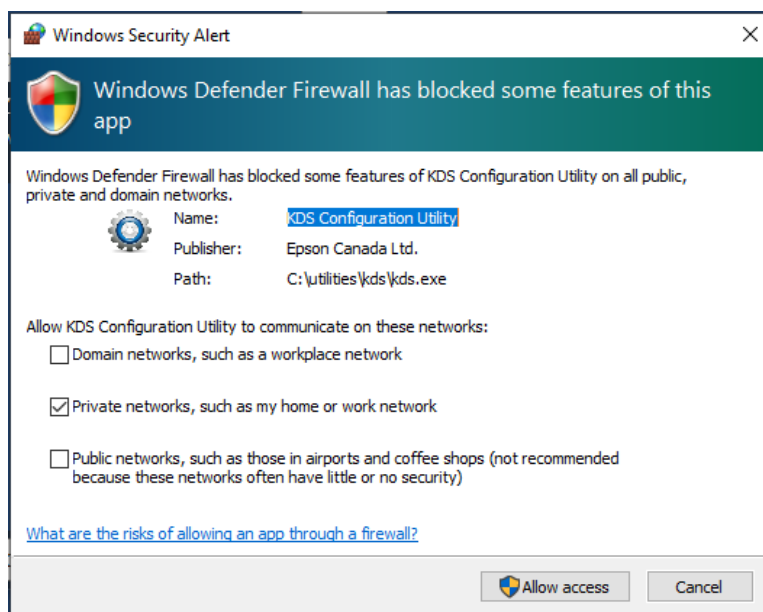
2.1.1. Default User Name and Password

User Name: "admin"

Password: (empty)

The image shows a login screen for the KDS Configuration Utility. It has a dark blue background. On the left, there are two labels: "User Name" and "Password". To the right of "User Name" is a text input field containing the text "admin". To the right of "Password" is an empty text input field. To the right of the password field is a "Log In" button.

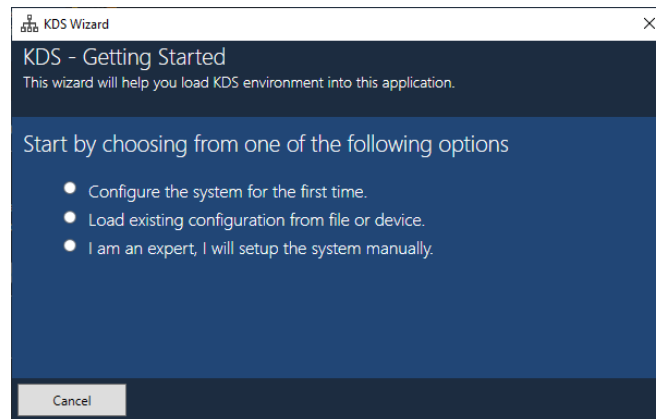
Note: When the utility discovers devices on the network, the firewall may prevent the discovery. If the following message is presented after logging into the application, you must "Allow access" for the utility in order for it to function. If you click cancel, the utility will not be able to run discovery or communicate with devices on the network. To enable discovery, go to firewall settings and make an exception for the configuration utility manually. If you are using third party firewall, consult the documentation on how to add an exception for the utility.



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2.2. Getting Started Wizard

When the application starts for the first time a Wizard can help guide the user to do an initial discovery and setup of the KDS. In order to find the devices, the machine the Configuration Utility is running on must be connected to the same LAN as the KDS devices. All devices must be turned on and connected to the network. When the Wizard starts the user is presented with 3 options:



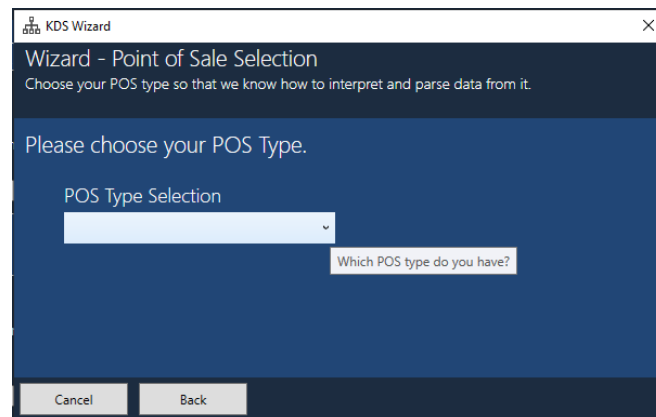
Wizard – Getting Started

2.2.1. Configure the system for the first time

Use this option if you have just unpacked the system from the box and connected everything together for the first time. This step will scan the network for all the KDS devices and their capabilities, and automatically assign a default configuration.

2.2.1.1. Point of Sale Selection

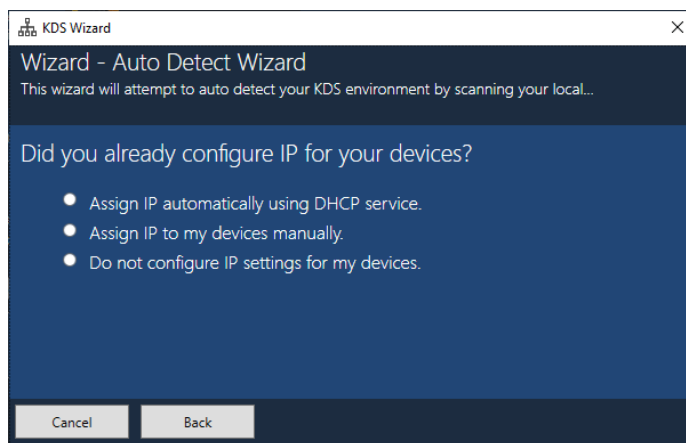
Select your Point of Sale (POS) type and click Next. If your POS does not appear in the list, you will need to contact your Epson representative for information on how to get it supported.



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2.2.1.2. Auto Detect Wizard

Next the Wizard will ask how you would like to configure the IP/network settings for the KDS devices:

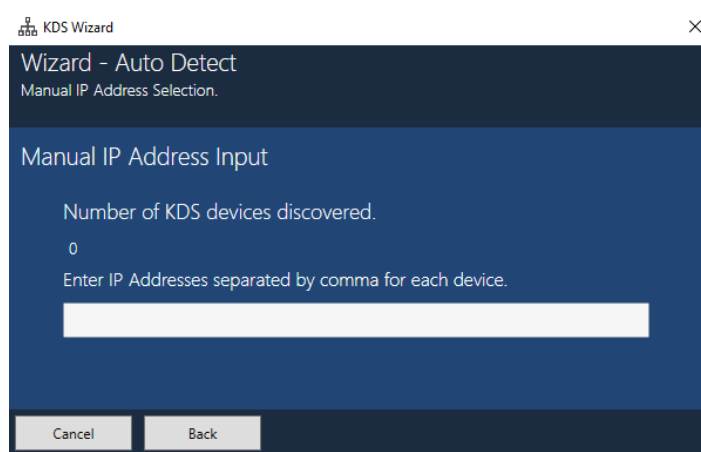


Assign IP automatically using DHCP service

This option sets all of the devices to DHCP mode which allows them to automatically be assigned an IP address from the network DHCP server. KDS devices recognize each other using their MAC addresses so if IP addresses change it will not affect the KDS operation. But Epson generally recommends using static IP configuration for all devices to eliminate any issues with POS's sending data to the right destination.

Assign IP to my devices manually

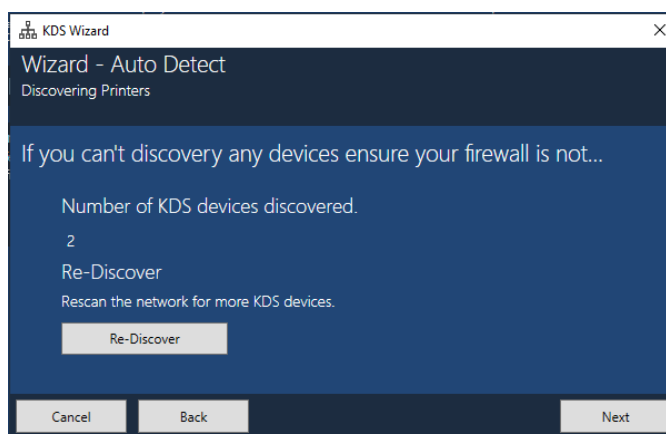
Use this option if you have a list of IPs that you wish to assign to each device. This option will take you through the steps to assign IPs for the devices.



