User Manual

AEP Works 3

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1 Introduction

AEP Works 3 is a professional application development tool for creating software applications for SATO barcode printers that support the AEP platform. An application designed with AEP Works 3 forms a complete label printing solution that can be transferred to the printer. It offers an easy-to-use design interface and meets any label design and printing requirements needed for creating efficient label printing applications.

For industries using the new FX3 printer, AEP Works 3 offers the feature to design business specific touchscreen applications. This allows the operator to create customized applications that can add value to users in various industries.

- Install the software
- Connect to printer
- Uninstall the software

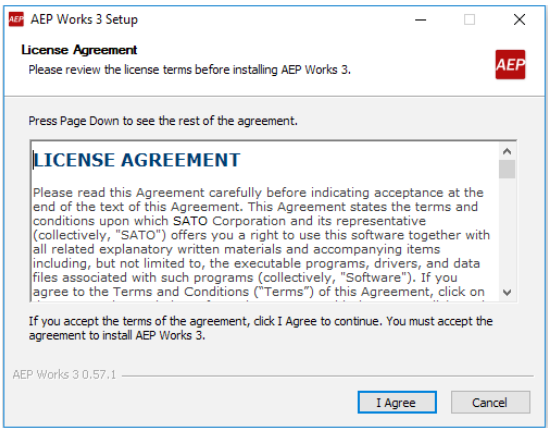
Install the Software

DO NOT CONNECT THE PRINTER before the software has been successfully installed!
System Requirements: Windows 7 or later.

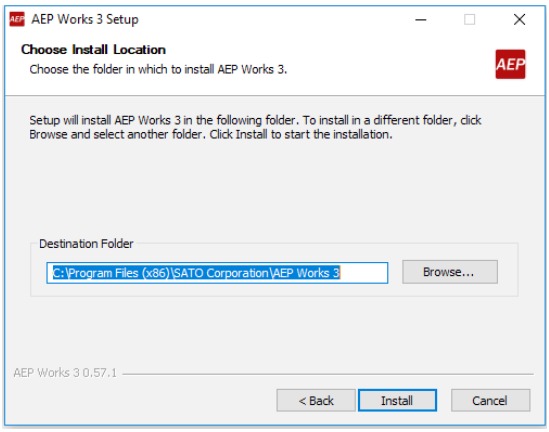
NOTE: You need administrator privileges to run the installer.

1. Execute **AEP Works 3 Setup.exe** to launch the installer.

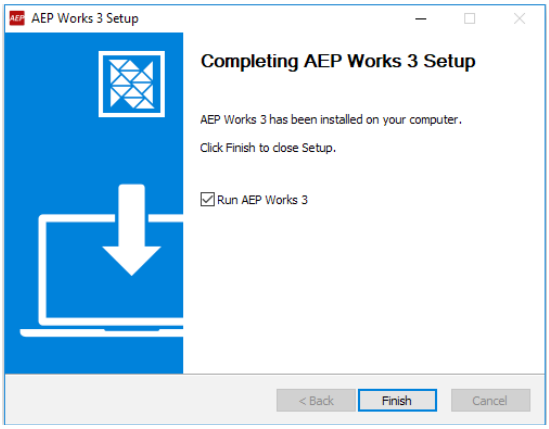
2. Read the license agreement. To accept, click **I Agree**.



3. Select install location, click **Install.**



4. To complete the installation, click **Finish.**



1

Connect to Printer

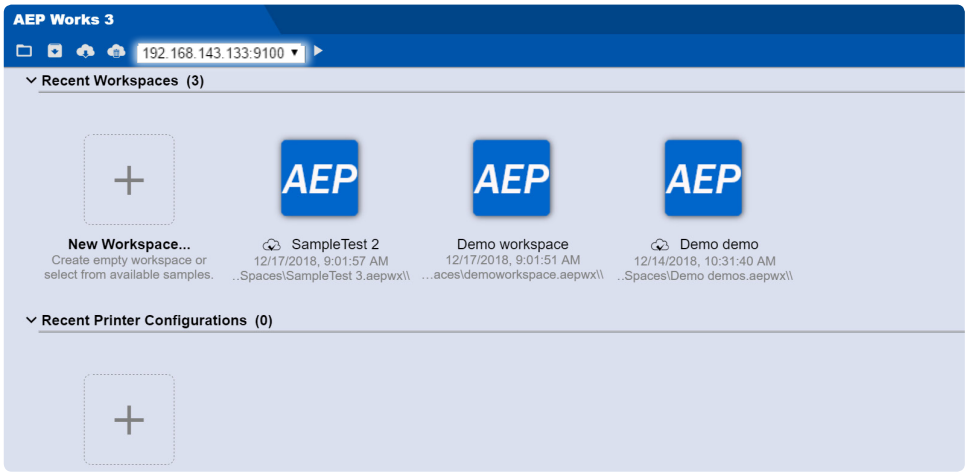
Choose one of the following interfaces for connecting the printer to your computer:

- LAN AND WLAN
- USB

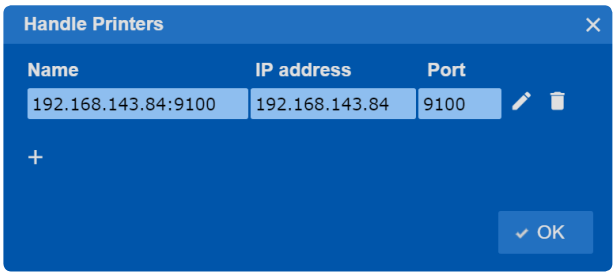
CONNECT TO THE PRINTER VIA **LAN** AND **WLAN**

1 Start **AEP Works 3** by clicking the desktop icon.

2 In the toolbar located at the top of the screen, in the **Select Printer** drop-down list, click **Handle Printers.**



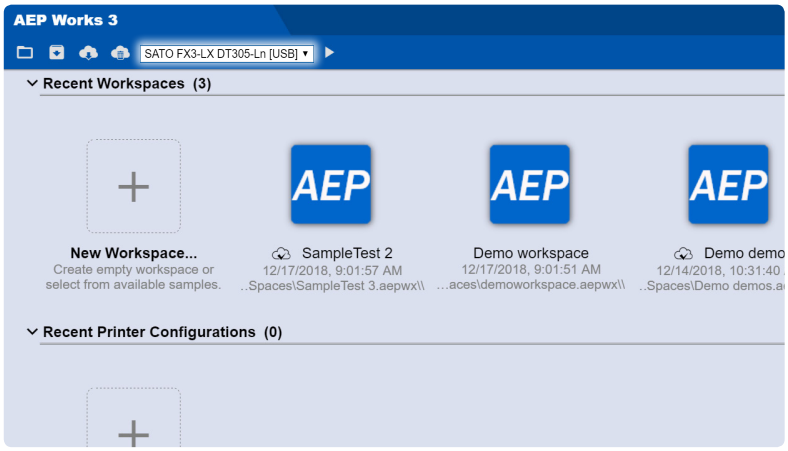
3 Click the plus icon and enter the IP-Address and port of the targeted printer, click the check icon or **OK.**
NOTE: If you don't know the IP-Address and port of your printer, check your printer's manual.



CONNECT TO THE PRINTER VIA **USB**

1. Start **AEP Works 3** by clicking the desktop icon.

2. In the toolbar located at the top of the screen, in the **Select Printer** drop-down list, select the USB-connected printer model.

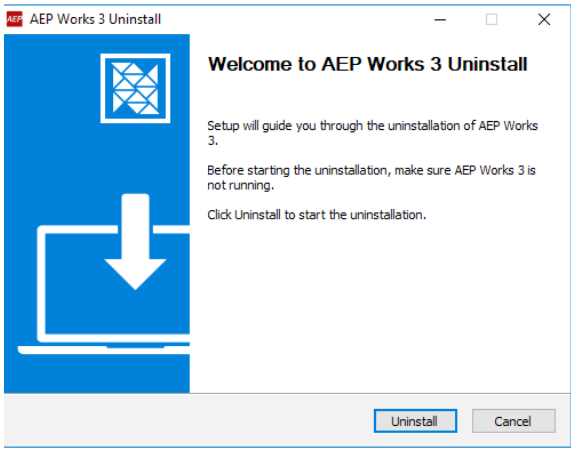


Uninstall the Software

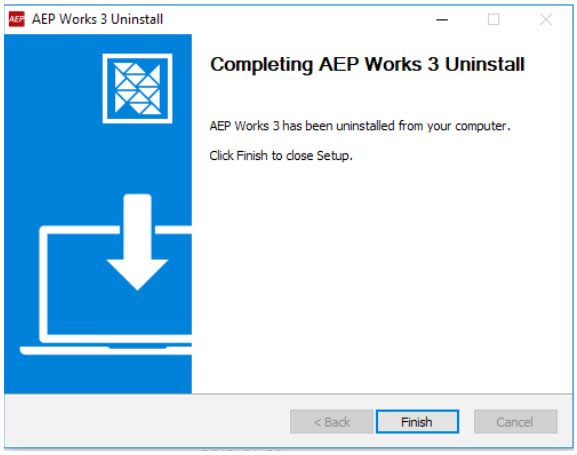
To uninstall AEP Works 3, use the uninstall program provided by your operating system. Follow the instructions below to complete the uninstallation:

NOTE: You need administrator privileges to run AEP Works 3 uninstall.

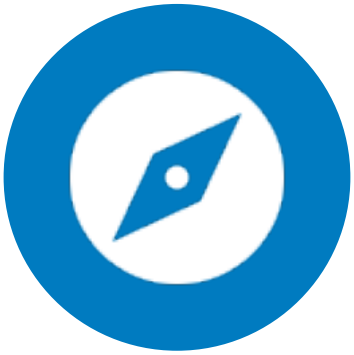
1. Make sure AEP Works 3 is not running. To start the uninstallation, click **Uninstall.**



2. To complete the uninstallation, click **Finish.**



2 Navigate AEP Works 3

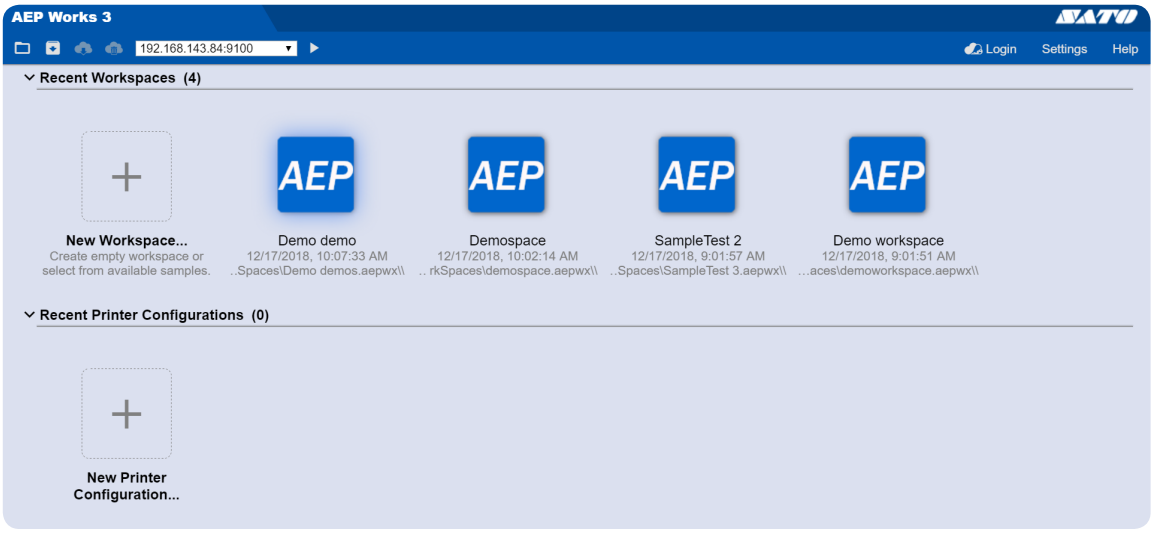


AEP Works 3 offers an intuitive interface environment to help designing labels and screens. This chapter provides an overview of the interface as well as knowledge of its basic elements and menus.

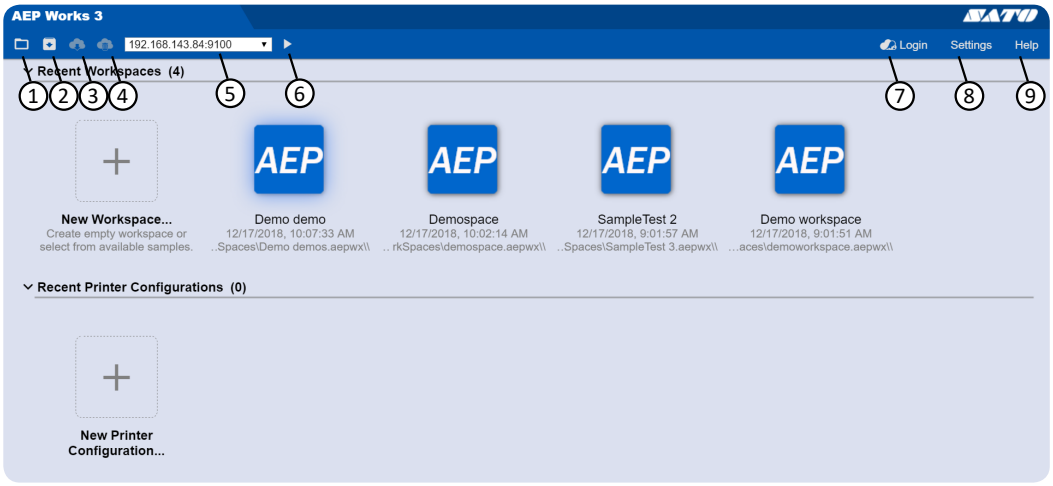
- Start Screen
- Workspace Overview
- Editors

Start Screen

The first window that appears after starting AEP Works 3 is the start screen. It´s the gathering point of all your recent workspaces and printer configurations. To learn about creating new workspaces, go to Create New Workspace on page 49. To learn about printer configurations, go to Printer Configuration on page 127.



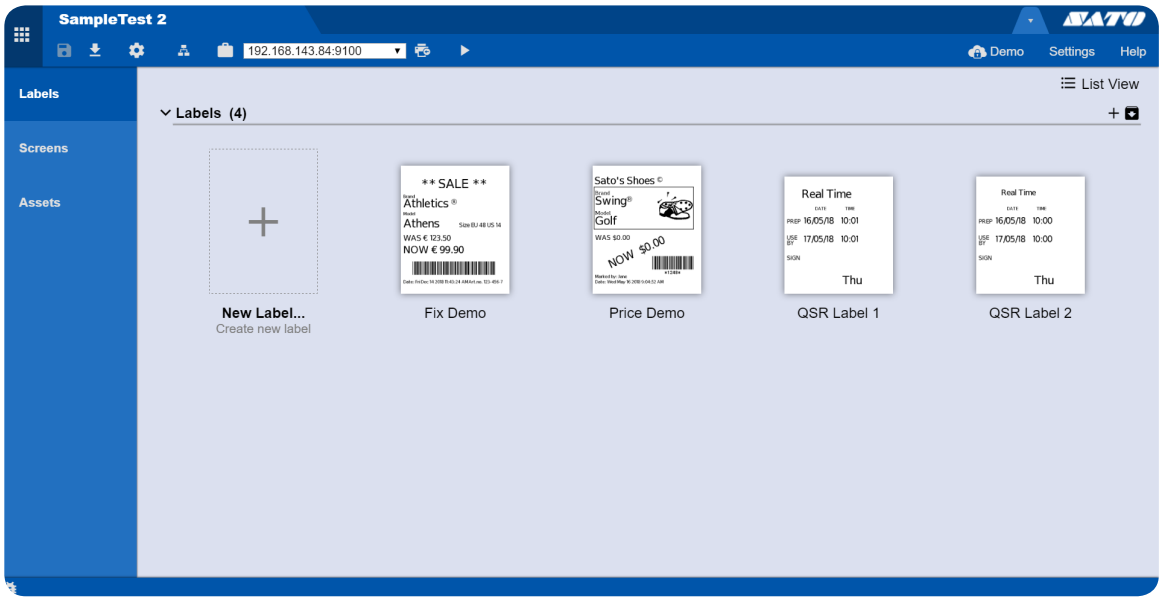
START TOOLBAR



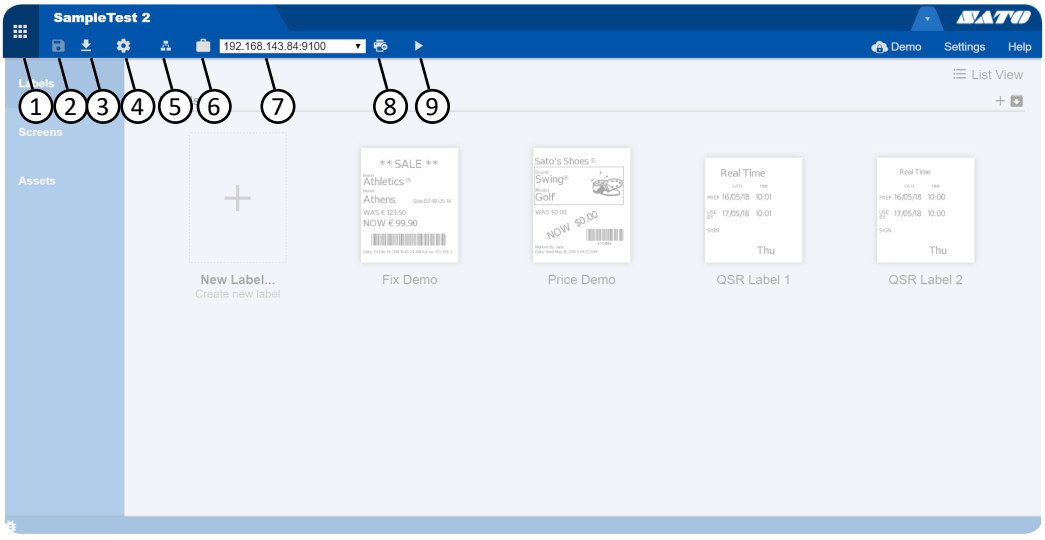
1. **Open** - Open an existing workspace or printer configuration.
2. **Import** - Import an existing workspace from AEP Works Pro.
3. **Download workspace from SATO App Storage** - Download a workspace from the SATO App Storage cloud (only available if you are logged in to SATO App Storage).
4. **Delete files from SATO App Storage** - Delete files from the SATO App Storage cloud (only available if you are logged in to SATO App Storage).
5. **Select Printer** - Select the targeted printer model.
6. **Run in Simulator** - If a printer is connected, simulate the workspace on your computer.
7. **Login to SATO App Storage** - Login to the SATO App Storage cloud application.
8. **Settings** - Change language, units and the appearance of the workspace.
9. **Help** - Get useful help and information from the online PDF user manual.