Do not configure IP settings for my devices

Choose this option if you know your devices already have their correct IP addresses and you do not wish to change them. This option is useful if you have previously assigned static IPs to the printer using another method, and you do not wish to change the IP settings further. Keep in mind that IP addresses can still be changed later if necessary.

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The Wizard will attempt to discover all the KDS devices on the network. If the number of physical devices that you have on the network matches the number of discovered devices in the wizard, click next to go to the next step. Otherwise if the number of discovered devices is less than what you have on the network then check the cabling and click the “Re-Discover” button to try again.

Pick the Master Device

If your configuration has multiple KDS printers or controllers, one must be picked to play the role of the master. If orders are sent directly to the Master printer or controller (KDS Menu routing) pick that device. If orders are sent directly to their respective stations (POS Menu Routing) pick the printer or controller that is not displaying orders.

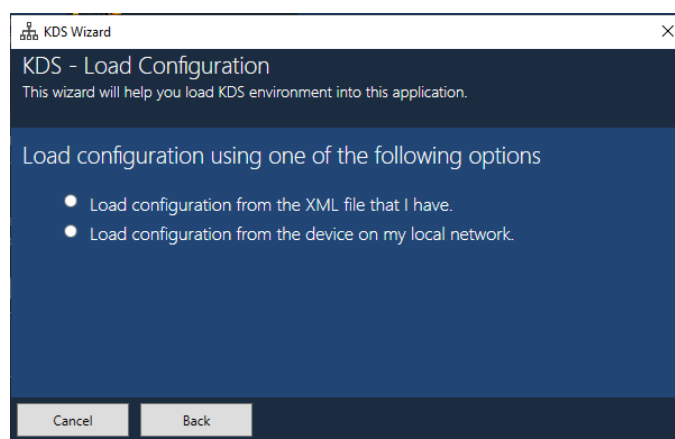
What will the wizard do next?

When you click next, the wizard will scan the network again, and add all your devices to the Utility. For each device a display will be created and attached to that device automatically. A Default Tile design will also be created and attached to each display. Note that all these settings can be change later. The operation of the wizard will then be complete. The starting point it has created can then be further tweaked and adapted manually.

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2.2.2. Load existing configuration from file or device.

This wizard option allows you load a previously saved configuration file or if your Master device had previously been configured, it will load configuration from that device instead.



2.2.2.1. Load Configuration from the XML file that I have

Use this option if you already have a configuration file and wish to reload it. Exercise this option carefully, however, as the files from another system may not necessarily be compatible with the current system. It is also possible that the IP and MAC addresses may not match. In this case, further adjustments to device settings will be necessary to match the file to the physical devices on your network. This option is, however, good for importing display settings, and menu items and tile designs from another system. In this case, only devices will need to be rediscovered and configured manually.

2.2.2.2. Load configuration from the device on my local network.

This option is good for when your system is configured and working, but you don't have the configuration in your utility and wish to load it from the Master device. This will extract configuration file from the Master device and load it into the utility.

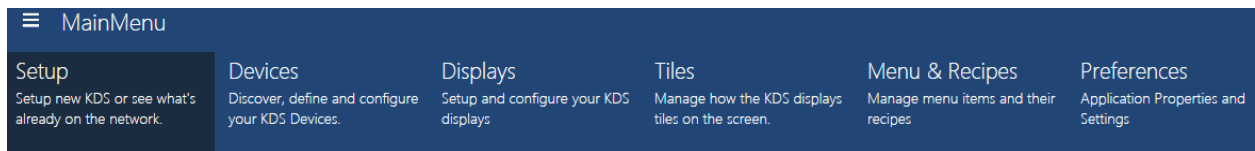
2.2.3. I am an expert, I will setup the system manually.

Use this option, if you have no need for the wizard. Everything the wizard does can also be done manually.

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2.3. Main Menu

The configuration utility is divided into several logical sections responsible for different aspects of the KDS environment. Click on the tile to navigate to that section of the application.



Setup – Configures global KDS parameters such as POS type, site name, and business start time.

Devices - Manages a collection of devices, their network settings, and some device specific settings.

Displays – Manage KDS displays and their functionality.

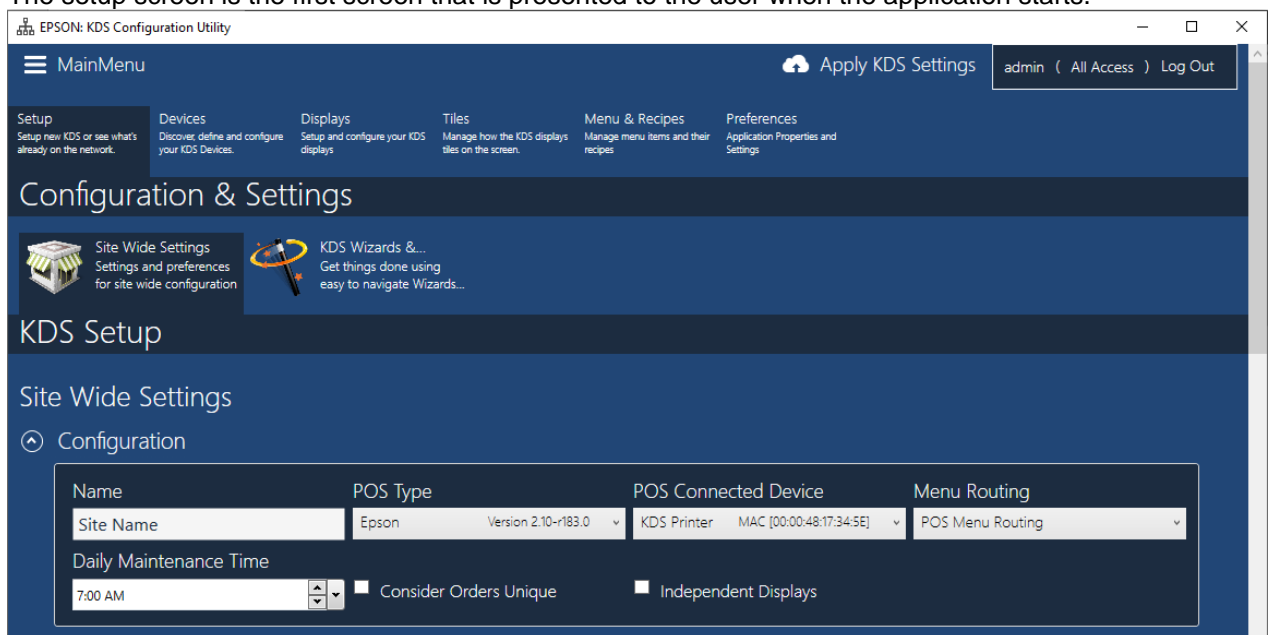
Tiles – Tile configuration – font size, items per tile, and colors.

Menu & Recipes – Configure the menu items and any recipes.

Preferences – Configuration utility settings and preferences, including settings for roles and users.


2.3.1. Setup

The setup screen is the first screen that is presented to the user when the application starts.



2.3.2. Site Wide Settings

The site wide settings are used to name your business site, choose the parser target and other general settings to help the system function.

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2.3.2.1. Configuration

Name: Give the name of the business location. Useful for identifying a particular site if troubleshooting is ever required.

POS Type: Select the POS System that is to be used with the KDS. This tells the KDS which data to expect and parse accordingly for display.

POS Connected Device: For the configuration to work at all, this setting must be set to the proper device. If orders are sent directly to the Master printer or controller (KDS Menu routing) pick that device. If orders are sent directly to their respective stations (POS Menu Routing) pick the printer or controller that is not receiving orders. The POS Connected Device also known as “Master Device” is the one device that will be used to send configuration data generated by the configuration tool.

Note: It is important to know that this combo box in the beginning will be empty. Once devices are discovered, this combo box will be populated as well. The user will then be expected to choose the correct device to become the “Master”. Also note, that the configuration tool is intelligent enough to pick master device automatically during the discovery process.