Workspace Overview

The workspace functions as a center for adding and viewing content for your label- and screen designs. The Workspace Overview window shows all of your labels, screens and assets in the currently active workspace.



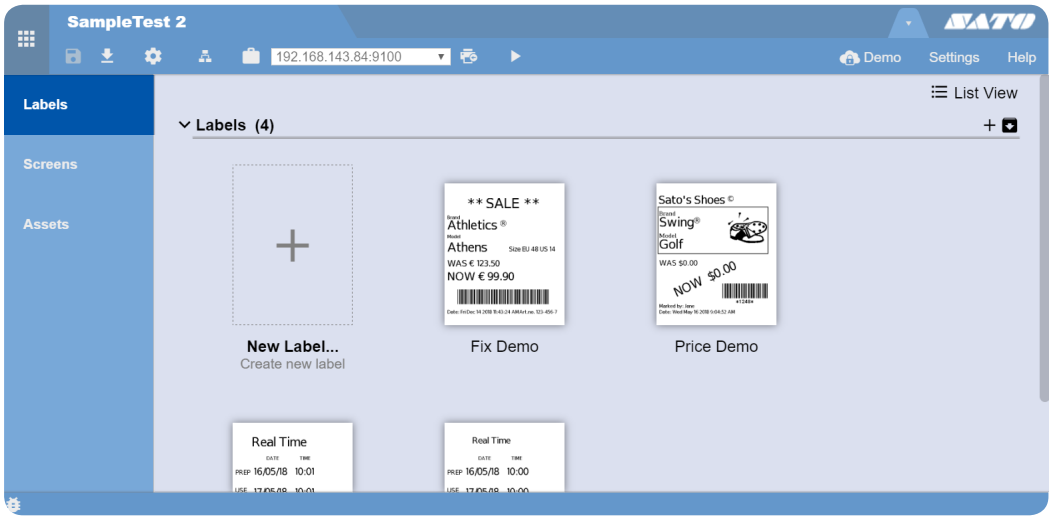
WORKSPACE TOOLBAR



1. **Go Back -** Go back to the previous screen.
2. **Save -** Save your currently active workspace.
3. **Save As -** Save your currently active workspace to a new location.
4. **Workspace Settings -** Access general and advanced workspace settings.
5. **Screen Flow -** Get an overview of the screen flow of your workspace.
6. **Build Package -** Compile a package of your currently active workspace.
7. **Select Printer -** Select the targeted printer model.
8. **Send to Printer -** Send your currently active workspace to a connected printer.
9. **Run in Simulator -** If a printer is connected, simulate the workspace on your computer.

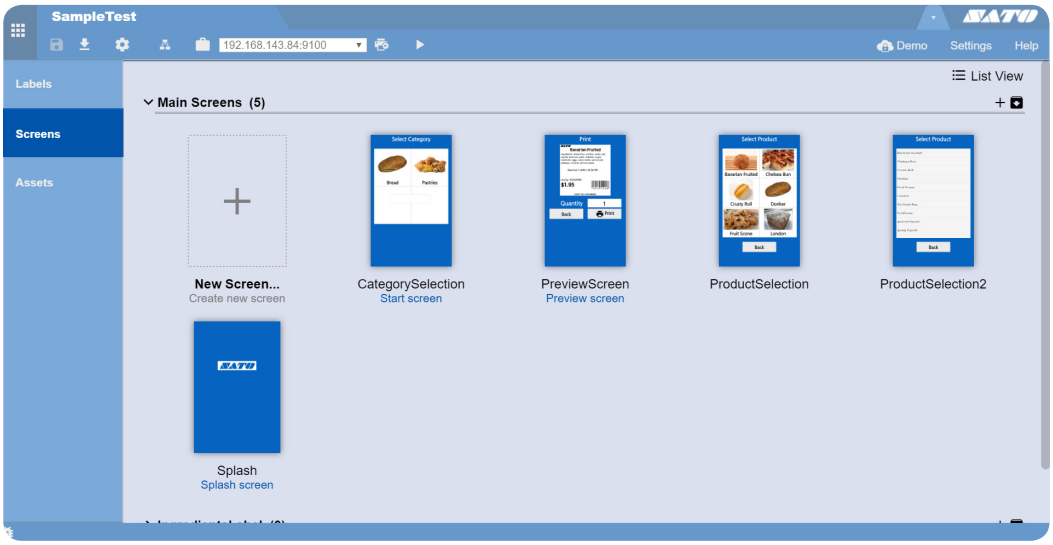
LABELS OVERVIEW

Create new labels and browse through your existing labels.



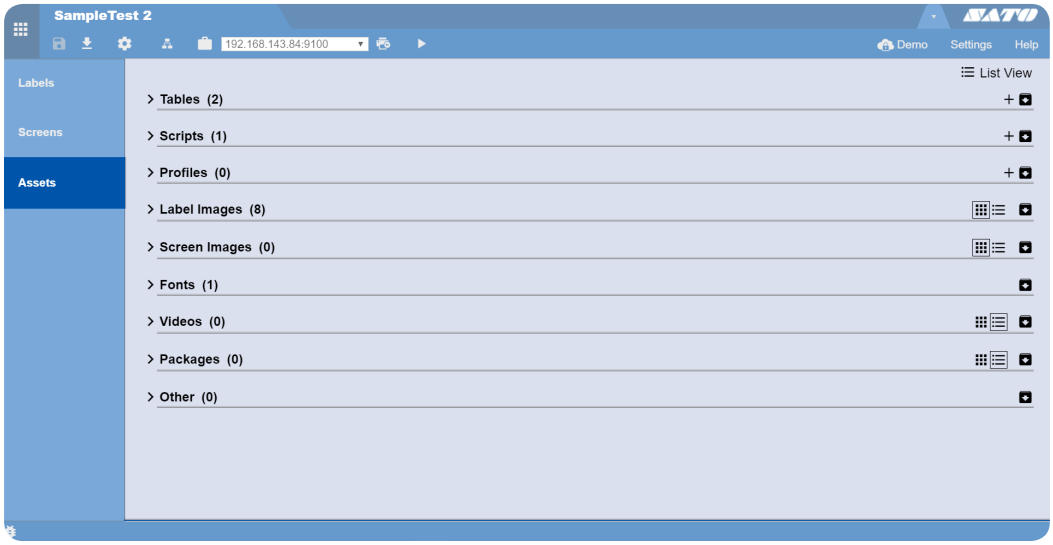
SCREENS OVERVIEW

Create new screens and browse through your existing screens.



ASSETS OVERVIEW

The assets overview works as a library of files and settings that you can use while working on your labels and screens. From here it's possible to copy, delete, export/import and change properties of individual files.

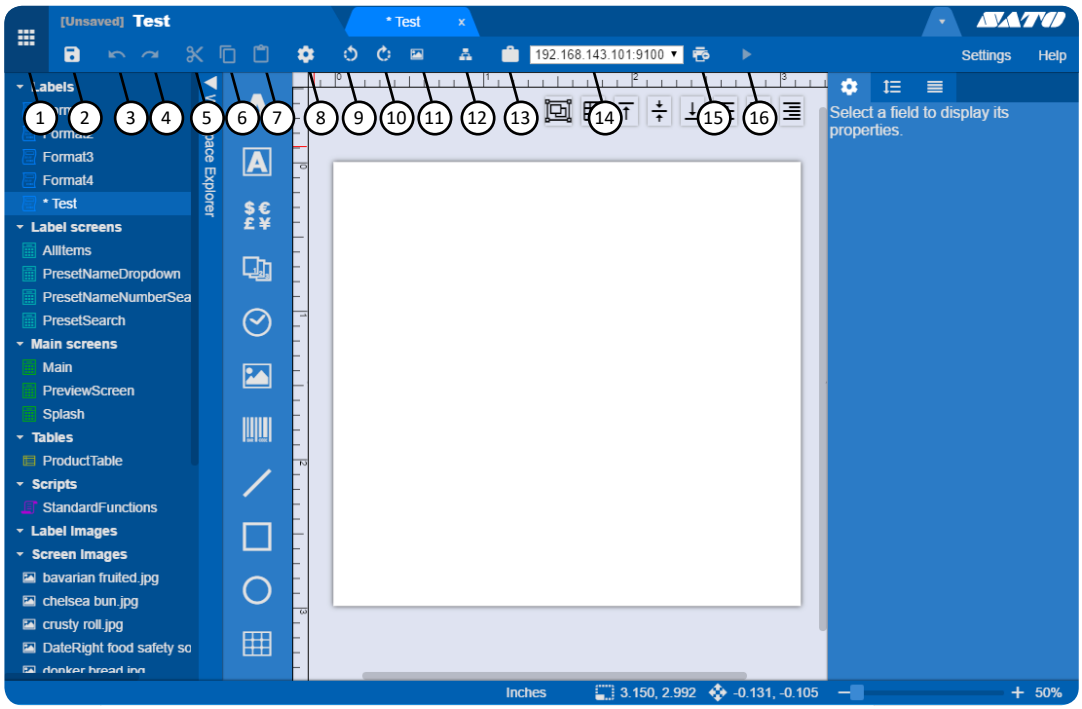


Editors

Labels, screens, scripts, tables and profiles all have their own dedicated editors, which contains tools and options for designing and editing content.

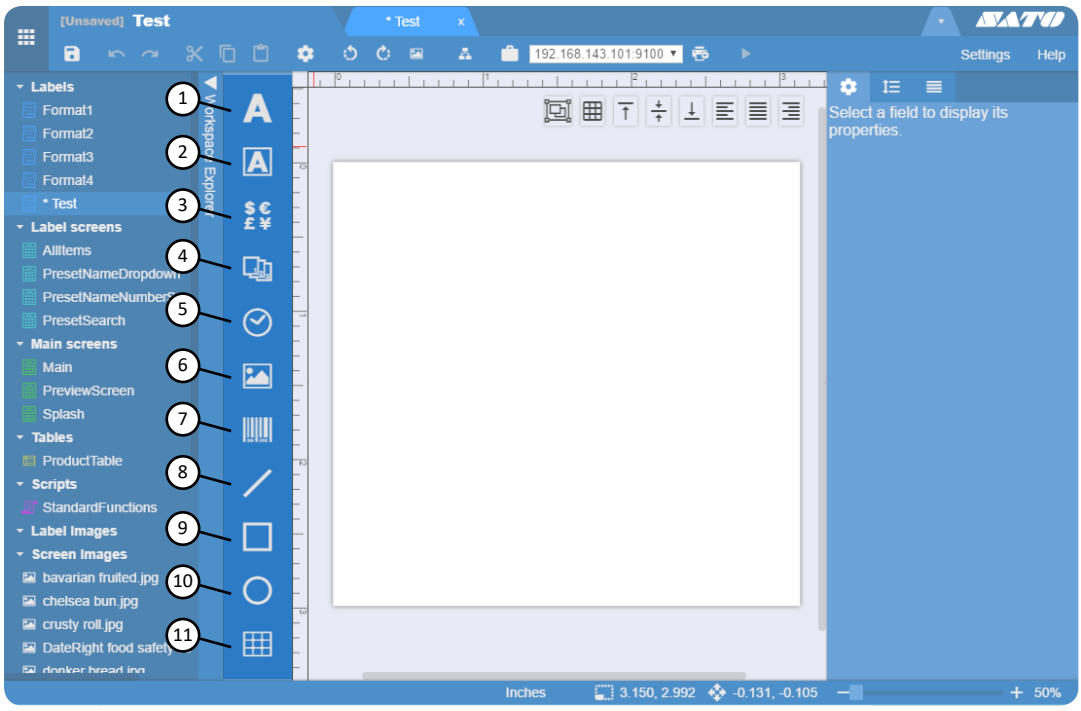
LABEL EDITOR

Label Editor Toolbar



1. **Back** - Go back to previous screen.
2. **Save** - Save your progress in the currently active editor.
3. **Undo** - Undo the last action in the active editor.
4. **Redo** - Redo the last undo action in the active editor.
5. **Cut** - Remove the selected object from its current position.
6. **Copy** - Copy the selected object.
7. **Paste** - Paste the last copied or cut-out object.
8. **Label Settings** - Open label settings.
9. **Rotate Label Left** - Rotate the label left.
10. **Rotate Label Right** - Rotate the label right.
11. **Pre-print** - If your media roll already has preprinted graphics, you can use this setting to simulate the graphics on the label to prevent overlapping of objects.
12. **Screen flow** - Overview the screen flow of the currently active workspace. For more information on using screen flow, go to Screen Flow on page 100.
13. **Build package** - Compile a package of your currently active workspace.
14. **Select printer** - Select the targeted printer model.
15. **Send to Printer** - Send the currently active workspace to a connected printer.
16. **Run in Simulator** - If a printer is connected, simulate the workspace on your computer.

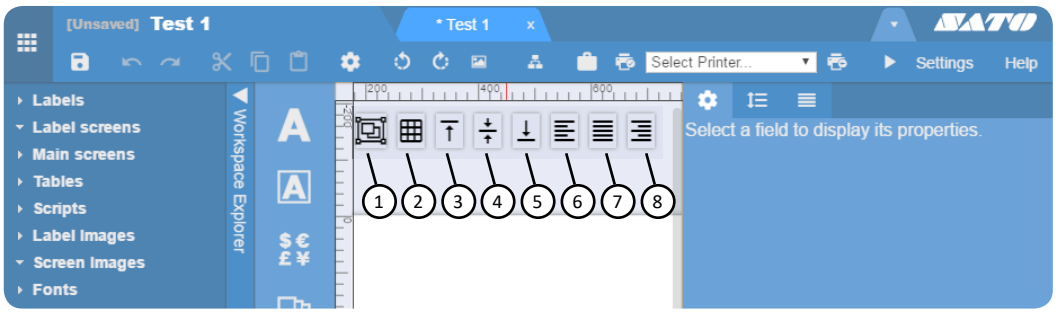
Label Object Menu



1. Text
2. Textbox
3. Price
4. Counter
5. Time
6. Image
7. Barcode
8. Line
9. Box
10. Circle and Ellipse
11. Grid

Label Editor Mini Toolbar

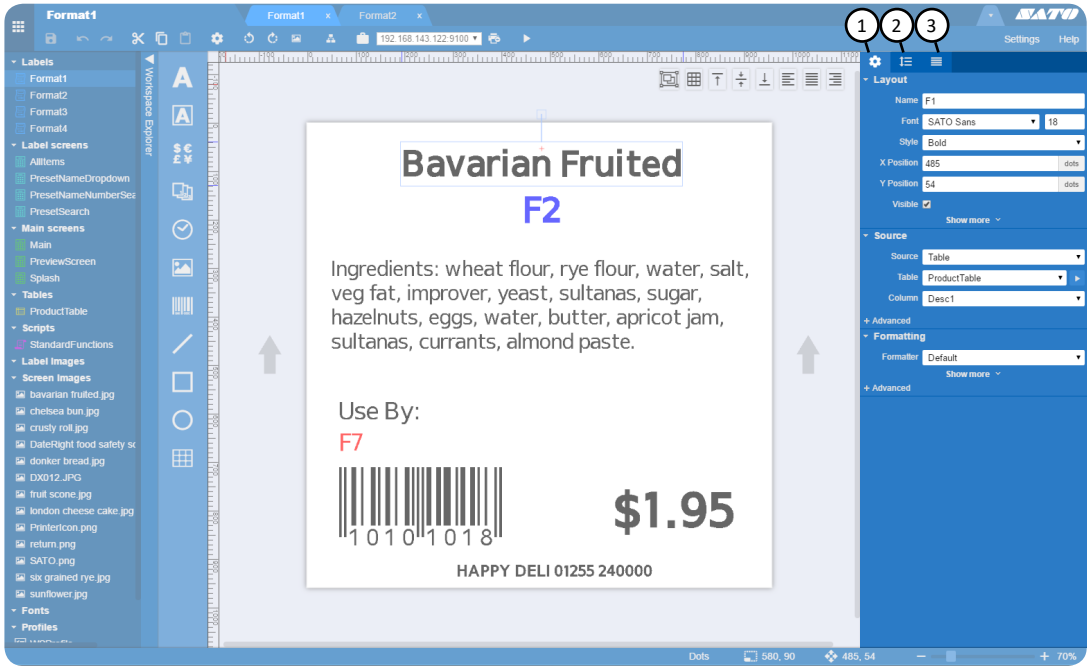
The Editor Mini Toolbar contains a set of controls that lets you perform actions upon the selected object.



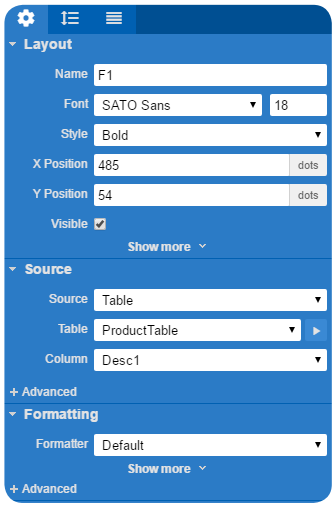
1. **Group** - Attaches selected objects with each other.
2. **Grid view** - Add a grid in the background of your editor window. Objects can align to the intersections of lines in the grid. The grid does not print.
3. **Top align** - Align selected objects to the top edge of the top-most object.
4. **Middle align** - Align selected objects to the horizontal middle of the objects.
5. **Bottom align** - Align selected objects to the bottom edge of the bottom-most object.
6. **Left align** - Align selected objects to the left edge of the left-most object.
7. **Center align** - Align selected objects to the vertical center of the objects.
8. **Right align** - Align selected objects to the right edge of the right-most object.

Label Properties Panel

The panel offers options for changing the properties of an object, rearranging its execution order and previewing the output of your dynamic data sources.

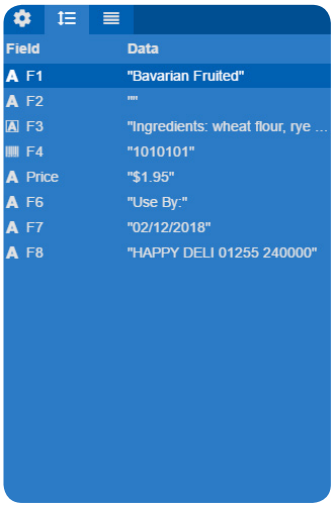


1. Properties



When clicking an object in the label editor, the Properties panel automatically populates with object-specific properties and editing options.

2. Field List



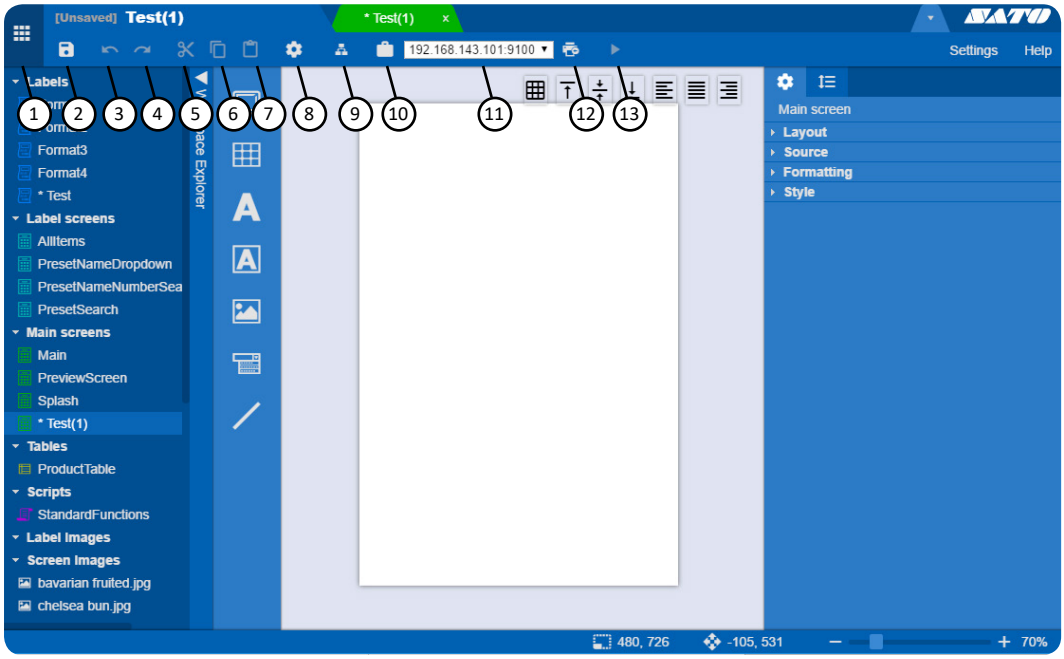
The Field List displays all the objects on the label and their order of execution in your currently active editor. You can change the execution order of objects by dragging them to preferred positions in the list.

3. Preview Rows

If tables are used as sources of updating content, this feature allows browsing through the different table columns.

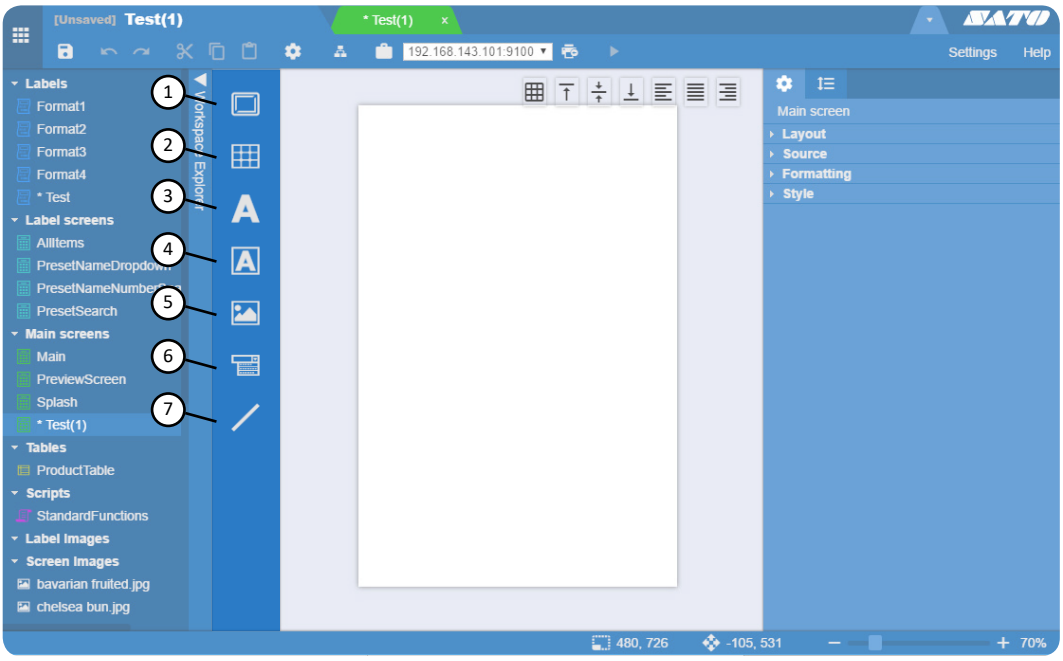
SCREEN EDITOR

Screen Editor Toolbar



1. **Back** - Go back to the previous screen.
2. **Save** - Save your progress in the currently active editor.
3. **Undo** - Undo the last action in the active editor.
4. **Redo** - Redo the last undo action in the active editor.
5. **Cut** - Remove the selected object from its current position.
6. **Copy** - Copy the selected object.
7. **Paste** - Paste the last copied object.
8. **Screen Settings** - Open screen settings.
9. **Screen flow** - Overview the screen flow of the currently active workspace. For more information on screen flow, go to Screen Flow on page 100.
10. **Build package** - Compile a package of the currently active workspace.
11. **Select printer** - Select the targeted printer model.
12. **Send to Printer** - Send the currently active workspace to a connected printer.
13. **Run in Simulator** - If a printer is connected, simulate the workspace on your computer.

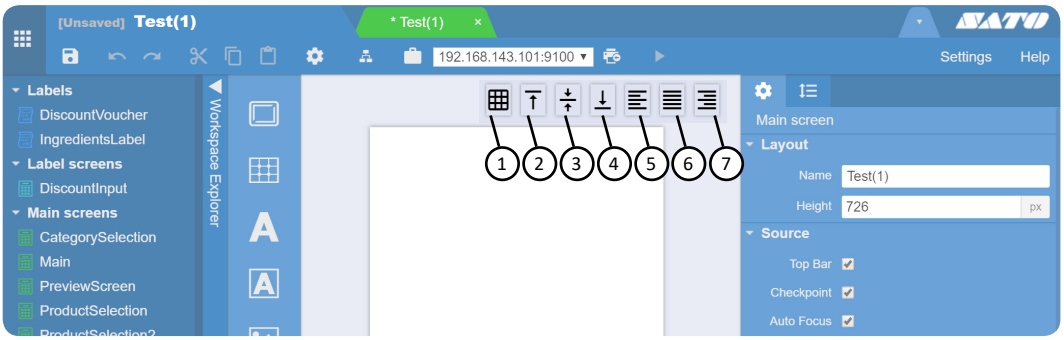
Screen Object Menu



1. Button **3. Text Label** **5. Image** **7. Line**
2. Grid view **4. Input** **6. Combo Box**

Screen Editor Mini Toolbar

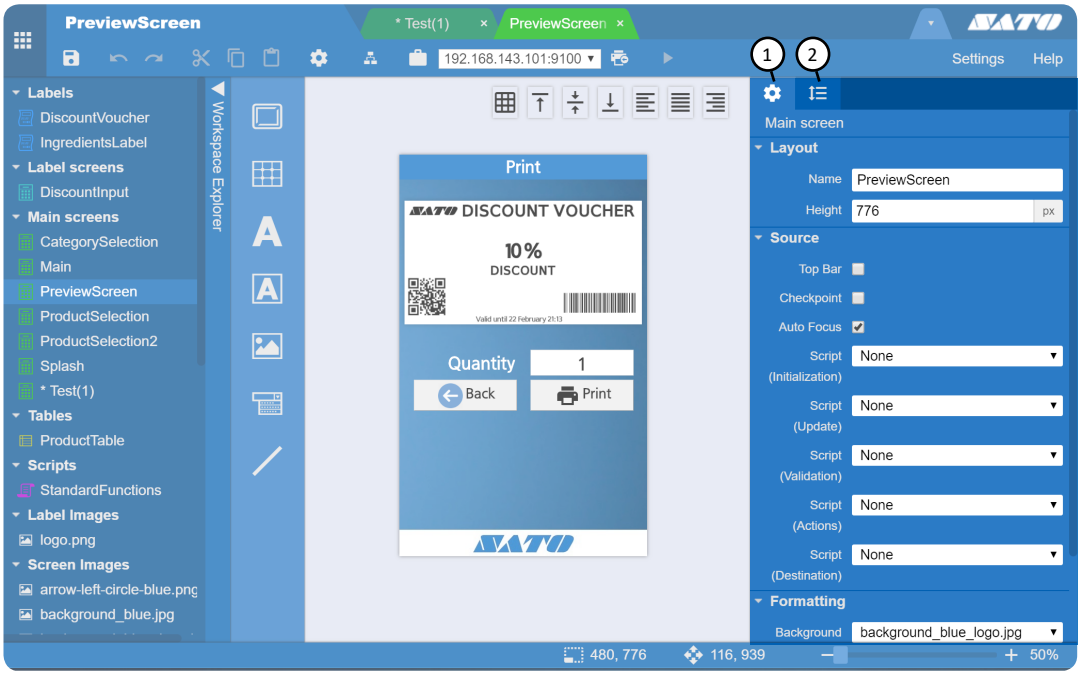
The Editor Mini Toolbar contains a set of controls that lets you perform actions upon selected objects.



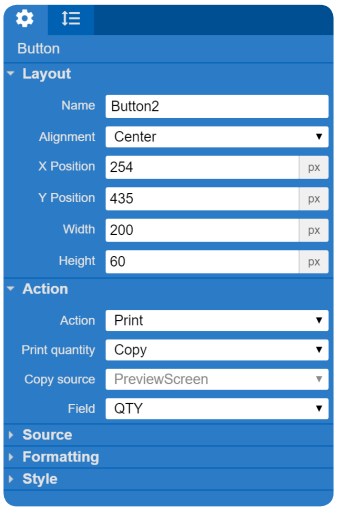
1. **Grid view** - Add a grid in the background of your editor window. Objects can align to the intersections of lines in the grid. The grid does not print.
2. **Top align** - Align selected objects to the top edge of the top-most object.
3. **Middle align** - Align selected objects to the horizontal middle of the objects.
4. **Bottom align** - Align selected objects to the bottom edge of the bottom-most object.
5. **Left align** - Align selected objects to the left edge of the left-most object.
6. **Center align** - Align selected objects to the vertical center of the objects.
7. **Right align** - Align selected objects to the right edge of the right-most object.

Screen Properties Panel

The panel offers options for changing the properties of an object and rearranging its execution order.

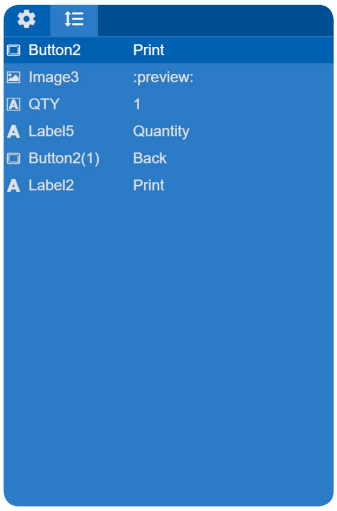


1. Properties



When clicking an object in the screen editor, the properties panel automatically populates with object-specific properties and editing options.

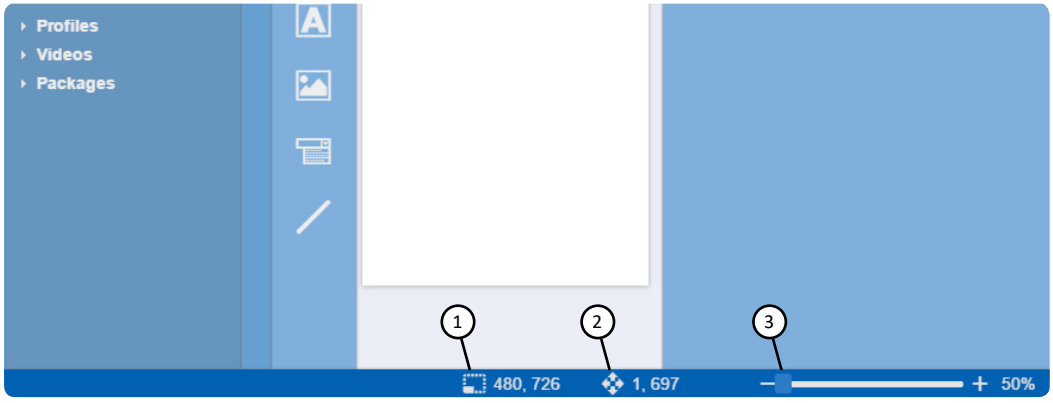
2. Field List



The Field List displays all the objects on the screen and their order of execution. You can change the execution order of objects by dragging them to preferred positions in the list.

LABEL- AND SCREEN EDITOR STATUS BAR

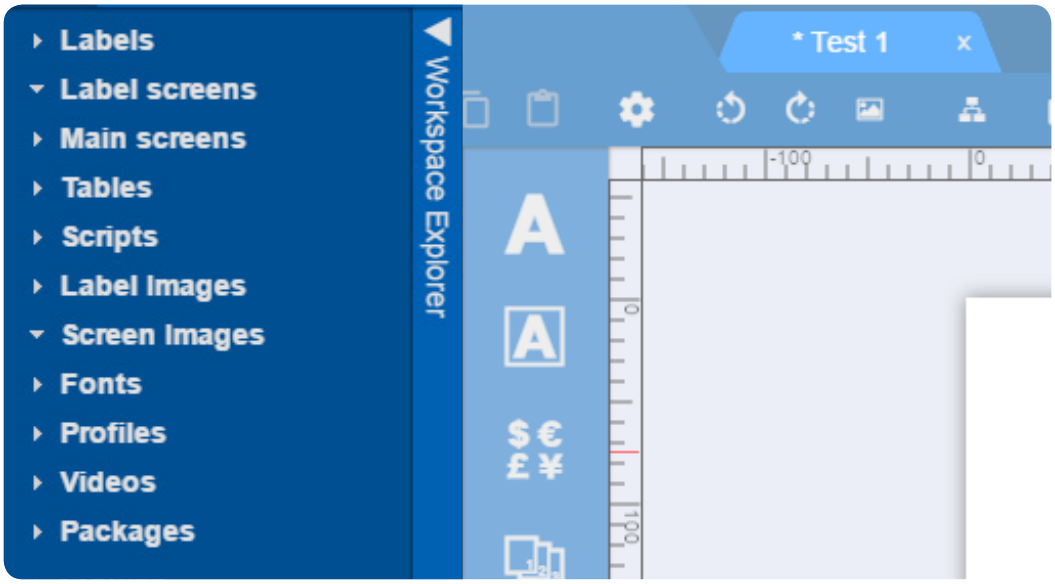
The Editor Status Bar at the bottom of the window displays useful object- and sheet properties, as well as options for zooming.



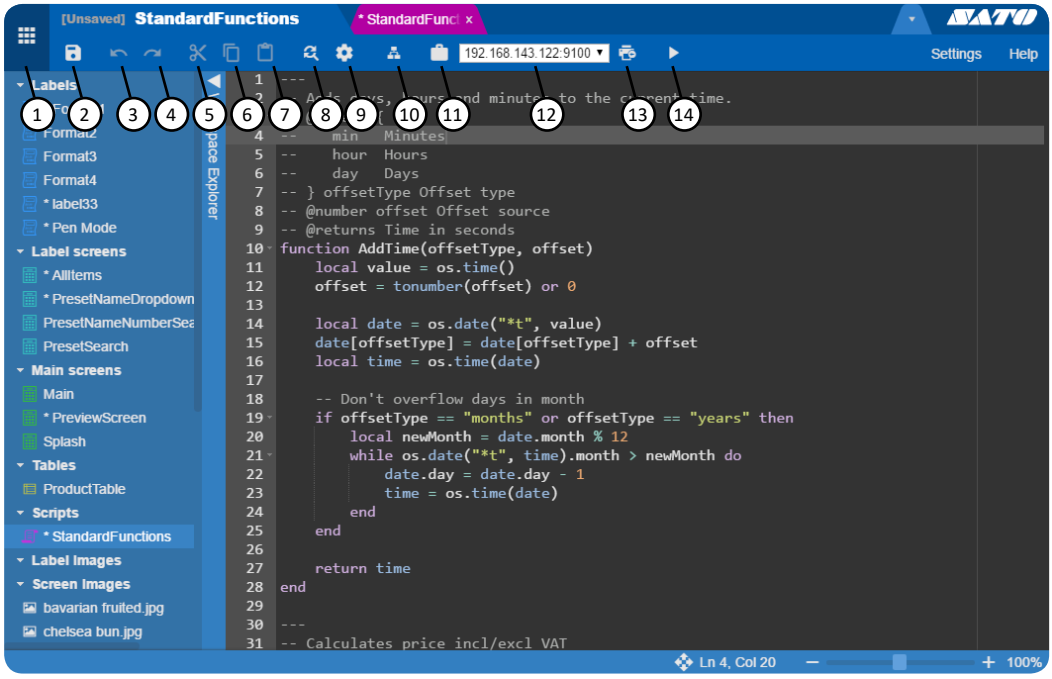
1. **Object Size** - Displays the dimensions of a selected object. If no object is selected, the size of the label is shown. The dimensions can be shown as dots, mm or inches, depending on the unit settings.
2. **Object Position** - Displays the coordinates of a selected object. If no object is selected, it shows the coordinates of the pointer. The coordinates can be shown as dots, mm or inches, depending on the unit settings.
3. **Zoom Slider** - Zoom in and out using the slider or by clicking the plus- and minus controls.

WORKSPACE EXPLORER

The Workspace Explorer Menu provides you with an overview of the various assets, labels and screens in the currently active workspace. To add new assets to your workspace, go to Add Assets to Workspace on page 50.