Menu Routing: Select the method to route menu items to displays. POS Menu Routing will use the routing as defined by the POS. KDS Menu Routing will use the routing as defined within the KDS. The default is POS Menu Routing.

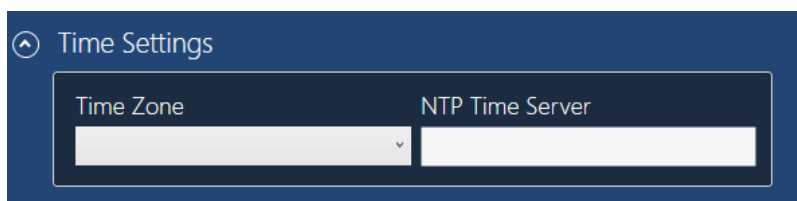
Daily Maintenance Time: The KDS requires some maintenance time in order to work correctly during the day. This time specifies when such maintenance will be performed. Such as clearing buffers, resetting certain parameters and preparing for the next busy day. This time should be set to off business hours when the system is least likely to be used.

Consider Orders Unique: When this is checked, it will indicate that each new order should be treated as unique even if order# already exists in the queue. This prevents the system from appending new items to the existing orders. Business must decide to enable/disable this function. Default is disabled.

Independent Displays: When the KDS is configured for POS menu routing, the POS can send items in a single order to multiple displays. If the same item (including modifiers) is sent to multiple displays, Epson KDS will identify this and treat these items as if they are the same. Bumping from one screen will cause it to be crossed off on another, and the Expeditor will show only one. This is the behavior with Independent Displays unchecked and historically how the Epson KDS has operated. If Independent Displays is checked, then each display treats all items as if they are unique. Bumping the (same) item from one display will *not* cause it to be crossed off on any other. And the Expeditor will show the multiple items.

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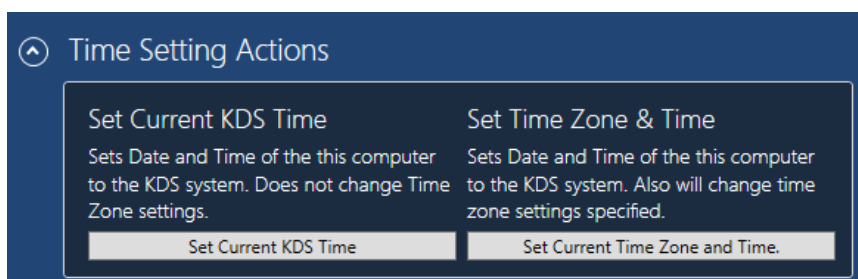
2.3.2.2. Time Settings



Time Zone: The system support time zone settings. Choose your time zone and click “Set Time & Time Zone setting” in the Main Menu. This will update the master device (If selected) to the new time zone settings and the current local time.

NTP Time Server: Specifies NTP Time Server. This setting must be applied by clicking “Set Time & Time Zone Settings” in the Main Menu.

2.3.2.3. Time Setting Actions

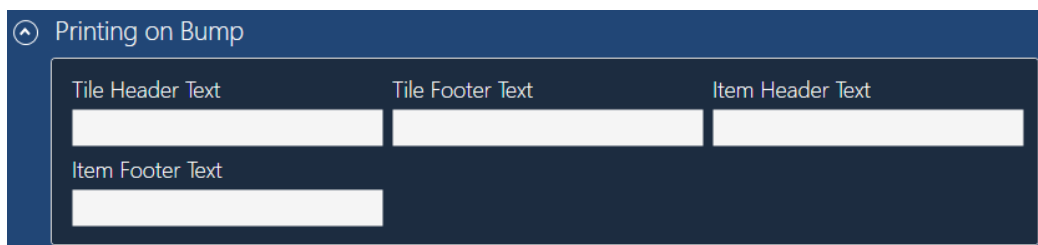


Set Current KDS Time: Sets the date and time for this computer to the KDS system. Does not change the time zone settings.

Set Time Zone & Time: Sets the date and time for this computer to the KDS system. It will also change the specified time zone settings.

2.3.2.4. Printing on Bump

Configure the bump-and-print header & footer text.



The headers and footers allow customization of the printout per order or item bases. When used, they can contain any simple text or ESC/POS commands in order to customize the look and feel of the printout. There is a line feed added after any header or footer, so just putting in a simple text string will always work.

If you want to add any extra commands, there is some special processing done that allows non-ASCII characters to be added to the text. The following sequences are all supported:

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- \n - line feed
- \t - tab
- \v - vertical tab
- \xnn - hexadecimal code
- \0nnn - octal code
- \\ - backslash
- Any other character after the '\' will just be itself.

Example: Command to change whether text is left/center/right justified is ESC a *n*, and the ESC character is \033. The following command sequence will center the header.

```
\033a\01HEADER\n-----\n\033a\0
```

This translates as ESC a 1 HEADER LF ----- LF ESC a 0, and it will print as:

```
HEADER
-----
```

Note: Extra LF was added in there because the ESC a *n* command only works at the start of a line.

Example: To make the characters bold and double-width as well:

```
\033!\050\033a\01HEADER\n-----\n\033a\0\033!\0
```

This translates as ESC ! 0x28 ESC a 1 HEADER LF ----- LF ESC a 0 ESC ! 0x00.

WARNING: Both the \xnn and \0nnn sequences can take any number of digits after them. This means that, to do the 'ESC 2' command, you need to use \033\062 or something similar, because \0332 will be read as a single character.

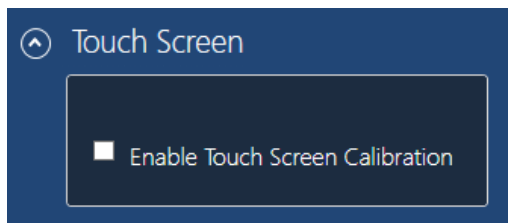
Tile Header, Tile Footer: If not empty, this text will be printed on the printout for each order. Follow explanation above if ESC/POS commands need to be inserted to customize the look and feel of the text.

Item Header, Item Footer: If not empty, this text will be printed on the printout for each of the items on the order. Follow explanation above if ESC/POS commands need to be inserted to customize the look and feel of the text.

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2.3.2.5. Touch Screen

Configure the touch screen



Enable Touch Screen Calibration: Enables or disables the on-screen calibration of the Touch Screen by tapping and holding a finger on the touchscreen for more than 10 seconds. If this is disabled, a Touch screen can only be calibrated by using this KDS Configuration Utility (see the Calibrate button in the Devices section).

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2.4. Devices

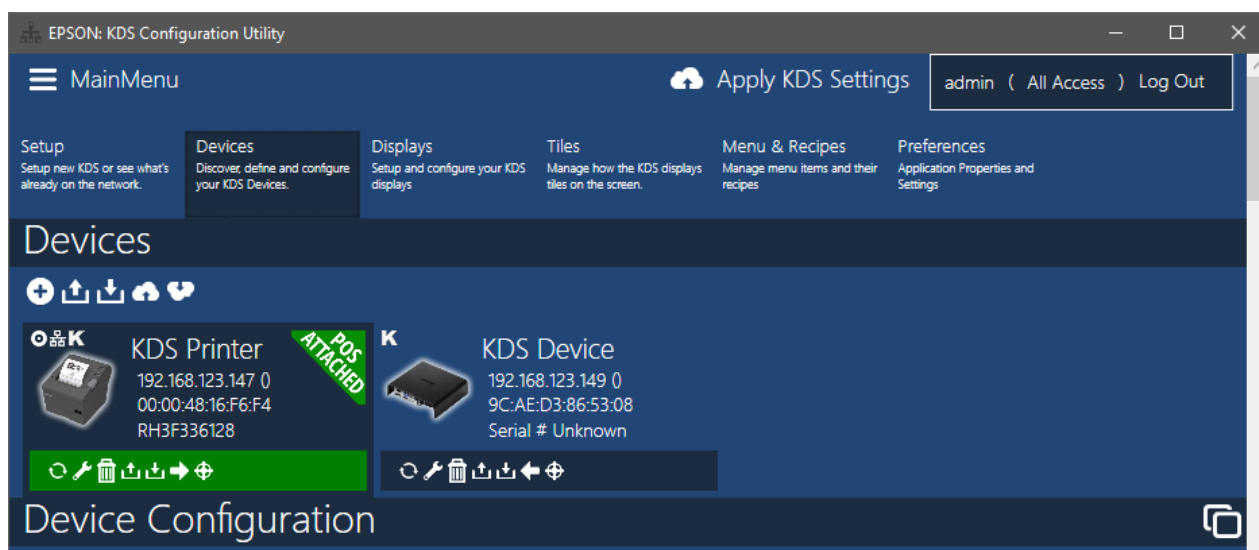
Devices are the computer controllers that execute the KDS program and decide which display shows which items. A device can be set to be a “Master Device”. Such “Master Device” usually connects to the POS system and parses the stream of orders from the POS station. In general, each Master Device connects directly to POS system while each none master device connects to the bump bar and display. The Master Device can also have a display in multi-station Configuration.