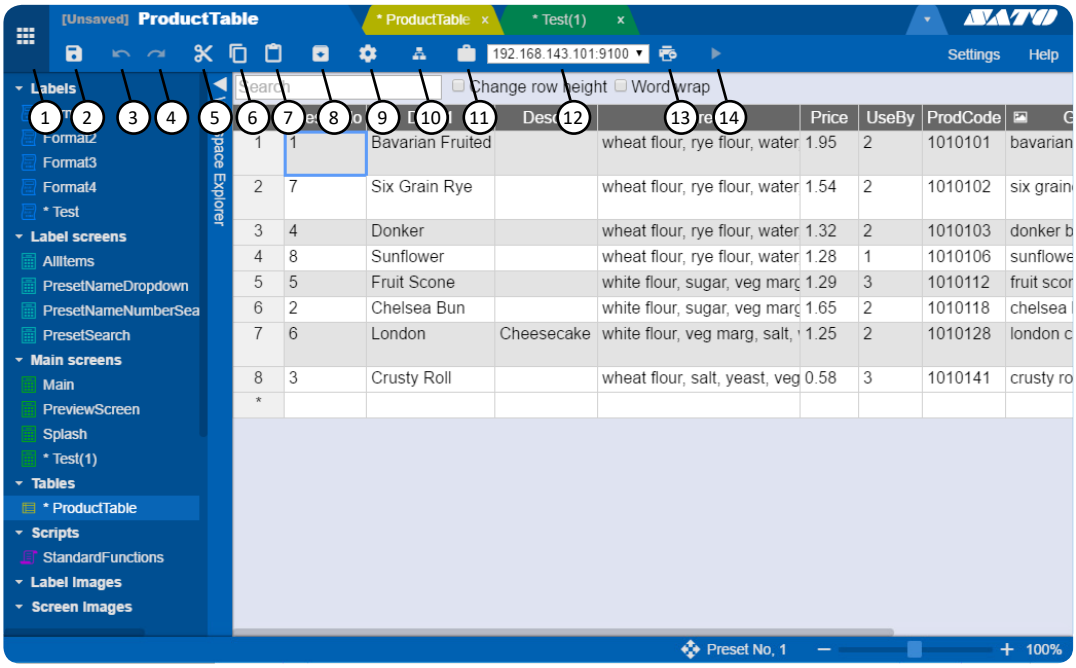


SCRIPT EDITOR

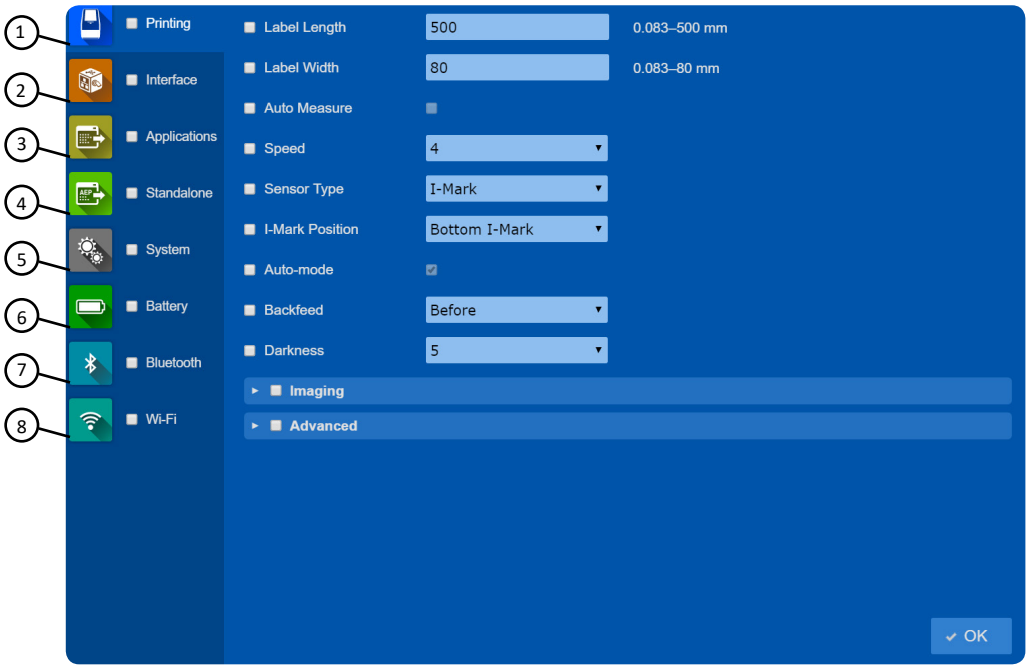


1. **Back -** Go back to the previous screen.
2. **Save** - Save your progress in the currently active editor.
3. **Undo -** Undo the last action in the active editor.
4. **Redo -** Redo the last undo action in the active editor.
5. **Cut -** Remove the selected object from its current position.
6. **Copy -** Copy the selected object.
7. **Paste -** Paste the last copied object.
8. **Find and Replace -** Find a string of code and replace it with a new one.
9. **Script Settings -** Change the settings of the script editor.
10. **Screen flow -** Get an overview of the screen flow of your currently active workspace. For more information on using screen flow, go to Screen Flow on page 100.
11. **Build package -** Compile a package of the currently active workspace.
12. **Select printer -** Select the targeted printer model.
13. **Send to Printer -** Send the currently active workspace to a connected printer.
14. **Run in Simulator -** If a printer is connected, simulate the workspace on your computer.

TABLE EDITOR



1. **Back** - Go back to the previous screen.
2. **Save** - Save your progress in the currently active editor.
3. **Undo** - Undo the last action in the active editor.
4. **Redo** - Redo the last undo action in the active editor.
5. **Cut** - Remove the selected object from its current position.
6. **Copy** - Copy the selected object.
7. **Paste** - Paste the last copied or cut-out object.
8. **Import** - Import a table from e.g. MS Excel.
9. **Table Settings** - Change the settings of the script editor.
10. **Screen flow** - Get an overview of the screen flow of your currently active workspace. For more information on screen flow, go to Screen Flow on page 100.
11. **Build package** - Compile a package of your currently active workspace.
12. **Select printer** - Select the targeted printer model.
13. **Send to Printer** - Send the currently active workspace to a connected printer.
14. **Run in Simulator** - If a printer is connected, simulate the workspace on your computer.



1. **Printing -** Edit label length/width, printing speed, sensor type etc.
2. **Interface** - Edit settings such as network and USB-connections.
3. **Applications** - Edit settings such as printer language.
4. **Standalone** - Change start-up display, edit settings for starting applications etc.
5. **System** - Set the display language, keyboard language, passwords etc.
6. **Battery** - Change battery settings.
7. **Bluetooth** - Enable and edit bluetooth settings.
8. **Wi-Fi** - Enable Wi-Fi and set the wireless LAN.

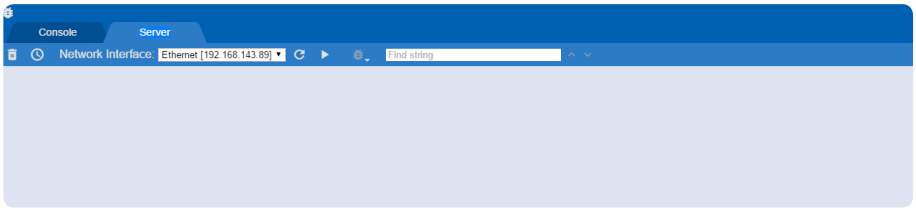
DEVELOPER PANEL

The Developer Panel contains a Lua console and a debug server. Both the console and the debug server provide a search function which enables you to search for strings in the output. To open the Developer Panel, press **Ctrl+F1**.

CONSOLE

The console provides a Lua console which allows you to execute inline Lua scripts and see the output. This should only be used by users with knowledge in Lua scripting. The console also displays run time errors that could emerge when running your application(s).

SERVER



The server section in the developer panel allows you to see debug output from a remote network enabled printer, or to start and stop a PSim (printer simulation) session.

Use the printer drop-down to select a printer to connect with. Then click the "debug" icon and select “Start remote debugging [192.168.xxx.xxx]". A debug package will be sent to the printer and the application will restart. When the message “Connected to ‘192.168.xxx.xxx” is displayed the printer will send all output from dprint() to AEP Works 3. To start a session in PSim mode, select “Start remote debugging (PSim) [192.168.xxx.xxx]". In PSim mode you are able to view the printed label(s) as an image in the PSim window. No physical label will be printed.

To stop debugging, click “Stop remote debugging [192.168.xxx.xxx]".

To refresh your list of network interfaces, click the refresh icon .

3 SATO App Storage

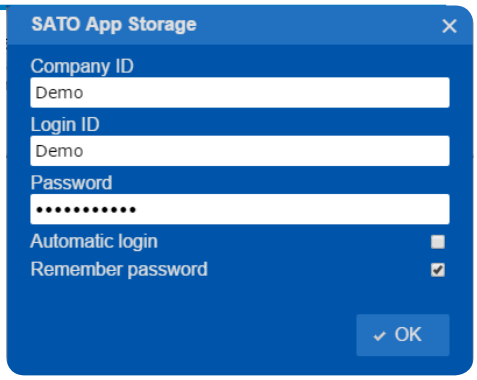
SATO App Storage works as a cloud storage for your company files. Workspaces and package files can be uploaded and saved to SATO App Storage and connected printers can be configured to receive automatic updates from SATO App Storage.

- Connecting
- Downloading
- Deleting
- Uploading
- Configuring manual or automatic updating

Logging in to SATO App Storage

To log in to SATO App Storage you need to use the account information provided by the administrator when you received your SATO App Storage account.

LOG IN TO SATO APP STORAGE

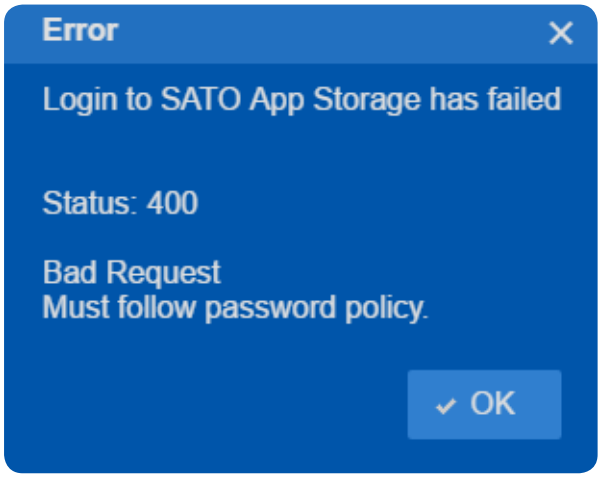


1. On the start screen of AEP Works 3, click **Login**.
2. In the **SATO App Storage** dialog, enter the following information:
   Company ID: The ID of the company.
   Login ID: Your login ID or username.
   Password: Your password.

3. **Optional:** The following options are available:
   Automatic login: Set whether or not to sign in to SATO App Storage automatically upon starting AEP Works 3.
   Remember password: Set whether or not AEP Works 3 remembers the user information.

   You can always turn these options on or off from the **Login** menu.

4. Click **OK**. To confirm a successful login session the **Login** button is replaced with your login ID and the **cloud icon** to the left of your login ID displays a lock inside.
5. NOTE: If failure to login occurs:
   - A box with an error message will appear, showing why login failed.
   - Read through the error message and click **OK**.
   - Verify that login credentials are entered correctly.
   - If login still fails, please contact your administrator.



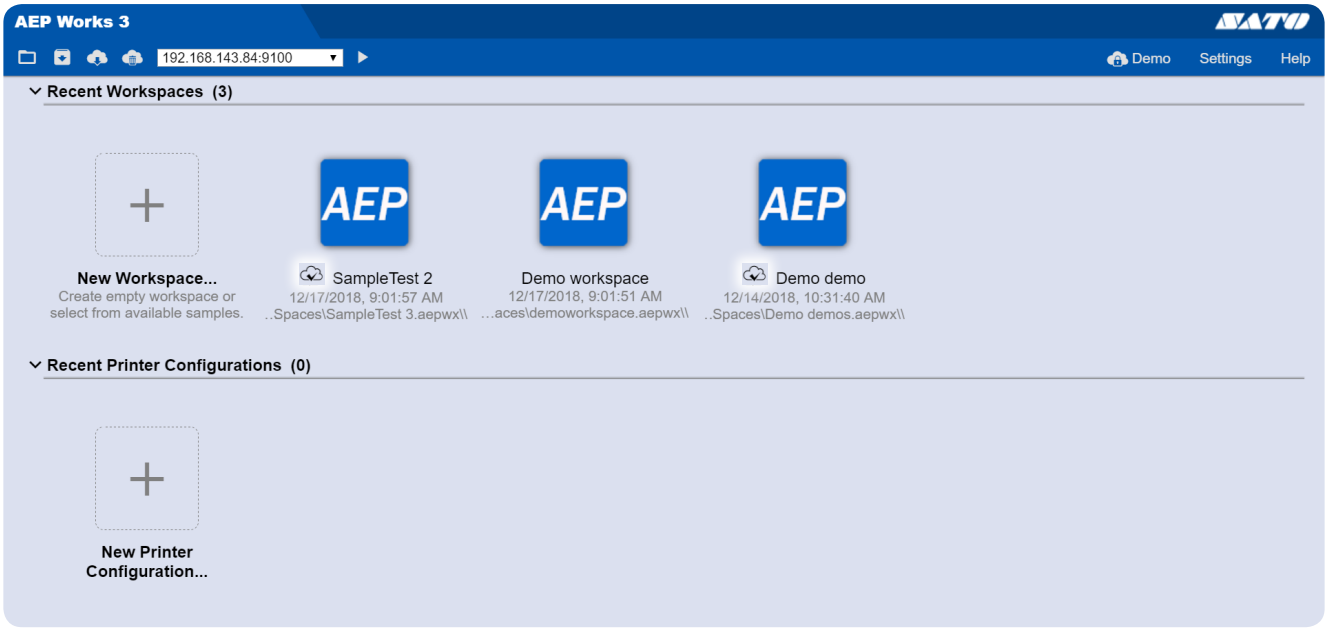
Identifying a SATO App Storage-connected workspace

When you are using an AEP Works 3 application and you are logged in to SATO App Storage, a small cloud icon is displayed to the left of a workspace name to indicate that the workspace is connected to SATO App Storage. This means that the workspace/workspaces has the ability to upload updates and files to SATO App Storage.

If no cloud icon is shown, it means that the workspace is currently not connected to SATO App Storage.

NOTE: There is no automatic synchronization keeping a downloaded workspace updated with the original file, therefore you need to manually download a workspace from SATO App Storage to receive updates.
If you use the same login ID that was used when uploading the workspace, AEP Works 3 replaces the workspace. If you use a different login ID, AEP Works 3 creates a new workspace instead.

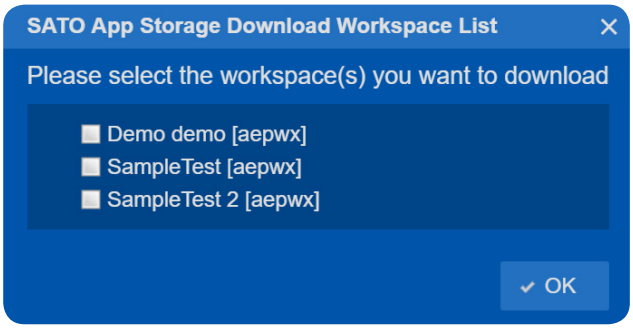
For information on how to manually upload and connect a workspace, go to Upload workspace manually to SATO App Storage on page 36. For information on how to activate automatic uploading for a specific workspace, go to Configure SATO App Storage in workspace on page 38.



Manage workspaces with SATO App Storage

DOWNLOAD WORKSPACE

1. On the start screen of AEP Works 3, click .
2. Choose which workspace(s) to download by selecting the check box (multiple choices possible) to the left of the workspace name(s).
3. Click **OK**.
4. Choose a folder to locally store chosen workspace(s).
5. Click **Save**.
6. NOTE: If a file with the same name already exists, or if no folder has been created to locally save workspaces, see instructions below.



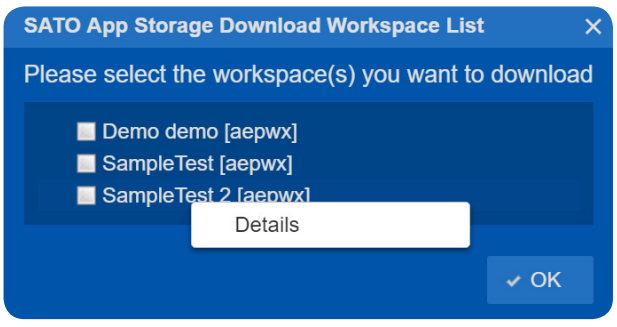
For saving a new workspace with an already existing name, choose one of the following options:

a. Rename one of the workspaces. This option will let you keep both files in case you need a backup.
b. When asked if you want to overrite existing file, click **OK**. This replaces the older file, which then can't be used as a backup.

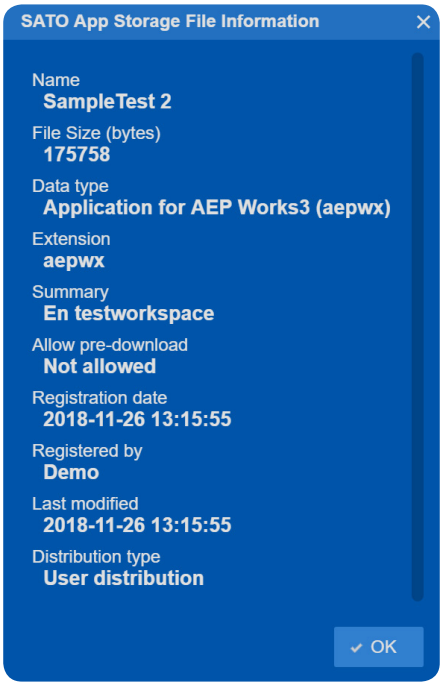
Create a folder for saving workspaces:

1. Create a folder on any destination.
2. Give the folder a name, e.g. "WorkSpaces".
3. Repeat steps 1-5 in the download workspace instructions.

To see a detailed view of a workspace before downloading it, right-click on the workspace name and click **Details**.



The **SATO App Storage File Information** window shows the following information



Name: The name of the selected file.
File Size (bytes): The size of the selected file in bytes.
Data type: Which type of data the selected file consist of.
Extension: The format of the selected file.
Summary: A summary written by the user that uploaded the selected file to SATO App Storage.
Allow pre-download: Whether or not the selected file is available to be downloaded ahead of release date.
Registration date: The date when the selected file was uploaded to SATO App Storage.
Registered by: Which user that uploaded the selected file to SATO App Storage.
Last modified: The date when the selected file was last modified.
Distribution type: Which type of distribution the selected file is used for.