2.4.1. Device Configuration

For the devices to function properly, each one must be configured inside the utility. Each device becomes aware of the other via the configuration file that establishes the function for each device, its IP and MAC address for connectivity. Once this configuration file is uploaded to the master device, the master device will then forward this configuration file to the other devices on the network. Each device will find its own configuration in the file and configure itself appropriately.

This section of the configuration utility enables the user to discover, add and configure KDS devices that will be part of the system. If you have previously used a wizard to do initial setup and discovery, the utility should have prepopulated this section with all the devices that were discovered during the wizard step. It is at this point they can be configured further.

If you had not used the wizard, you can still discover them here and configure each one manually. This section will explain some of the things that can be done.



2.4.1.1. Add or Discover

This command opens a discovery window that allows you to easily add a device to your devices list. This method is preferred, because it automatically detects the IP and MAC address of the device and its capability, so this does not have to be guessed by the user. If devices cannot be discovered or it is not possible to connect them to the network at this time, you can still give a name for the device and add it to the list. Once added, the device can be configured further.

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2.4.1.2. Export All Devices

This command allows you to export devices to the XML file.



2.4.1.3. Import All Devices

This command allows you to import devices previously exported XML file.



2.4.1.4. Upload Configuration to Master Device


This command exports the configuration to the master device on the network. If the master device is not connected, is offline, or is in the error state this command will fail with an appropriate error message.



2.4.1.5. Download Configuration from Master Device

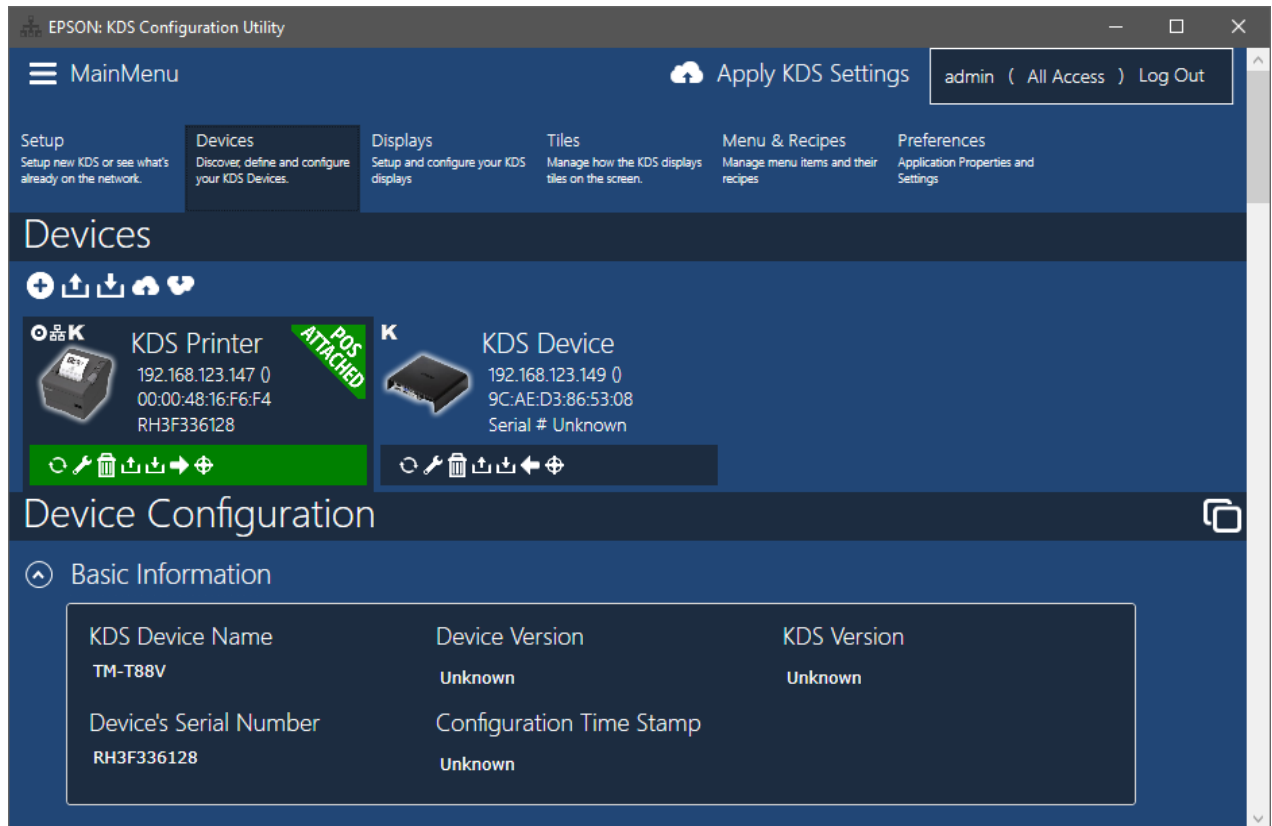
This command imports the configuration file from the master device on the network. If the master device is not defined, is not connected or is in the error state this command will fail with an appropriate error message.



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2.4.2. Device Settings

This section explains a selected device within devices list in the configuration utility. Once device had been added to the list it can be selected and configured. Once selected, various properties for this device will be exposed in the Configuration Utility.



2.4.2.1. Device Status Indicator

The color of the bar at the bottom of the listing of each device will change depending on the device status as follows:



Green: The device is reachable (pingable) from the IP address that is currently set.

Orange: The device is verified to receive broadcast messages is not reachable (not pingable) from the IP address that is currently setup. This indicates that the device is not fully setup correctly. Possible causes are that the device is on a different subnet or else is still set to the default IP address.

Grey: The device is currently in the middle of a transition to a different IP address (temporary state).

No color: In this state the color will appear the same as the Application Background color defined in the settings (default is dark blue): Currently the application cannot communicate with the device.

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2.4.2.2. Reload Device

Re-Scans the device capabilities and determines if the device is reachable on the network. The reload will also confirm the MAC and IP address of the device and its capabilities.



2.4.2.3. Change IP Settings

This command allows you to change IP settings for a device.



This brings up the TCP/IP Configuration dialog:

TCP/IP Configuration

Set new IP Settings

Device Name: KDS Printer

MAC: 00:00:48:16:F6:AB

Current IP: 192.168.1.148

Mode: ☒ DHCP ☐ Static IP

New IP: 192.168.1.148

New Gateway: 192.168.1.1

New Subnet: 255.255.255.0

Password: epson

OK Cancel

2.4.2.4. Delete Device

This command deletes a device from the list. Once deleted, the discovery should be able to re-discover it.



2.4.2.5. Export Settings

Exports device settings, excluding MAC, IP Address and Name. This option is good for transferring settings to other devices if they should be the same.



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2.4.2.6. Import Settings

Imports previously exported device settings. Please note that IP, MAC and the Name will not be altered.



2.4.2.7. Move Right or Move Left

This button moves the device one space to the right in the device list, or, if it is the last device in the list, the arrow is reverse and will move it one space to the left.



2.4.2.8. Calibrate Touch Screen

Clicking on this button will trigger the Touchscreen Calibration process. The device will reboot and show the calibration screen with instructions on how to calibrate it in order to improve the touch accuracy.



2.4.2.9. Configuration

A screenshot of the 'Configuration' screen. It has a dark blue header with a back arrow and the title 'Configuration'. Below the header is a form with three input fields: 'Name' (containing 'KDS Printer'), 'Description' (empty), and 'IP Address' (containing '192.168.1.36'). Below these is a 'MAC Address' field (containing '9C:AE:D3:86:54:32') and a radio button labeled 'Attached to POS' which is currently selected.

Name: The identifier given to a device.

Description: Could be used to indicate location within the kitchen.

MAC Address: Either discovered or manually entered MAC Address.

Note: When MAC address is entered and the device is connected to the network, the IP Address will be discovered automatically by the utility. Attempting to point this device to another IP will fail if the MAC address is not empty, because the new IP will not match the MAC address and will rediscover the original IP for it.

IP Address: IP Address of the device on the network. This IP can be changed only if MAC field is empty. Once the new IP address is entered, the MAC address for it will be discovered automatically. In this way MAC and IP are always interchangeable and recover each other in the case one is known but not the other.

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Configuration Time Stamp: This time stamp indicates when the configuration file was uploaded to a device. “Unknown” indicates that the device is not yet configured.

Attached to POS: Indicates this device is also a master device. In general, if you only have one printer or controller configured, it also becomes the master device and is the device you connect to the POS station. You can configure multiple devices, but then the master must be selected manually.

2.4.2.10. Printing Functions

Master Device:

Is Printer:

Printing Functions

☐ Print Chit
 ☐ Print Item on Bump
 ☐ Print Tile on Bump

Is Controller

Printing Functions

☐ Print Item on Bump
 ☐ Print Tile on Bump

Non-Master Device:

Master Is Printer:

Printing Functions

☐ Print Item on Bump
 ☐ Print Tile on Bump
 ☐ Print Tile on Bump at POS

Master Is Controller:


Printing Functions

☐ Print Item on Bump
 ☐ Print Tile on Bump

Print Item on Bump: If ON, will print the item as it is bumped. This option is OFF by default.

Print Tile on Bump: If ON, will print the entire contents of the Tile when bumped. This option is OFF by default.

Print Tile on Bump at POS (Non-Master Device And Master Device Is Printer): If ON, the KDS Tile contents will be printed on the Master device when bumped. KDS Boxes also cannot print themselves so they can redirect the print job back to the Master printer when enabled.

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If the selected device is the POS attached master device and it is printer, there will be another option displayed:

Print Chit: If ON, the printer will print incoming Kitchen chits.

2.4.2.11. Display Manager

Add/Remove Displays...: Brings up the Display Settings to Add/Remove displays

Assigned Display: Assigns display behavior to the device. This means that the physical display will be configured as specified by the assigned display.

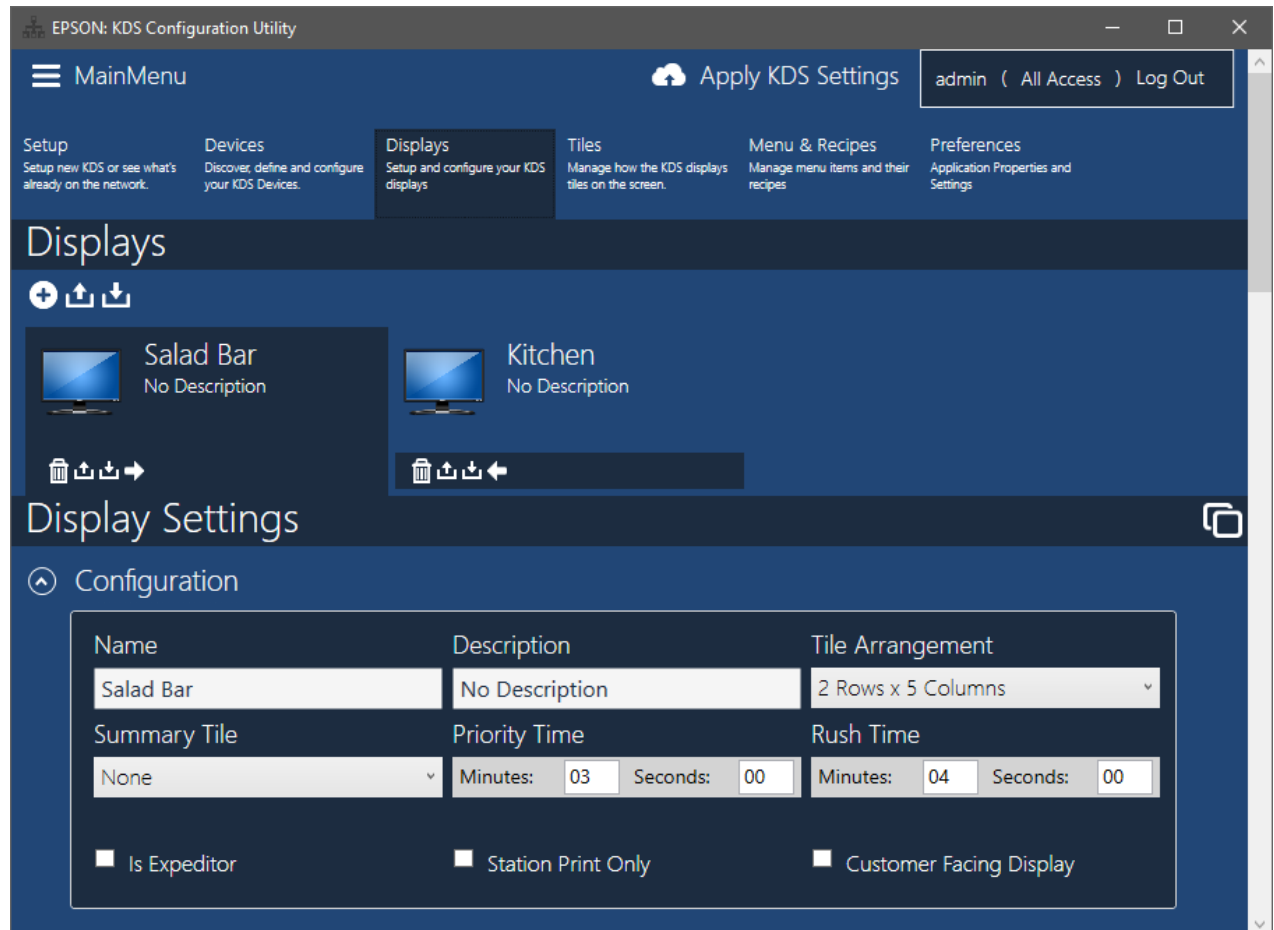
The screenshot shows the EPSON KDS Configuration Utility window. The 'Display Manager' section includes a button 'Add / Remove Displays...' and an 'Assigned Display' dropdown menu currently set to 'Kitchen'. The 'Display Settings' section is expanded, showing three sub-sections: 'Configuration', 'Sound on New Order', and 'Display Tile'. The 'Configuration' sub-section contains fields for Name (Kitchen), Description (No Description), Tile Arrangement (3 Rows x 6 Columns), Summary Tile (None), Priority Time (Minutes: 03, Seconds: 00), Rush Time (Minutes: 04, Seconds: 00), and three checkboxes: Is Expeditor, Station Print Only, and Customer Facing Display. The 'Sound on New Order' sub-section has a 'Choose Sound' dropdown (Electronic_01), a 'Sound Volume' slider (90), and a 'Play Sound' button. The 'Display Tile' sub-section has an 'Add / Remove Tiles...' button and a 'Default' dropdown.

The Display Settings (Configuration, Sound and Tile) are described in the Displays chapter below.

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2.4.3. Displays

In display section, you can add and configure displays of the KDS. Each display can be setup to a certain function and behavior.



2.4.3.1. Add Display

This command opens a dialog that allows you to easily add a new display to your display list. Once added, the display configuration becomes active with default parameters. These parameters can be tweaked further to control display look and feel and behavior.