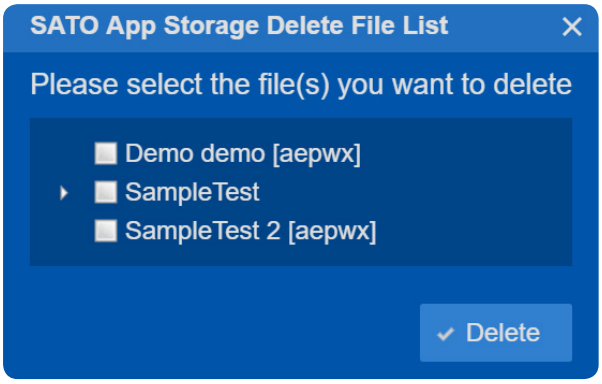
DELETE FILES FROM SATO APP STORAGE

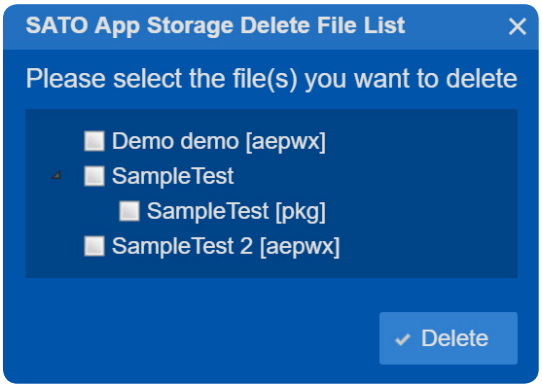
NOTE: When you delete files from SATO App Storage, they will be deleted from the cloud for all users. Which files you have access to is limited by the access level of the currently logged in account.

It is recommended that you save all workspaces locally before attempting to delete a file from SATO App Storage. This is a precaution in case of an accidental deletion of a file which has no backup. Locally saved files can be used as backup, and be manually uploaded again, even if a file has been deleted from SATO App Storage.

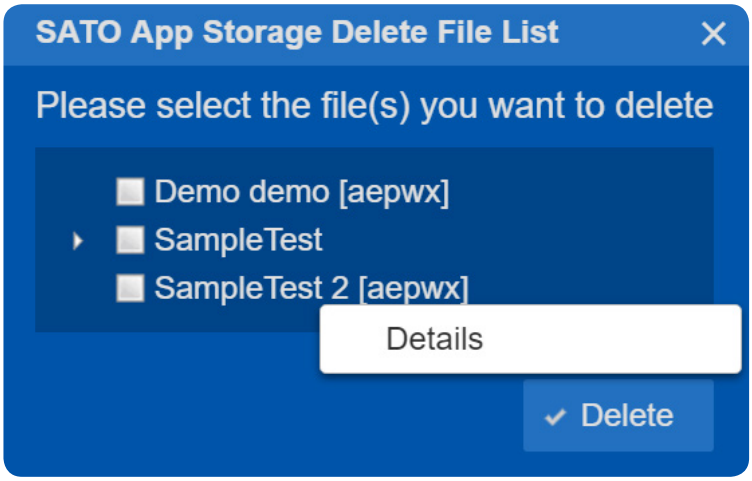
Delete files from SATO App Storage:

1. On the start screen of AEP Works 3, click .
2. Choose which workspace(s) should be deleted by selecting the check box to the left of the workspace name.
3. Click **OK**.



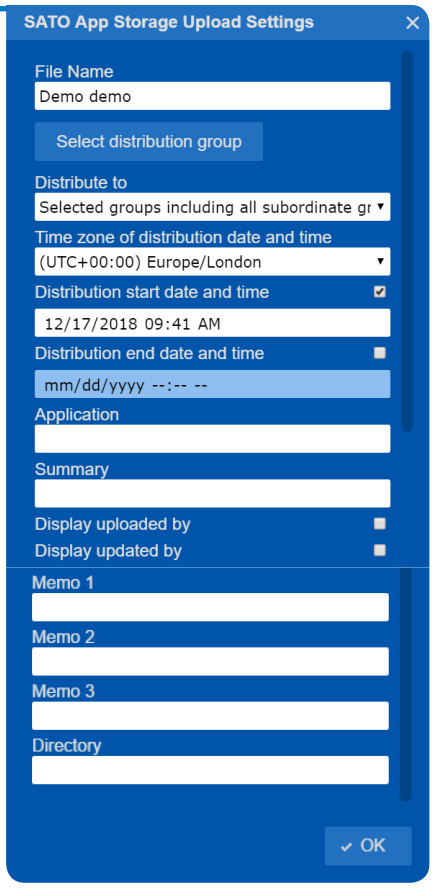


To see a detailed view of a workspace before deleting it, right-click on the workspace name and click **Details**. For more information go to Manage workspaces with SATO App Storage on page 33.



UPLOAD WORKSPACE MANUALLY TO SATO APP STORAGE

UPLOAD YOUR LOCAL WORKSPACES TO SATO APP STORAGE



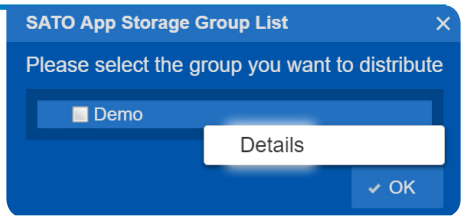
1. On the AEP Works 3 start screen, under **Recent Workspaces**, right-click the workspace you want to upload to SATO App Storage.
2. Click **Upload to SATO App Storage**.
3. On the **SATO App Storage Upload Settings** menu, the following options are available:

   File Name: Enter the name of the file.
   Select distribution group: Choose which group(s) (multiple choices possible) have access to the file. For more information regarding this feature, go to distribute to groups on page 37.
   Distribute to: Choose if distribution includes subordinate groups and/or users or applies only to the selected groups.
   Time zone of distribution date and time: Choose what time zone to assume for the file distribution.
   Distribution start date and time: If selected, choose a start date and time from which the file is available to download.
   Distribution end date and time: If selected, choose an end date and time from which the file is unavailable for download.
   Application: Enter the purpose of the file.
   Summary: Enter an explanation of the file.
   Display uploaded by: Select the check box to show which login account has uploaded the current file.
   Display updated by: Select the check box to show which login account has updated the current file.
   Memo 1: Optional description about the file distribution.
   Memo 2: Optional description about the file distribution.
   Memo 3: Optional description about the file distribution.
   Directory: Enter a directory path. If the file is downloaded to a printer, the printer checks this directory path to validate if the file is new or updated.

4. Click **OK**.

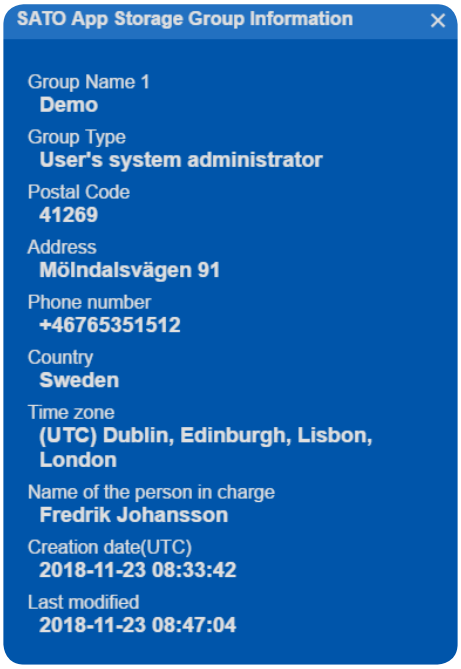
DISTRIBUTE TO GROUPS

SPECIFY GROUP DISTRIBUTION



1. On the **SATO App Storage Upload Settings** menu, click **Select distribution group**.
2. On the **SATO App Storage Group List** select the check box for the group(s) (multiple choices possible) that you want to distribute the file to.
3. NOTE: For more information regarding a group or subordinate group, right-click on the name of the group and click **details**. For more information regarding **SATO App Storage Group List** and **SATO App Storage Group Information**, see information below.

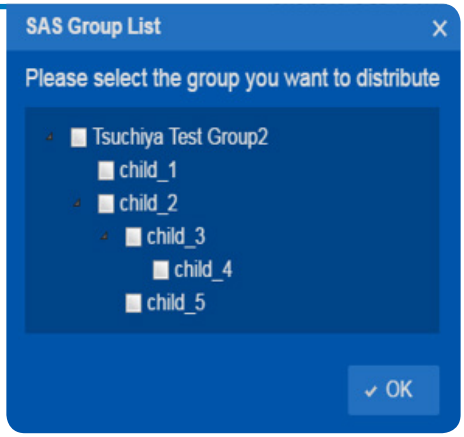
4. Click **OK**.



The **SATO App Storage Group Information** window shows the following information

Group Name 1: The name of the selected group.
Group Type: The type of the selected group.
Postal Code: The postal code that is associated with selected group.
Address: The address that is associated with selected group.
Phone Number: The phone number that is associated with selected group.
Country: The country that is associated with selected group.
Time zone: The time zone that is associated with selected group.
Name of the person in charge: The name of the person with the main responsibilities for selected group.
Creation date(UTC): The date when the group was created.
Last modified:The date and time when the group was last modified.

GROUP OPTIONS FOR DISTRIBUTION



SATO App Storage Group List shows groups that you have access to. Subordinate groups are identifiable by being placed slightly more to the right in the box. By clicking the **triangle** you can collapse/expand a group to show associated subordinate groups.

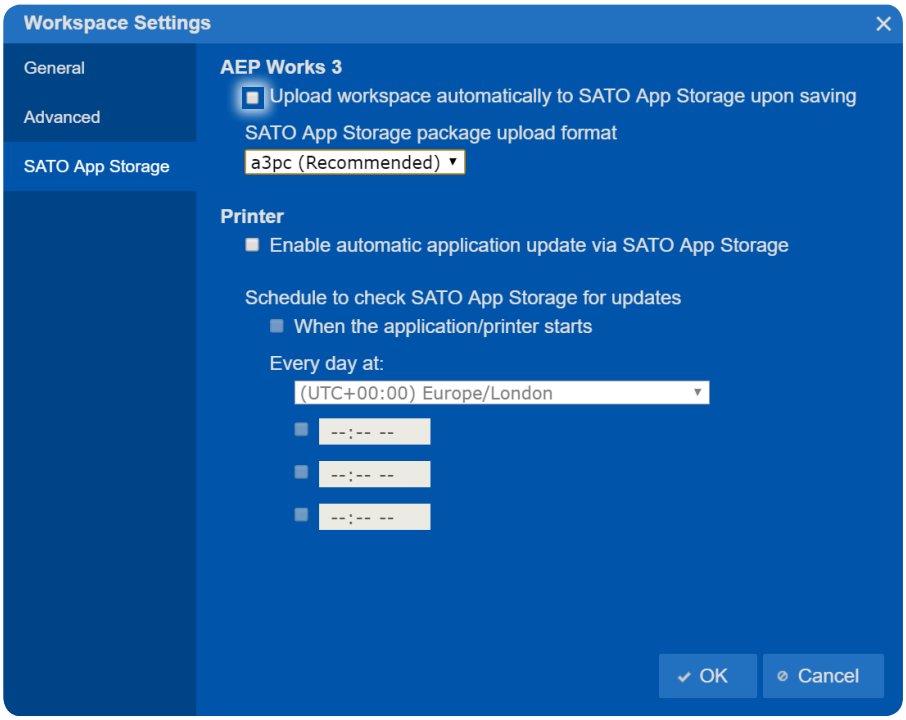
CONFIGURE SATO APP STORAGE IN WORKSPACE

The workspace settings page allows you to apply and edit SATO App Storage settings for individual workspaces and for your printer.
NOTE: These configurations are only applied to a selected individual workspace, and do not function as general settings for all existing workspaces in AEP Works 3 or your printer.

To open SATO App Storage settings:
1. On the **Workspace Overview** toolbar, click .

The following options are available for:

AEP Works 3



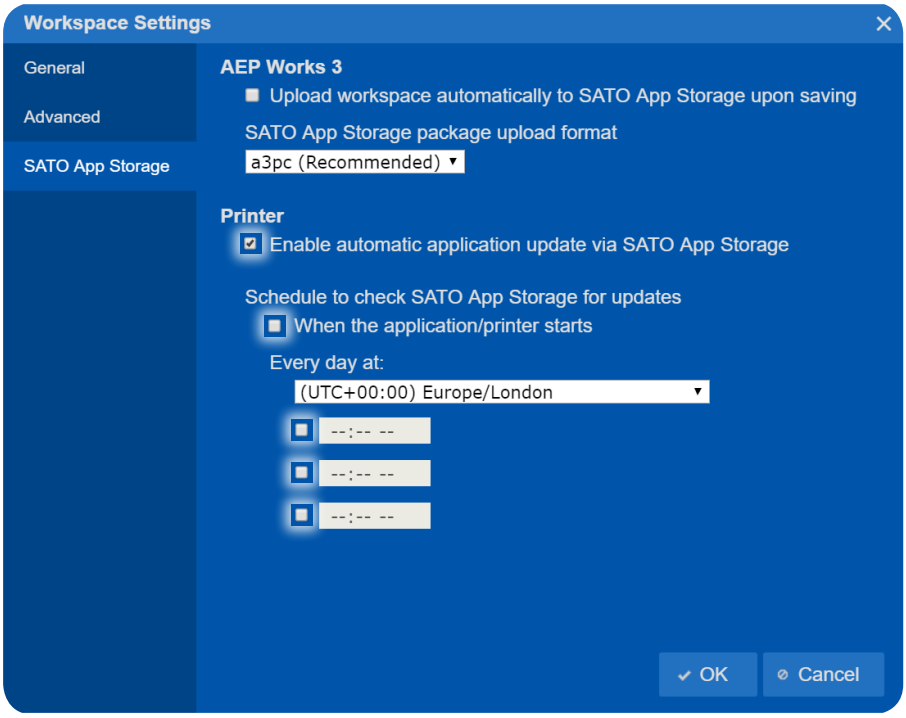
Upload workspace automatically to SATO App Storage upon saving:
Selecting this option results in the workspace being automatically uploaded to SATO App Storage each time you **Save** . While this option is selected, a small cloud icon is visible down in the left corner of your screen .

NOTE: If the current workspace is not already connected to SATO App Storage, the next time you **Save**, you will be asked to upload the workspace to SATO App Storage manually. If you click **OK**, go to Upload workspace manually to SATO App Storage on page 36 for more information.

SATO App Storage package upload format:
The drop-down menu allows the following:

- **a3pc (Recommended):** AEP Works 3 converts the file type of a package from a default pkg file to seven a3pc files when uploading to SATO App Storage.
- **pkg:** AEP Works 3 uploads the package as a pkg file type to SATO App Storage.

Printer



Enable automatic application update via SATO App Storage:
Selecting this option allows the printer to schedule reception of application updates automatically through SATO App Storage.

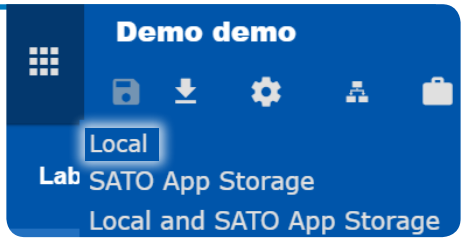
When this is enabled, the following options for **Schedule to check SATO App Storage for updates** becomes available:
When the application/printer starts:
Your printer will automatically search for updates when it is started.
Every day at: Set a desired time zone from the drop-down menu. Set at what time every day your printer will search for updates, up to three different times.

Scheduling times for updates are all optional, it is possible to choose multiple options or none.
NOTE: If no scheduling option is selected your printer cannot receive automatic updates.

Build and upload package

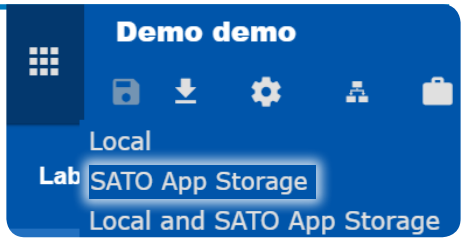
Build and upload your packages both locally and to SATO App Storage

BUILD A PACKAGE LOCALLY



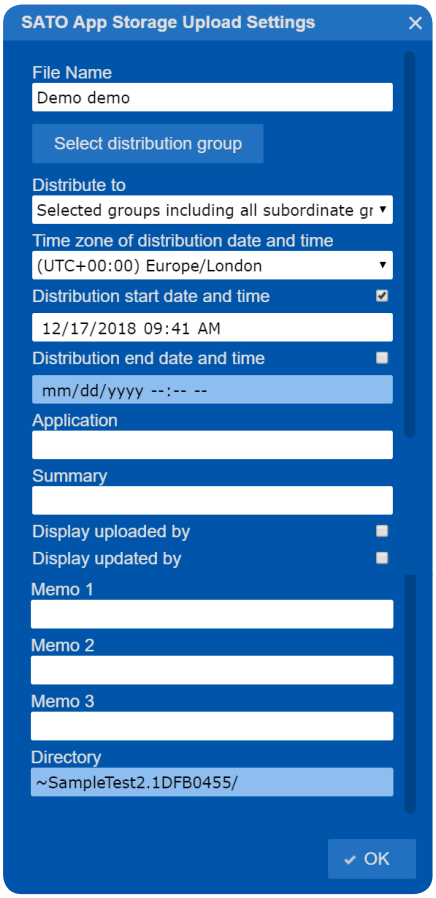
1. On the start screen of a workspace, click **Build Package**.
2. Click on **Local**.
3. Click **OK**.
4. Save the package in any desired folder or destination.

BUILD AND UPLOAD A PACKAGE TO SATO APP STORAGE



1. On the start screen of a workspace, click **Build Package**.
2. Click **SATO App Storage**.

NOTE: It is possible to create and upload a package both locally and to SATO App Storage. This creates a backup file of the package locally.



3. On the **SATO App Storage Upload Settings** menu, the following options are available:

   File Name: Enter the name of the file.
   Select distribution group: Choose which group(s) (multiple choices possible) have access to the file. For more information regarding this feature, go to distribute to groups on page 37.
   Distribute to: Choose if distribution applies only to the selected groups, or includes subordinate groups and/or users.
   Time zone of distribution date and time: Choose what time zone to assume for the file distribution.
   Distribution start date and time: If selected, choose a start date and time from which the file is available to download.
   Distribution end date and time: If selected, choose an end date and time from which the file is unavailable for download.
   Application: Enter the purpose of the file.
   Summary: Enter an explanation of the file.
   Display uploaded by: Select the check box to show which login account has uploaded the current file.
   Display updated by: Select the check box to show which login account updated the current file.
   Memo 1: Optional description about the file distribution.
   Memo 2: Optional description about the file distribution.
   Memo 3: Optional description about the file distribution.
   Directory: Shows a directory path. If the file is downloaded to a printer, the printer checks this directory path to validate if the file is new or updated.

4. Click **OK**.

4 Basic Editing Commands

This chapter contains useful information on how to edit content on labels and screens. AEP Works 3 offers editing commands that are developed with the user in focus, with the goal of being as intuitive and easy to use as possible.

- Moving
- Resizing
- Grouping
- Hiding
- Aligning
- Cut, Copy, Paste and Delete
- Arranging
- Pen Modes

The controls for editing content can be found in the **Properties Panel** in the currently active editor**.** The sub-menus in the panel varies depending on whether you are editing labels or screens.

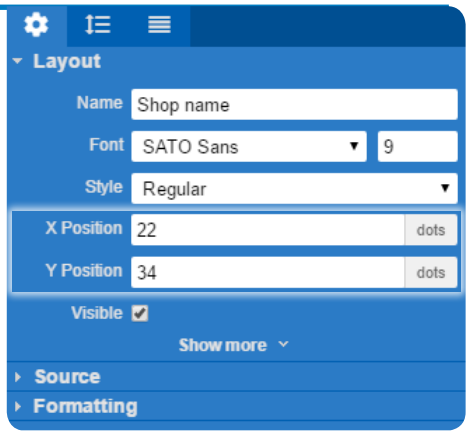
Moving

Move objects

1. Select the object.
2. Drag the object where you want it.

or

1. Select the object.
2. On the **Properties Panel**, click the **Properties** tab.
3. On the **Layout** menu, click the **X Position** or **Y Position** box.
4. Enter the new coordinates.



Move multiple objects

1. Use the pointer to select the objects you want to move by dragging a selection box over the objects.
2. Drag the selected objects where you want it.

or

1. Use the pointer to select the objects you want to move by dragging a selection box over the objects.
2. On the **Properties Panel**, click the **Properties** tab.
3. On the **Layout** menu, click the **X Position** or **Y Position** box.
4. Enter the new coordinates.

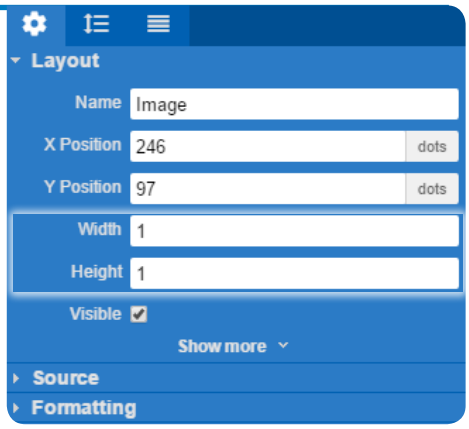
Resizing

Resize objects

1. Select the object.
2. If a bounding box appears, click any handle of the bounding box and drag it to correct size.

or

1. Select the object.
2. On the **Properties Panel**, click the **Properties** tab.
3. On the **Layout** menu, click the **Width** or **Height** box.
4. Enter new dimensions.



Resize objects proportionally

1. Select the object.
2. On the bounding box, hold the **Shift** key and drag any of its corner to preferred size.

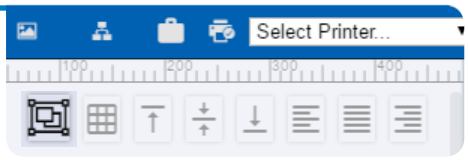
Grouping

Group objects

1. Hold the **Ctrl** key and click the objects you want to group.
2. On the **Editor Mini Toolbar**, click the **Group** icon. You can now manage the objects as a group.

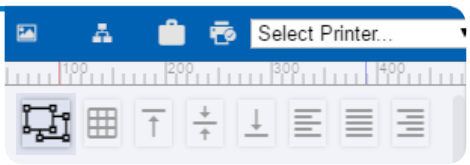
or

1. Use the pointer to select the objects you want to group by dragging a selection box over the objects.
2. On the **Editor Mini Toolbar**, click the **Group** icon. You can now manage the objects as a group.



Ungroup objects

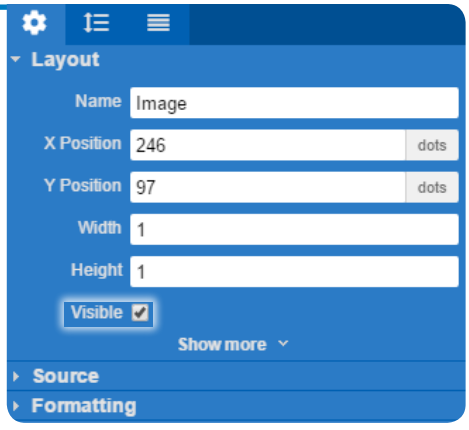
1. Select the object you want to ungroup.
2. On the **Editor Mini Toolbar**, click the **Ungroup** icon.
3. You can now manage the objects individually.



Hiding

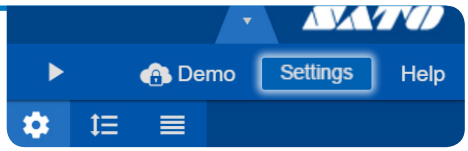
Hide objects

1. Select the object.
2. On the **Properties Panel**, click the **Properties** tab.
3. On the **Layout** menu, select the **Visible** check box. The object is now hidden and will not print.



Aligning

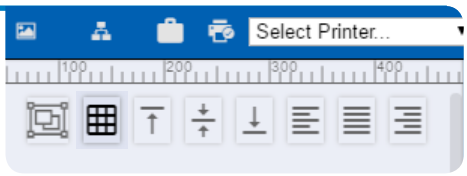
Enable snap lines



1. On the **Editor Toolbar**, click **Settings**.
2. Select the **Snap Lines** check box.
3. Click **OK**

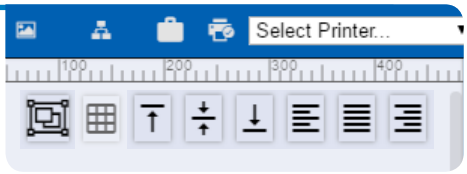
NOTE: The grid view must be turned off to align objects relative to each other.

Make an object align to the nearest intersection of lines in a grid



1. On the **Editor Mini Toolbar**, click **Grid View**, and the grid will appear.
2. Select the object you want to align to the grid and drag it to preferred position.

Align objects relative to each other



1. Hold the **Ctrl** key and click the objects you want to align.
2. On the **Editor Mini Toolbar**, the following options are available:

Top Align – Align the selected objects to the top edge of the top-most object.

Middle Align – Align the selected objects to the horizontal middle of the objects.

Bottom Align – Align the selected objects to the bottom edge of the bottom-most object.

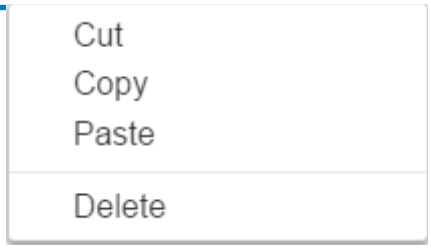
Left Align – Align the selected objects to the left edge of the left-most object.

Center Align – Align the selected objects to the vertical center of the objects.

Right Align – Align the selected objects to the right edge of the right-most object.

Cut, Copy, Paste and Delete Commands

Edit content

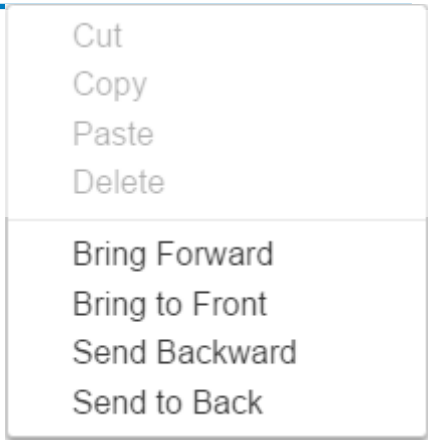


1. In the currently active editor, right click anywhere.
2. Choose one of the following options:
   Cut: Remove the selected object from its current position.
   Copy: Copy the selected object.
   Paste: Paste the last copied or cut-out object.
   Delete: Delete the selected object.

Arranging

Arrange objects in a specific order

NOTE: The following commands only work in screen editor!



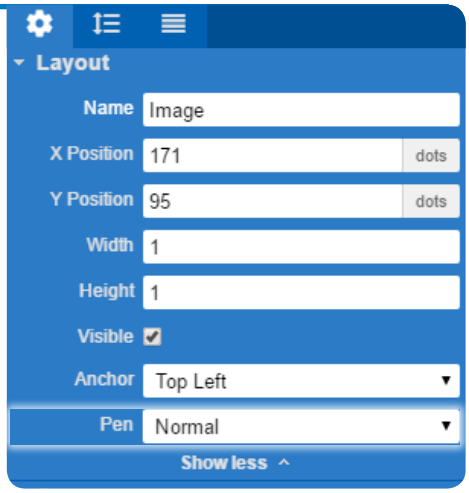
1. Select the object you want to arrange, and then right-click the object.
2. Select one of the following arranging options:
   - **Bring Forward** – Bring an object one step closer to the front.
   - **Bring to Front** – Bring an object to the front.
   - **Send Backward** – Bring an object one step closer to the back.
   - **Send to Back** – Bring an object to the back.

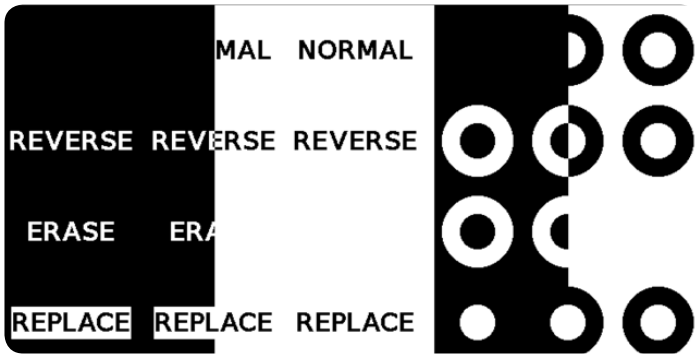
4

Pen Modes

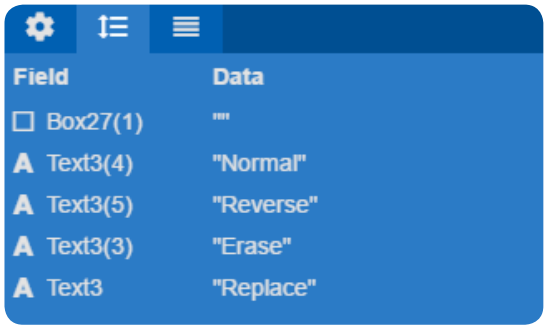
Change pen mode

1. Select the object.
2. On the **Properties Panel**, click the **Properties** tab.
3. On the **Layout** menu, click the **Pen** list.
4. Select one of the following options:
   Normal: Default mode, use black pen.
   Reverse: Change the color of an object so it becomes visible on any background.
   Replace: Erase background before printing.
   Erase: Use white pen.





NOTE! In order for reverse-, replace- and erase mode to work, the object that has one of the above pen modes assigned to it has to be located after any background objects in the field list. In the illustration above, the "Reverse", "Erase", and "Replace" text strings is located after the black rectangle to the left ("Box27(1)") in the field list.



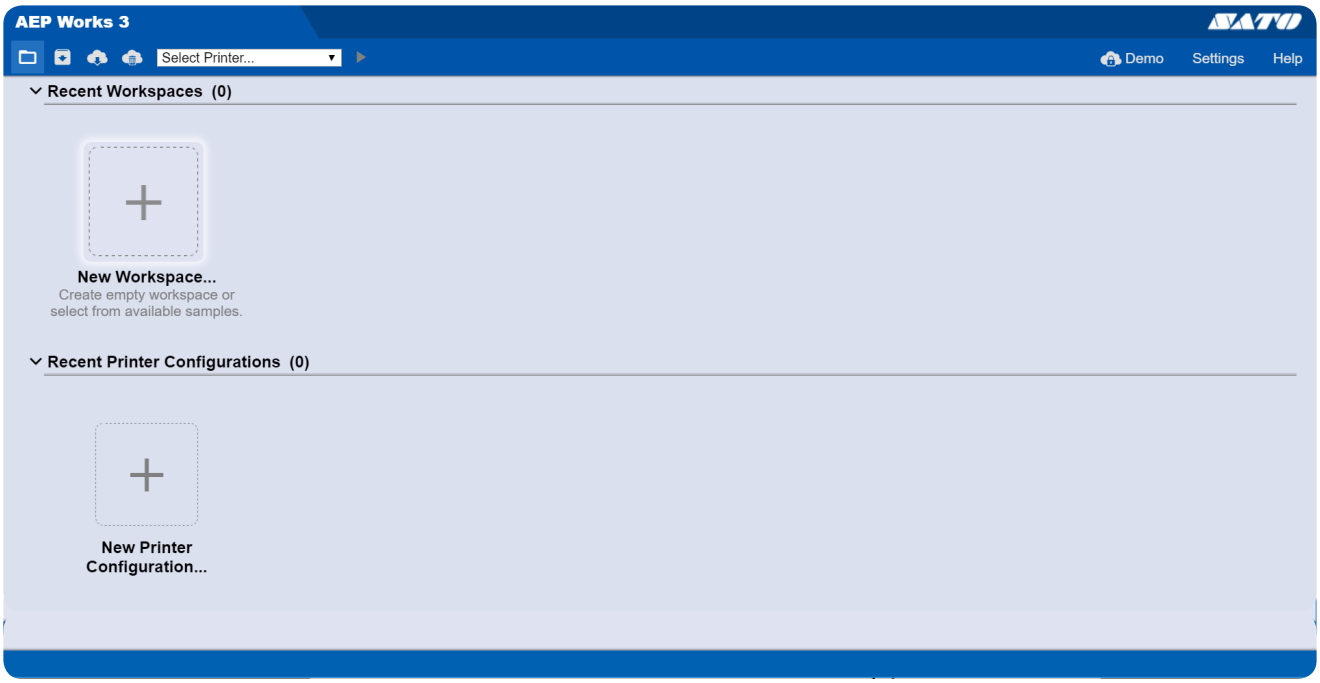
5 Workspace

The workspace functions as the center for managing and viewing labels, screens and various assets. This chapter is about how to create a new workspace and how to add assets to it, such as tables, profiles and scripts. When a workspace has been sent to a printer, the workspace is regarded as an application.

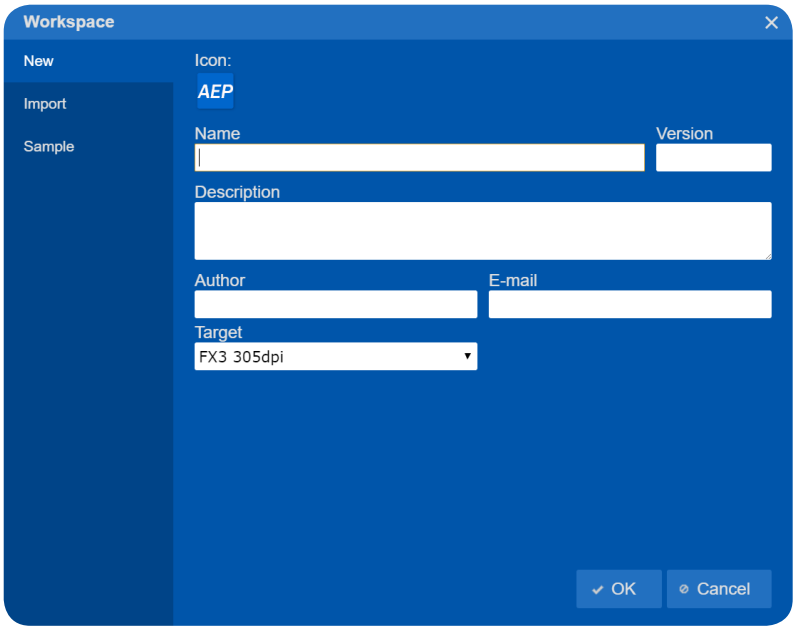
- Create New Workspace
- Add Assets to Workspace
- Import Workspace
- Workspace Settings

Create New Workspace

1. On the **Start Screen**, under **Recent Workspaces**, click **New Workspace**.

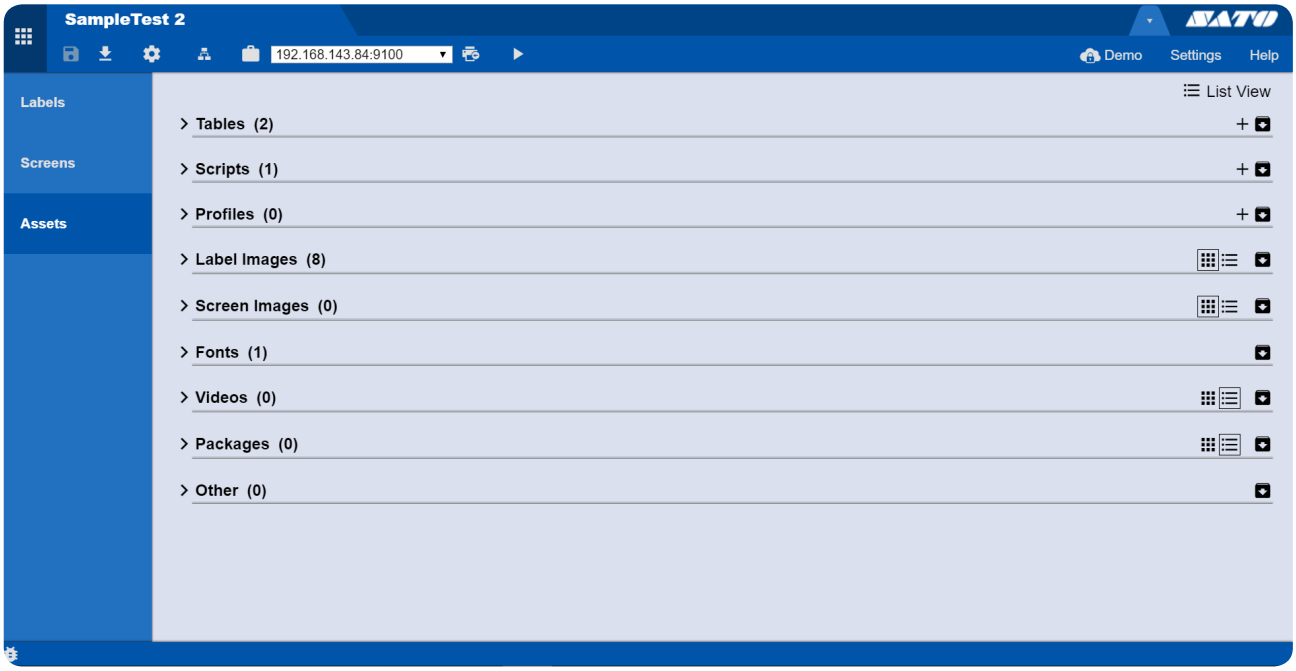


2. In the **Workspace** dialog window, enter the details of your new workspace.
3. In the **Target** list, select the targeted printer model.
4. Click **OK**.