2.4.3.2. Export All Display

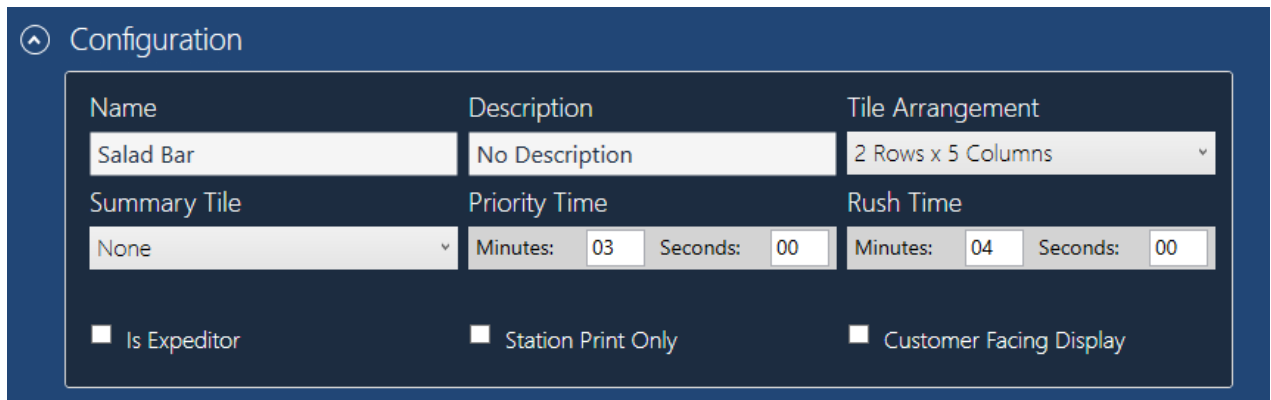
This command allows you to export displays to the XML file. Note that only the displays and their settings will be exported to file and not the entire XML Configuration File.

2.4.3.3. Import All Displays

This command allows you to import displays from previously exported XML file.

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2.4.4. Display Settings



Configuration

Name	Description	Tile Arrangement
Salad Bar	No Description	2 Rows x 5 Columns
Summary Tile	Priority Time	Rush Time
None	Minutes: 03 Seconds: 00	Minutes: 04 Seconds: 00
<input type="checkbox"/> Is Expeditor	<input type="checkbox"/> Station Print Only	<input type="checkbox"/> Customer Facing Display

2.4.4.1. Name

Name of the display. This name must be unique.

2.4.4.2. Description

Display description if any.

2.4.4.3. Tile Arrangement

This combo box selects how the tiles will be arranged in the display.

2.4.4.4. Priority Time

Specifies how much time in minutes and seconds must pass for the item to change to priority mode. The priority mode for the item indicates that it took longer for the item to be prepared, and that action should be taken to deliver the item to the customer as soon as possible.

2.4.4.5. Rush Time

Specifies how much time in minutes and seconds must pass for the item to change to rush mode. The rush mode is a more severe case than priority mode. The order must be taken care of for the customer as soon as possible.

2.4.4.6. Is Expeditor

Indicates if the display is an expeditor display. Expeditor displays usually show all orders and items and is the last bump that will need to happen to dismiss the order from the system, after which the order is delivered to the customer.

2.4.4.7. Station Print Only

If enabled, the station will auto-bump and print a chit with the item.

2.4.4.8. Customer Facing Display

If enabled, the display is set as a Customer Facing display. This is to allow customers to view status of orders.

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2.4.4.9. Customer Facing Display Settings

If “Is Customer Facing” is enabled, the user can adjust the time settings, and the number of columns to display in each Tile.

The Configuration window has a title bar with a back arrow and the text "Configuration". Below the title bar is a form with the following fields:

Name	Description	Order Expire Timer
test	No Description	Minutes: 00 Seconds: 00

Below the table is a section for "Tile Arrangement" with a dropdown menu set to "1 Column Per Tile". To the right of the dropdown are two checkboxes: "Show running time" (checked) and "Is Customer Facing" (checked).

The Order Expire Timer specifies how long an order should be displayed before it is automatically bumped off. If both the Minutes and Seconds are set to zero then the orders must be manually bumped. The Tile Arrangement specifies the number of columns per tile, which can be 1 or 2. Show Running Time will display the Order Expire Timer for each order if enabled, and it will be hidden if this is disabled.

2.4.4.10. Sound on New Order

The sound that will play when a new order is displayed on the screen can be selected.

The Sound on New Order window has a title bar with a back arrow and the text "Sound on New Order". Below the title bar is a form with the following fields:

Choose Sound	Sound Volume	Play Sound
Electronic_01	90	Play Sound!

“Choose Sound” will select the sound. “Sound Volume” adjusts the volume of the sound. The “Play Sound” button allows the user to preview the selected sound.

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2.4.4.11. Menu Item Filter

To indicate which items display will display when orders are added to the system, the technician must specify items either by selecting a group or by checking individual items from the Menu List. This list references the Menu & Recipe list that must be created separately from displays. This process will be described in later sections.

In this example, the display will only display “Wings” items and skip all other items that may or may not be in the rest of the order.

The screenshot shows a 'Menu Item Filter' window with a dark blue background. It contains four main categories, each with a list of items and checkboxes:

- Wings** (16 item(s)): All items are checked.
 - SpicyBBWWings (Spicy BBW Wings)
 - HouseSpecial (House Special)
 - SampleWing (Sample Wing)
 - SlightlyBreaded (Slightly Breaded)
 - FamilySizeBreadedWings (Family Size Br)
 - BreadeStyle (Breade Style)
 - ClasicWingsGrillStyle (Clasic Wings Grill !)
 - WholeChicken (Whole Chicken)
 - ThreeBreadedWings (Three Breaded Wi)
 - PersonalWingPlate (Personal Wing Plate)
 - ClasicWings (Clasic Wings)
 - TaryakiWings (Taryaki Wings)
 - 20WingsDeal (20 Wings Deal)
 - WingsGreenSalad (Wings and Green Sal)
 - PartywithWings (Party with Wings)
 - JackDanielBBQ (Jack Daniel in BBQ)
- Drinks** (11 item(s)): All items are unchecked.
 - CocaColaZero (Coca Cola Zero)
 - Tropico (Tropico)
 - OrangeJuice (Orange Juice)
 - FreshFruit (Fresh Fruit)
 - Pepsi (Pepsi)
 - Sprite (Sprite)
 - JuicyPunch (Juicy Punch)
 - POM (POM)
 - MountainDew (Mountain Dew)
 - BottleCocaCola (Bottle Coca Cola)
 - TomatoeJuice (Tomatoe Juice)
- Pasta** (11 item(s)): All items are unchecked.
 - PastaOlives (Pasta with Olives)
 - VegiePasta (Vegie Pasta)
 - ClasicMeetLasagna (Clasic Meet Lasagni)
 - LasagnaPlate (Lasagna Plate)
 - SpecialLasagna (Special Lasagna)
 - PastawithMeat (Pasta with Meat)
 - PastaPlate (Pasta Plate)
 - Menu Item1
 - LasagnaPiece (Lasagna Piece)
 - ClasicPasta (Clasic Pasta)
 - ChickenPasta (Chicken Pasta)
- Pizza** (17 item(s)): All items are unchecked.
 - PapperoniPizza (Papperoni Pizza)
 - PepperoniHeart (Pepperoni Heart)
 - SquareMeetSlice (Square Meet Slice)
 - SuperPizza (Super Pizza)
 - Onemoreslice (One more slice)
 - SquareCheese (Square Cheese)
 - PersonalSpinach (Personal Spinach)
 - PepperoniMeet (Pepperoni and Meet)
 - HighCrustPepperoni (High Crust Pepper)
 - PersonalVeggies (Personal Veggies)
 - TangoPizza (Tango Pizza)
 - LotsVegiesthensome (Lots of Vegies ane)
 - TomatoesMushrooms (Tomatoes and M)
 - ClassicCheese (Classic Cheese)
 - Justgoodpizza (Just good pizza)
 - BostonPizza (Boston Pizza)
 - CottagePizza (Cottage Pizza)

2.4.4.12. Display Tile

A display tile must be selected so that the display knows how to render the orders on the screen. These tile definitions are created separately from displays and can be selected from the combo box in order to apply tile target definition to the display.

The screenshot shows a 'Display Tile' configuration window. It has a dark blue header with the title 'Display Tile'. Below the header is a light gray button labeled 'Add / Remove Tiles...'. Underneath the button is a dropdown menu with a white background and a downward arrow, currently displaying 'Default Tile'.

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2.4.5. Tiles

Tiles specify how display will render items on the screen. A user can create a tile, and then reference that tile in multiple displays to apply the look and feel of the tile to the display. This section describes some of the options that can be set for a tile.