Add Assets to Workspace

In every new workspace created, you have the ability to add assets to it. It works as a library of files and settings that you can use while working on your labels and screens.



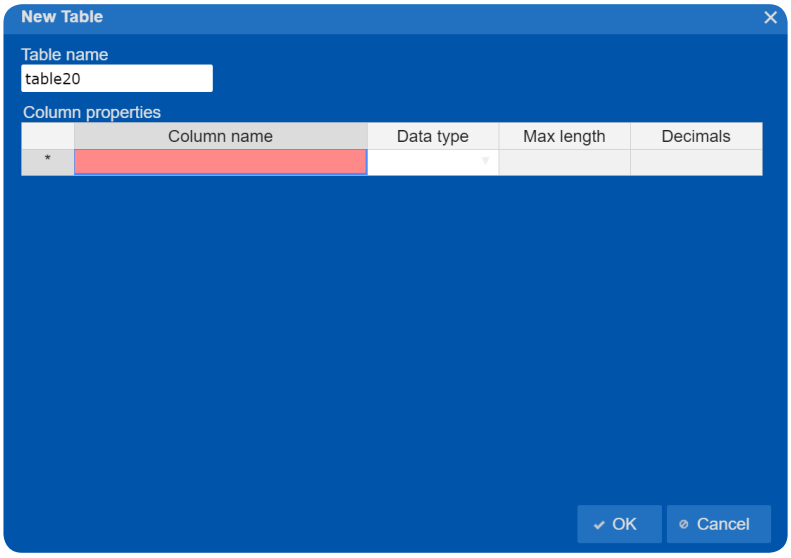
5

TABLES

You can use tables as a source for retrieving data to your labels and screens by specifying from which column in the table data should be retrieved from.

Create a New Table

1. On the **Tables** tab, click +.
2. In the **New Table** dialog window, enter your table information.
3. In the **Data Type** list, you can choose from several data types.
4. Click **OK**.

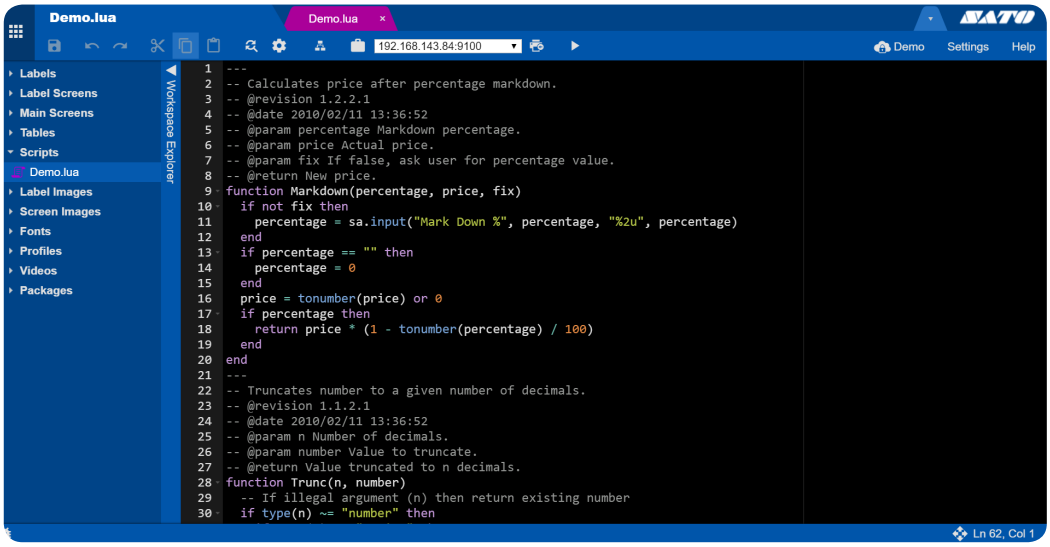


SCRIPTS

Scripts let you define a set of functions to perform actions on your labels and screens. Lua scripting language is used by AEP Works 3 which allows you to execute inline Lua scripts and see the output. This should only be used by users with knowledge in the Lua scripting language, as it might lead to unexpected behavior if used incorrectly.

Create a Script

1. After creating your new workspace, click the **Assets** menu.
2. On the **Scripts** tab, click +.
3. Enter the name of the script.
4. Click **OK.**
5. Type your Lua script. The script saves automatically.



VIDEOS

Import video content to your workspace

1. After creating your new workspace, click the **Assets** menu.
2. On the **Videos** tab, click ⬇.
3. Select a video from your library.

FONTS

Import fonts to your workspace

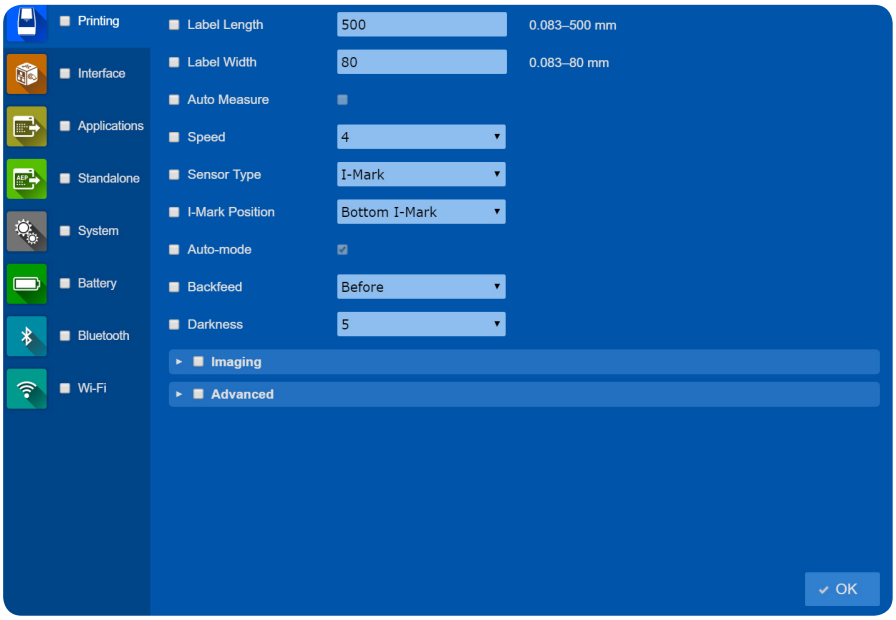
1. After creating your new workspace, click the **Assets** menu.
2. On the **Fonts** tab, click ⬇.
3. Select a font from your library.

PROFILES

A profile is a predefined printer setting configuration that will override the existing printer setting. A profile can be useful if an operator would like to use a different settings configuration e.g. to switch between LCD languages or change print conditions for a specific print media etc. For more detailed information on profiles, go to Profiles on page 121.

Create a New Profile

1. After creating your new workspace, click the **Assets** menu.
2. On the **Profiles** tab, click +.
3. Enter the name of the profile.
4. Click **OK**
5. The printer settings window pops up and offers a wide range of options. In front of every profile option you want to edit, select the check box, and then edit the selected option.



PACKAGES

Import packages created from workspaces and/or printer configurations.
This can be useful for configuring the printer with just one package (by adding a printer configuration package) or installing multiple workspaces with one package (by adding workspace packages). Only one printer configuration package should be added. Packages added, should not themselves contain included packages.

Import package to your workspace

1. After creating your new workspace, click the **Assets** menu.
2. On the **Packages** tab, click ⬇.
3. Select a package from your library.

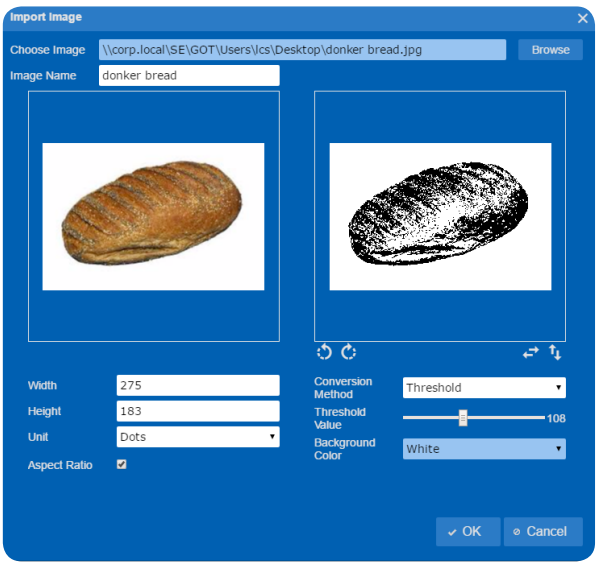
LABEL IMAGES

Import graphic content to your assets

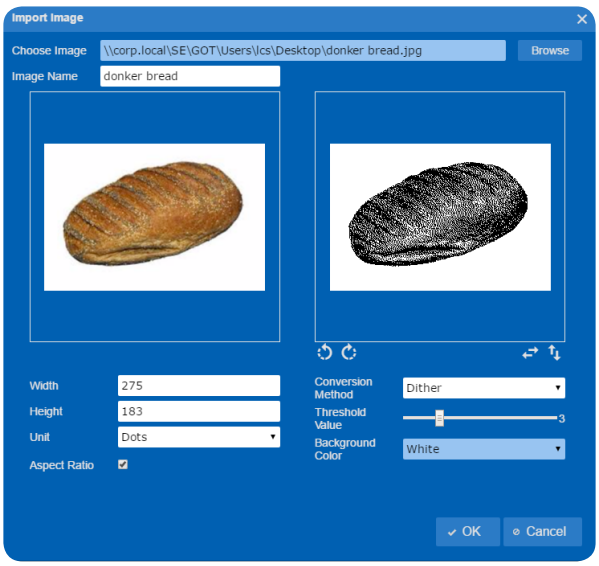
1. After creating your new workspace, click the **Assets** menu.
2. On the **Label Images** tab, click , and the **Import Image** dialog window pops up.
3. Click **Browse** and select an image from your library.
4. In the **Import Image** dialog window, you are left with the following options:
   Width - Adjust the width of the label image.
   Height - Adjust the height of the label image.
   Unit - Change the unit of measure.
   Aspect Ratio - Lock the height and width ratio of the label.
   Rotate - Rotate left . Rotate right .
   Flip - Horizontal flip . Vertical flip .
   Conversion Method:
   - **Threshold**: Force all pixels below the threshold value into black.
   - **Dither**: Convert color pictures to black and white pictures.

   Threshold Value - Set the threshold value.
   Background Color - Set the background color to black or white.
5. Click **OK.**

Threshold



Dither

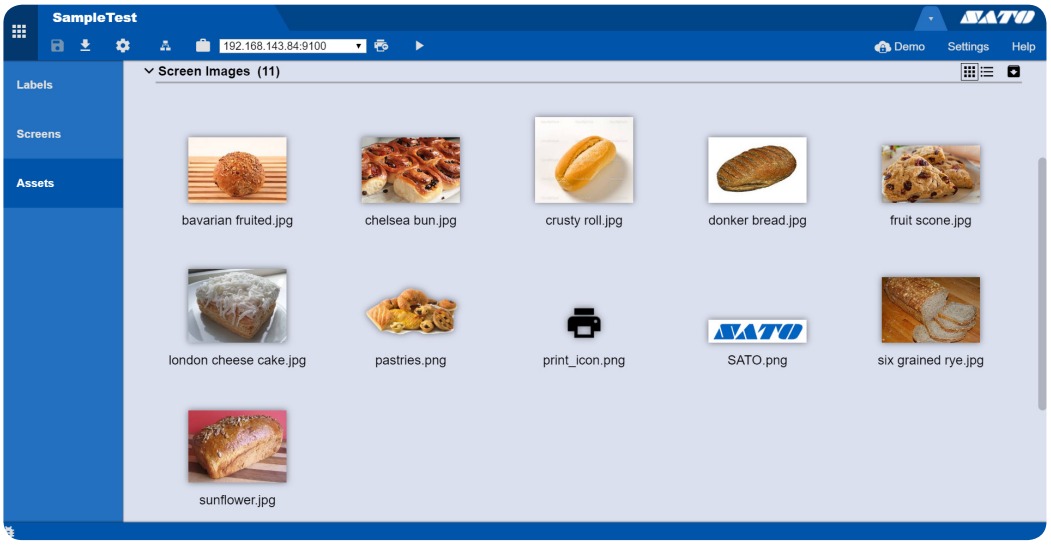


SCREEN IMAGES

Import screen images to your workspace. Screen images can be graphical content such as product images, icons or logos.

Import screen image

1. After creating your new workspace, click the **Assets** menu.
2. On the **Screen Images** tab, click .
3. Select an image from your library.



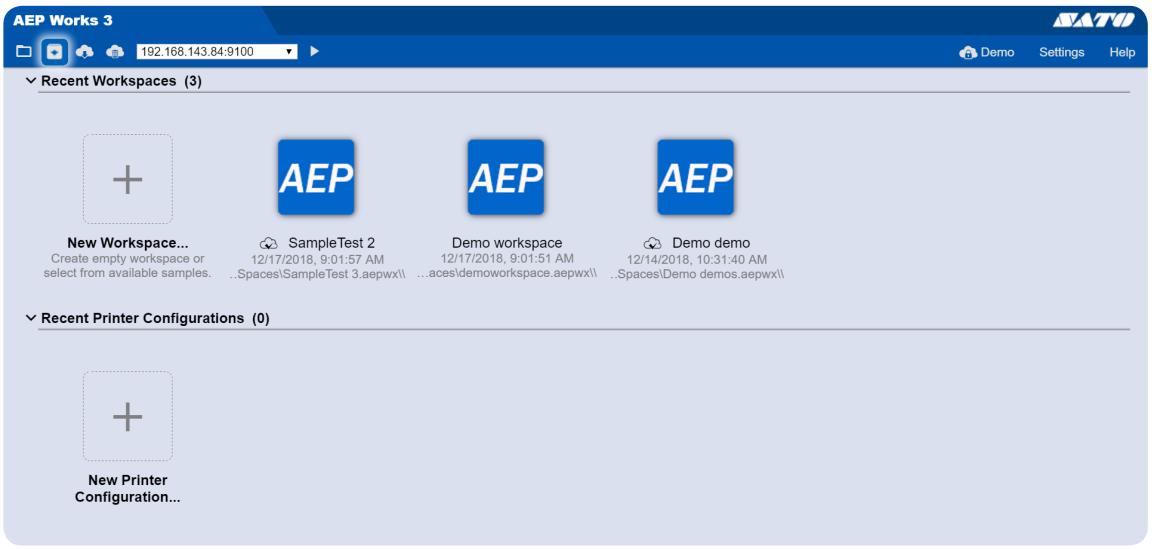
OTHER

Import other files to your workspace

1. After creating your new workspace, click the **Assets** menu.
2. On the **Other** tab, click .
3. Select a file from your library.

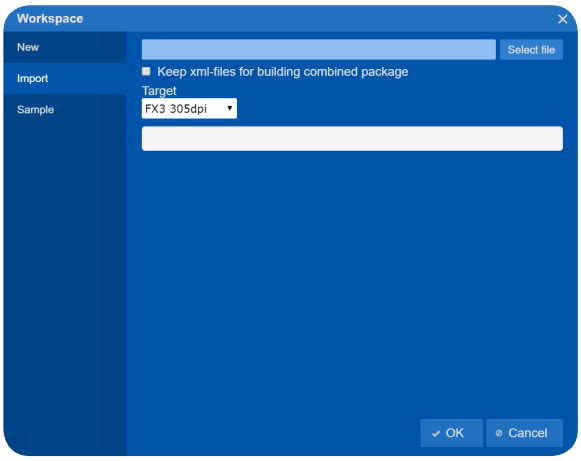
Import Workspace

Import an already existing workspace to AEP Works 3.



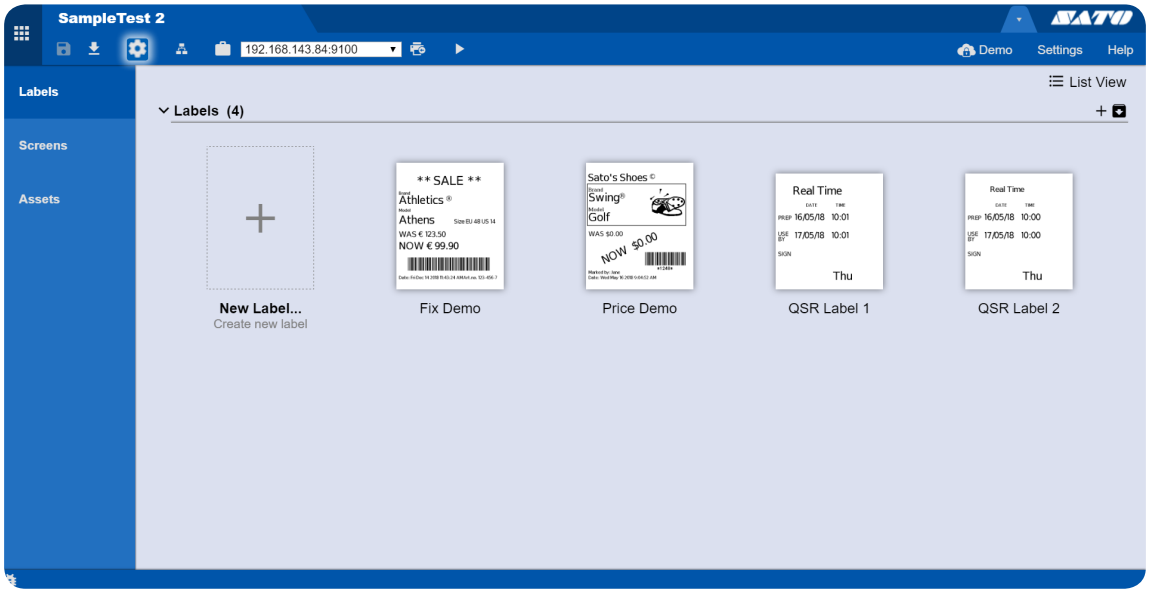
Import Workspace

1. On the **Start Toolbar,** click .
2. In the **Workspace** dialog window, click **Select File**, and then select a workspace.
3. If you want to keep TH2 (and/or CLNX with f/w 1.10.x and older) format description files for package generation, select the **Keep xml files for building combined package** selection box.
4. Select the targeted printer model.
5. Click **OK.**



Workspace Settings

Apply and edit general and advanced settings to your workspace.