2.4.5.1. Add a Display Tile

When adding a new Display Tile, the user will be prompted for the Display Tile Name, and Type. The type is either “For Kitchen Display” or “For Customer Facing Display”. The options for a Customer Facing tile are fewer than for a Kitchen Display tile.

2.4.5.2. Color Themes

One Default, five Light background, and five Dark background pre-defined color themes are provided to easily configure display with different color combinations. After a color theme is selected, if user adjusts some color settings, the selection automatically moves to “User Selected”. When user switches from “User Selected” to a pre-defined color theme, the following warning message will pop up before removing the user-selected colors.

Color themes will not be displayed for Customer Facing tile since it contains fewer color settings.

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2.4.5.3. Name

Specifies a unique name of the tile.

2.4.5.4. Description

A user description of the tile. This item is optional.

2.4.5.5. Header Name

Choose from available header names. Quantity # or Seat # are the two options at this time.

2.4.5.6. Lines Per Tile

Indicates how many lines a tile will display. The less lines per tile the more spacing between the items will be. To fill or increase the spacing between the items, the “Font Size” setting may need to be adjusted to make everything fit nicely.

2.4.5.7. Font Size

Font size that will be used for the tile to display items. For bigger font sizes “Lines Per Tile” setting may need to be adjusted to increase or reduce the gap between the lines, in order to fit the text within a tile nicely.

2.4.5.8. Order Header Colors Settings

These colors indicate the color of the tile header, when item is in the various urgency states. There are three states that are available for which a different color can be specified to indicate urgency, normal, priority and rush priority states. These states are triggered by specifying “Rush Time” and “Priority Time” settings in the Display settings. For Customer Display, there is only a single setting for **Header Color**.

2.4.5.9. Tile Color Settings

Background – Specifies the background color of the tile.

Foreground – Standard text color inside the tile (Kitchen Display only).

Item – The color of the order items displayed in the tile.

Modifier – Color of the modifiers for the item (Kitchen Display only).

Recall – Recalled item color (Kitchen Display only).

Void Item – Color of the void item (Kitchen Display only).

Alert – Color of the alert item such as allergies for example (Kitchen Display only).

Appended Item – Color of the appended item (Kitchen Display only).

Expeditor Bump Background – Expeditor Background Bumped Items (Kitchen Display only).

Item Selection – Selected Item Color (Kitchen Display only).

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2.4.5.10. Tile Rendering

The application will render all the changes for the tile on the left side of the screen as they happen. The rendered screen can be put into Normal, Priority and Rush modes to see the header colors for each mode. As the Kitchen Display and the Customer Facing Display have different options, they will be rendered differently.

Kitchen Display:

Tile Viewing Mode	
Normal	
1	SERVER S 374:31
Tbl 31 CK# 017	
QTY	Description
1	FRIED SHRIMP :BBW SAUCE :ADD SEASARR SAL ALLERGY
1	POT ROAST DINNER :SD/BEEF GRAVY :W/BROCCOLI
2	SIRLOIN STEAK -RARE -SD/BEEF GRAVY

Customer Facing Display:

IN PROGRESS
CK# 0024
CK# 0025
CK# 0026
CK# 0027
CK# 0028
CK# 0029
CK# 0030
CK# 0031
CK# 0032
CK# 0033

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2.4.6. Menu Items & Recipes

This section describes Menu Items & Recipe setting page. For the KDS to function properly and to be able to route items from one display to another, the system relies on this list of items to know what should be routed to which display. The list represents all the unique items sold at the location. At this time the list must be entered manually by the user and must be updated every time changes are made it.

	As Shown On Receipt	Description	Recipe	Grouping
	ThreeBreadedWings 2	Three Breaded Wings		Wings
	WingsGreenSalad	Wings and Green Salad 2		Wings
	SlightlyBreaded 4	Slightly Breaded		Wings
	PersonalWingPlate	Personal Wing Plate		Wings
	PartywithWings	Party with Wings		Wings
	FamilySizeBreadedWings	Family Size Breaded Wings		Wings
	ClasicWings	Clasic Wings		Wings
	BreadeStyle	Breade Style		Wings
	OrangeJuice	Orange Juice		Drinks
	TomatoJuice	Tomato Juice		Drinks
	PastaOlives	Pasta with Olives		Pasta
	SpecialLasagna	Special Lasagna		Pasta
	LasagnaPiece	Lasagna Piece		Pasta
	VegiePasta	Vegie Pasta		Pasta
	PastawithMeat	Pasta with Meat		Pasta

2.4.6.1. Add Item

This command will open a dialog box to enter new item to the list. For the item to be properly added, the user must enter the item name as it would appear on the receipt. The reason for this, is because the KDS parser will be looking for these keywords in order to find these items and then to route them to the appropriate displays later on. Once items are added optional Description and Recipe can be added later in a table.

2.4.6.2. Export All Items

Items can be exported to the XML file using this command.

2.4.6.3. Import All Items

Items can be imported from the previously exported XML file.

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2.4.6.4. Menu Item

Each menu item can have the following parameters.

As Shown On Receipt

This is a unique name that must match the item as it appears on the receipt. If this name does not match the item on the receipt precisely, the item may not route correctly onto the display.

Description

Optional description of the item. This can be human readable form name or whatever the user wants.

Recipe

The recipe information for the item. This information can later be displayed on the screen, for the chef to know how to prepare the item.

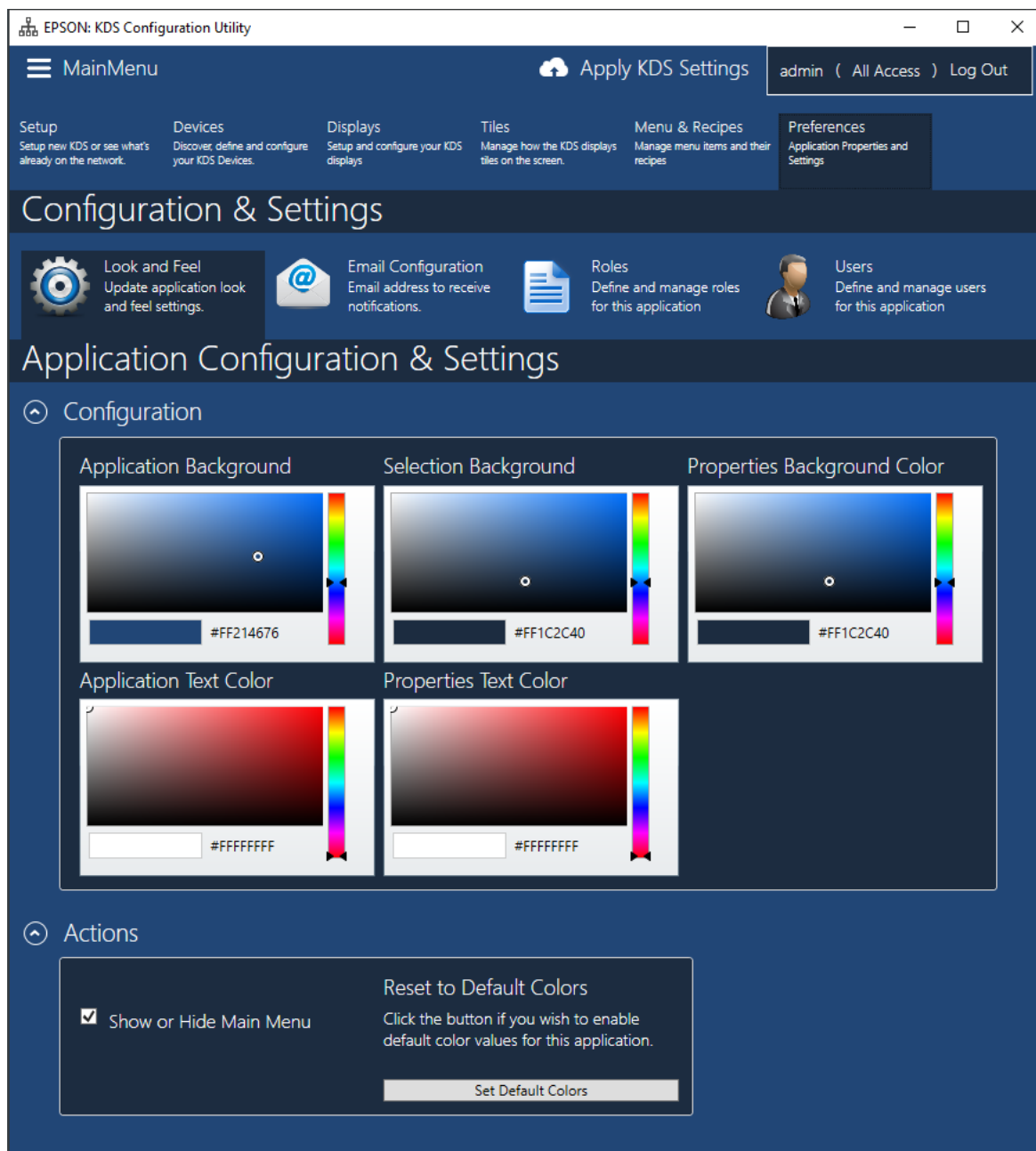
Grouping


Grouping is used to help the user route the items to the appropriate KDS display/screen. For example, you can have the following groups: Wings, Drinks and Pasta. When you setup your KDS environment you will be able to specify the group that the display will show. A display next to the fryer can be configured to show the "Wings" group only, the pizza station display will show "Pizzas" group, and the "Drinks" group will be shown on the drinks display. The way the user will setup the groups is left to the user, and will differ with every new KDS setup.

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2.4.7. Preferences

This section of the KDS Configuration Utility, allows you to control look and feel and access privileges for the application.



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2.4.7.1. Look & Feel

Control the look and feel of the KDS Configuration tool by controlling the following properties. These settings stay local to your account, and do not affect the KDS Configuration File.

Application Background

Control the background color of the KDS Configuration Utility.

Application Text Color

Control the text color of the KDS Configuration Utility.

Selection Background

Control the Tab Selection Color

Properties Background Color

Control the Properties Background Sections.

Properties Text Color

Control the Properties Text Color

Show or Hide Main Menu

Check to Show Main Menu, uncheck to hide it.

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2.4.7.2. Roles

Roles allow you to specify access privileges to certain sections of the KDS Configuration Utility. By default, the application will have “All Access” role that allows default “admin” account to access the application. This role cannot be changed, but new roles can be added to specify access privileges for the new role.

Add Role

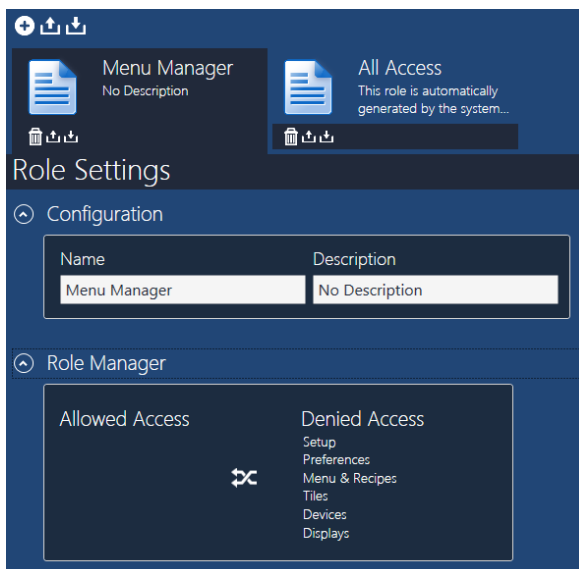
Use this command to create a new role by specifying the role name in the dialog box. The name of the new role must be unique. Once the role had been created it can be configured, and later applied to the users as needed.

Export All Roles

Exports all the roles and settings to the XML file.

Import All Roles

Imports all the roles and settings from previously saved XML file.



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2.4.7.3. Role Settings

A role must specify which areas of the application will be accessible by the user that is assigned such a role. For example, you can create “Menu Manager” role and allow the user to access only “Menu & Recipes” list and nothing else in the application. By default, newly created role will have no access privileges set to it. If such role is assigned to the user, the user will be able to log in, but not be able to do anything inside the application.

Name

The unique role name.

Description

A short description of the role.

Allowed Access & Denied Access

This section allows you to select which parts of the application to include in the Allowed Access, and which once to deny. By clicking on the items in the “Denied Access” they will be moved to the “Allowed Access” list and vice versa. Only those items that are included in the “Allowed Access” list will be accessible by the user with such role.

Note: “All Access” role is a special role. If you modify this role in any way, or delete this role, this change will not persist the next time you restart KDS Configuration Tool. This behavior is by design, and is necessary, in order to prevent the tool from being inaccessible by the admin user by mistake.

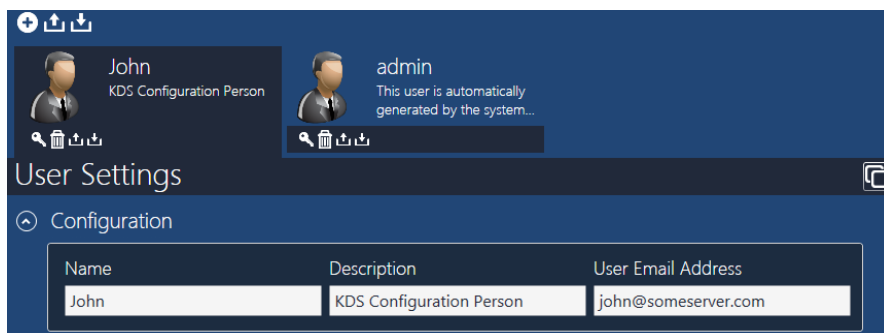
Deleting a role

If you delete a role that had been assigned to the user, the users will lose access privileges specified by that role. If you need to delete or rename a role, you must make sure to check which user accounts it may affect.

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2.4.7.4. Users

For security reasons, only registered or admin users can log in into KDS Configuration Tool. The users can have passwords and access privileges assigned to them. This section explains how to create and manage users and their access privileges.



Add User

Use this command to add new user to the user list. The name you add must be unique and can be changed later.

Export all users

Use this command to export all users and their settings to the XML configuration file.

Import all users

Import previously exported users from the XML file. All user settings including passwords are preserved.

2.4.7.5. User Settings

Once the user is added to the list, password and access privileges can be assigned.

Password

Click on “Set New Password” button (key) to enter new password for the user. The password can only be set if the user’s email address was set. This is necessary if the user would want to recover the password later on.

Note: Only users with “All Access” privileges can add/remove and modify users in the list. The administrators can also set new passwords for the users and control access privileges.

Delete User

The user can be deleted from the list by clicking on the “Delete” command. The deleted user will no longer be able to log in to the KDS Configuration Tool.

Name

Unique user name. This is also the log in name.

Description

A short optional description of the user.

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User Email Address

User email address must be specified before a password can be set for the user.
This email address will be used if the password is forgotten later.

Assigned Roles & Available Roles

A role can be assigned to the user by clicking on the role name in the “Available Roles” list. Once role name is clicked it will be moved to “Assigned Roles” list for the user and will allow the user to access the sections of the KDS Configuration Tool specified by the role earlier. Multiple roles can be assigned to the user as needed. A role can be removed for the user by clicking on it in the “Assigned Roles” list.

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3. Firmware Update

The configuration tool allows updating of the firmware on KDS devices. Please follow the steps to upgrade to the latest KDS firmware for your system.

3.1. Run Update

1. Get proper RCX file. This is the firmware update file that is supported by the configuration tool.
2. Click on “Main Menu” → Update Firmware.
3. Browse and choose RCX File.
4. The system will start the update process which should not be interrupted. The whole process could take up to 20 minutes depending on the number of KDS devices being update.
5. During the update, devices will be marked RED and progress will be shown on the screen for each device.

Keep in mind that the boxes will restart several times during the update process. Ensure you keep the power to the system on at all times. Do not attempt to disconnect cables or disrupt the process while it is happening as this could break your system.

3.2. Troubleshooting:

If for any reason, some of the devices were not updated correctly, here are the steps you can do to try and recover the system.

1. Restart configuration tool.
2. Ensure the IP field for each device is not empty, and that device is either Green or Red. Restart the update process and wait for it to finish.
3. If device already has the firmware updated, the success message will be show for that device.
4. Let all devices to update to the same firmware before using the KDS or configuring it.

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