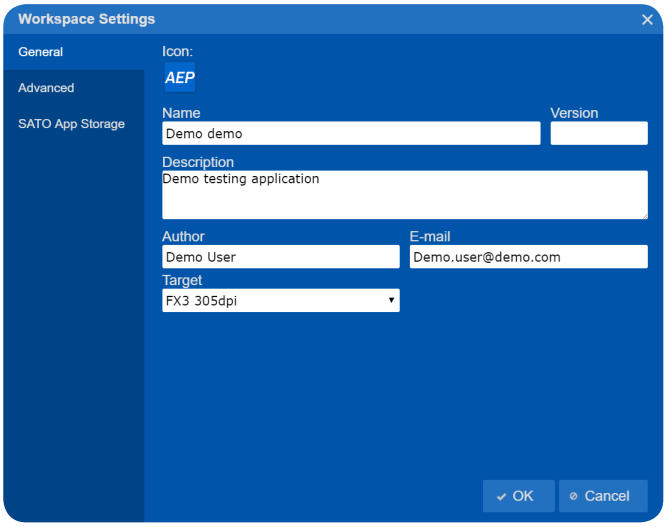


5

To open Workspace Settings

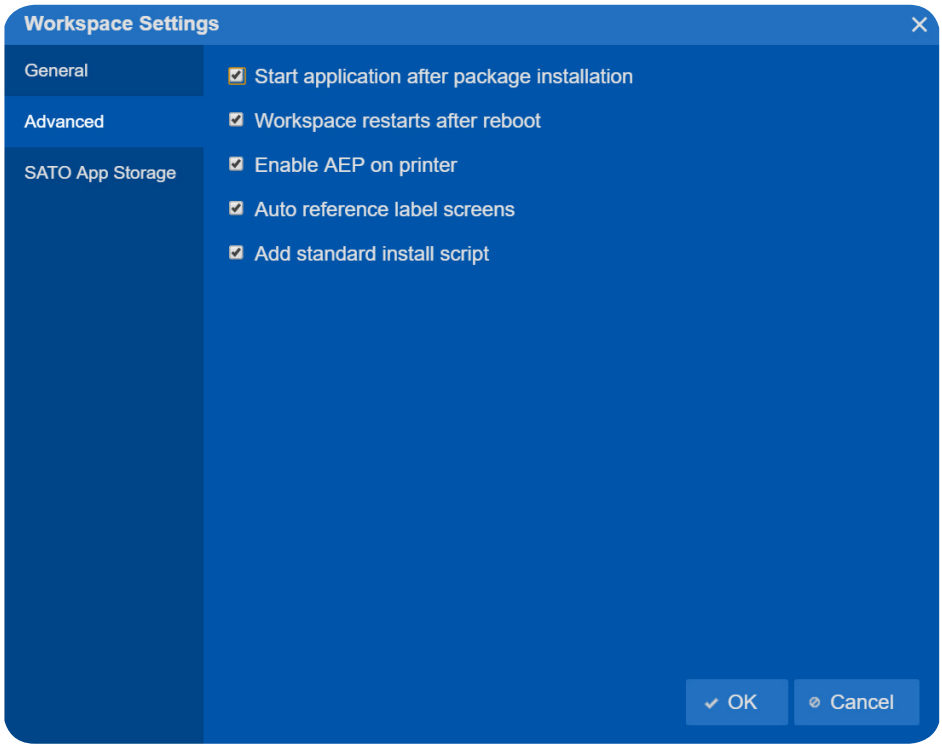
1. On the **Workspace Overview** toolbar, click .
2. The following options are available:

General Workspace Settings



Icon: Choose a workspace icon from your computer or from an external memory source.
Name: Enter the name of your workspace.
Version: Enter the version of your workspace.
Description: Enter workspace description.
Author: Enter the name of the author.
E-mail: Enter email address.
Target: Select the model of the targeted printer.

Advanced Workspace Settings



Start application after package installation:
Set whether or not to start the application after package installation.
Workspace restarts after reboot:
Set whether or not your workspace should restart after reboot, i.e. the workspace sets itself as the starting application when it is started.
Enable AEP on printer:
When a workspace is installed on a printer, update the printer's settings to *enable AEP*.
Auto reference label screens: A non-visible textfield is added as the first label field to display the screen, if it is unconnected.
Add standard install script: The package removes and replaces current known assets before installing an application to the printer. This does not affect assets that are placed in directories that are unkown to the application.

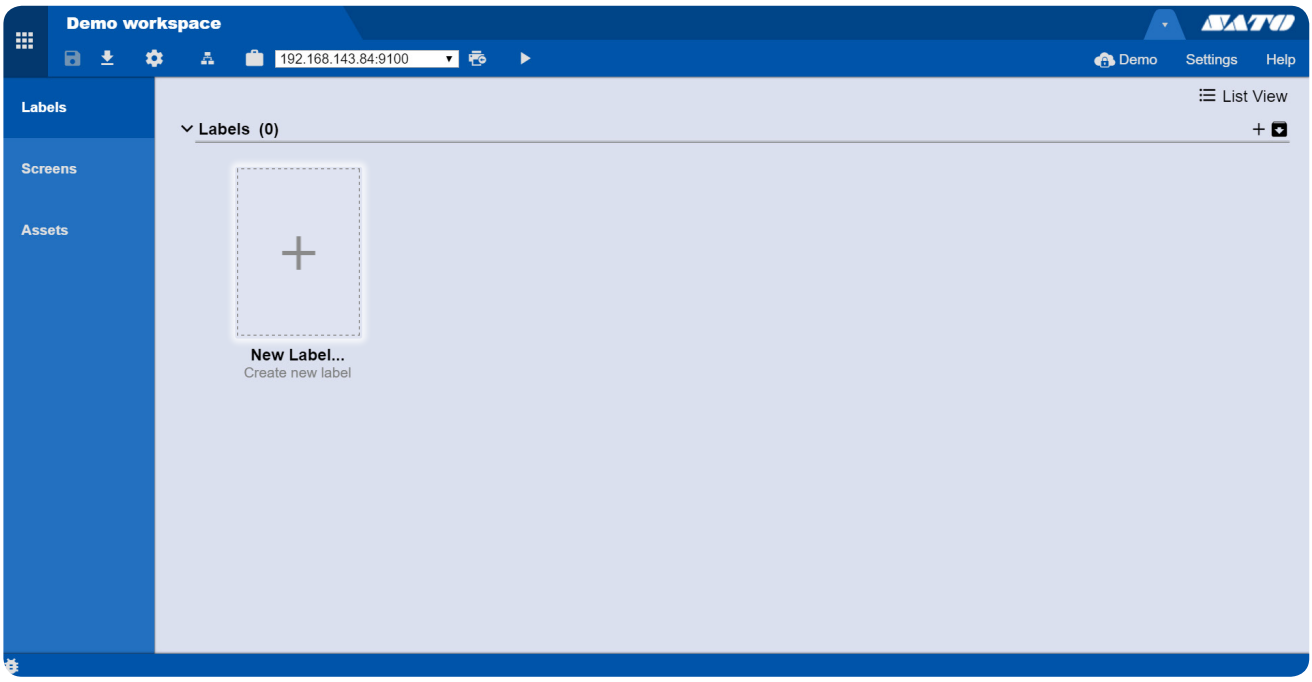
6 Labels

This chapter contain step-by-step instructions on how to create new and modify existing labels, using the various tools provided by the label editor. The chapter also deal with label management options and properties.

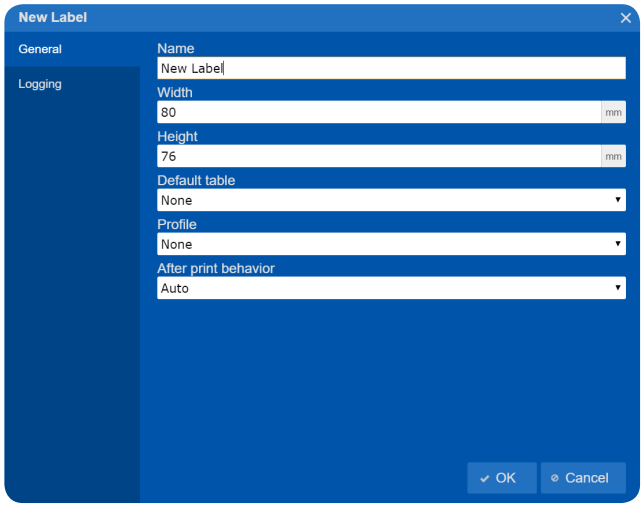
- Create New Label
- Add Content to Labels
- Manage Labels

Create New Label

1. On the **Workspace Overview** screen, click **Labels**, and then click **New Label.**



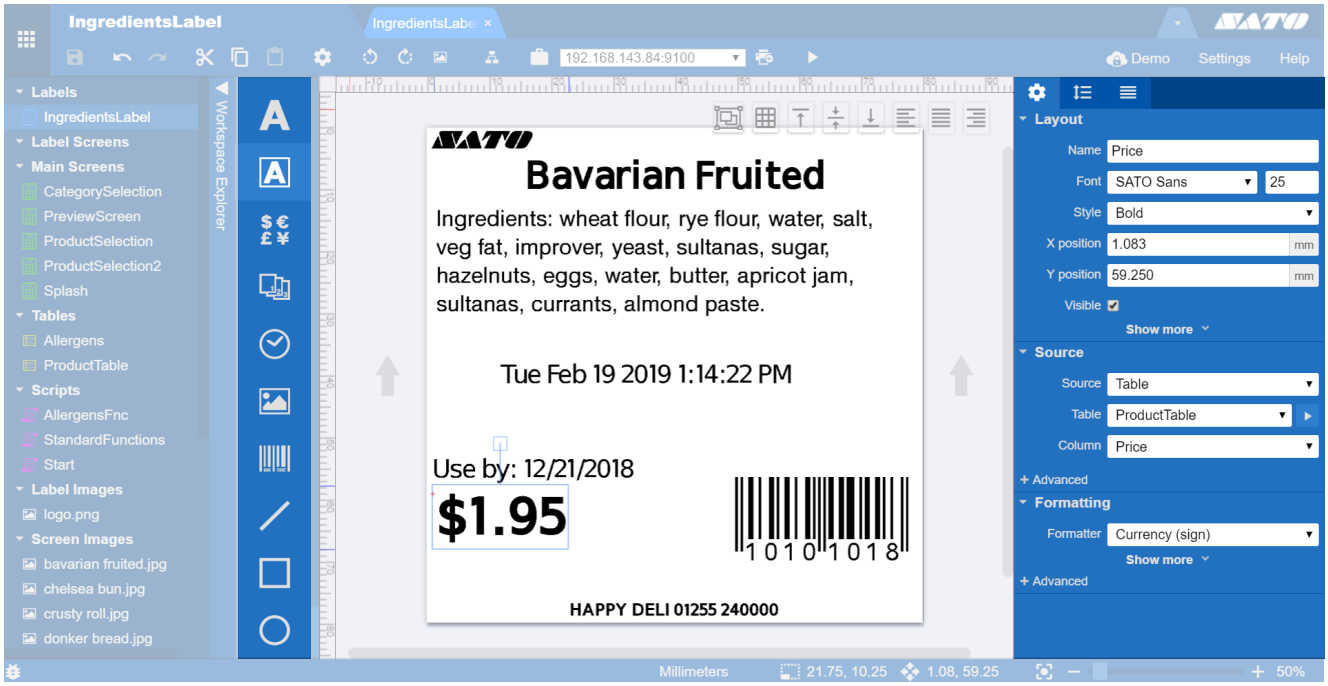
2. In the **New Label** dialog window, type in the **Name**, **Width** and **Height** of your new label.
3. If preferred, select a **Default Table** and **Profile**. If not preferred, select **None**.
4. If preferred, select an **After Print Behavior**. If not preferred, select **Auto**.
5. Click **OK.**



Add Content to Labels

AEP Works 3 offers a variety of tools to help you create your labels. The tools for label editing are located in the **Label Object** menu on the left side in the editor. Click the object you want to add, and then drag it to the label sheet. Depending on which object you choose to add, the **Properties** menu to the right populates with specific controls and options for the selected object.

For information on how to use dynamic data sources when designing your labels, go to Dynamic Data Sources on page 103.



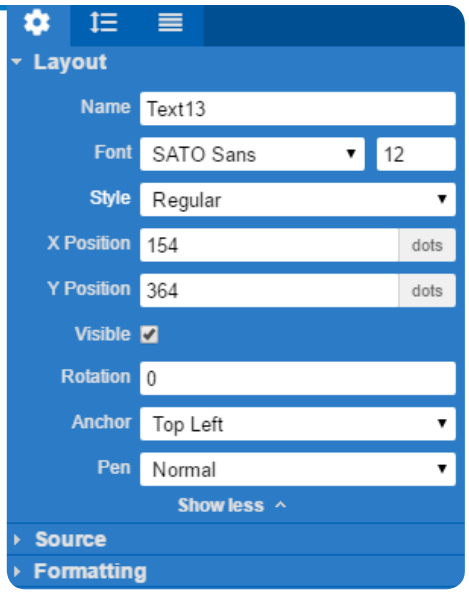
TEXT

Add text strings to your labels. You have several formatting options which allow you to customize the text field according to your design.

1. On the **Label Object** menu, select text tool .
2. On the label sheet, click to place the text.

Edit the layout of the text

1. Select the text.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

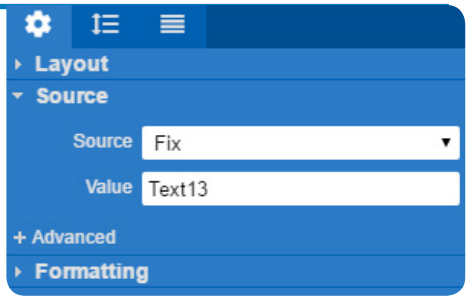


Name: Enter the name of the text field.
Font: Adjust the type and size of the font.
Style: Select the style of the font.
X-position: Set the horizontal position of the text.
Y-position: Set the vertical position of the text.
Visible: Display or hide the text.
Rotation: Rotate the text field.
Anchor: Set the reference point of the text field.
Pen: Change pen mode.

- **Normal**: Default mode. Use black pen.
- **Reverse**: Change the color of an object so it becomes visible on any background.
- **Replace**: Erase background before printing.
- **Erase**: Use white pen.

Change the source of the text

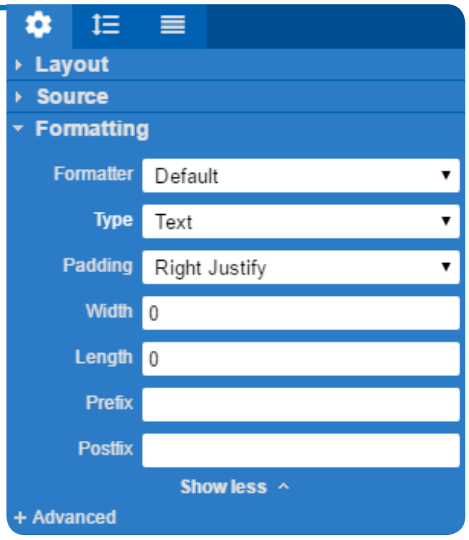
1. Select the text.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, the following options are available:



Source: Fix is selected by default. If another source is selected, options below can change its properties.
Value: Type the value you want the text field to display.

Change the formatting of the text

1. Select the text.
2. On the **Properties Panel**, click the properties tab .
3. On the **Formatting** menu, the following options are available:



Formatter: Change the format of the text field.
Type: Select if the field should contain text or digits.
Padding: Add spaces or zeros to the text.

- **Right Justify**: Add spaces so the text aligns to the right.
- **Left Justify**: Add spaces so the text aligns to the left.
- **Zero padding**: Add zeros to fill out the text field.

Width: Enter the width of the text field.
Length: Enter how many digits or letters the text field should consist of.
Prefix: Type a prefix.
Postfix: Type a postfix

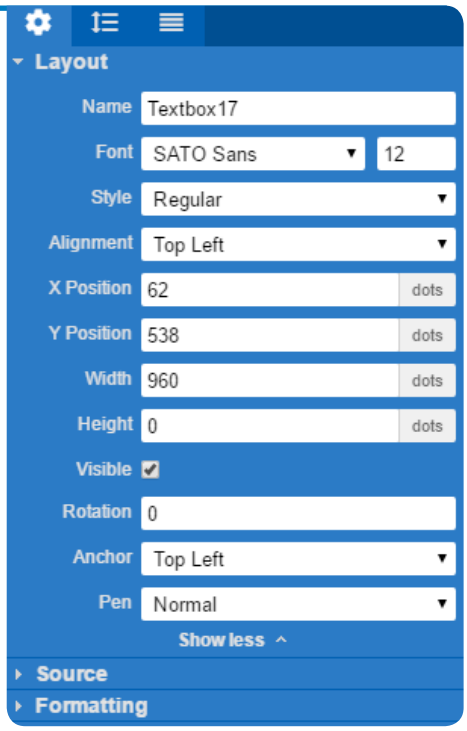
TEXTBOX

Add text content with a bounding box that adapts its dimensions to the entered input. In addition to creating text strings like the text tool, the textbox tool offer you more formatting options such as increasing the number of rows in the field.

1. On the **Label Object** menu, select the textbox tool .
2. On the label sheet, click to place the textbox.
3. Rename the textbox by double clicking on it, and then enter a new name.

Edit the layout of the textbox

1. Select the textbox.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

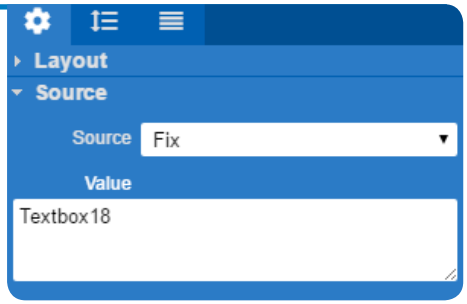


Name: Enter the name of the textbox field.
Font: Adjust the type and size of the font.
Style: Select the style of the font.
Alignment: Align the text within the textbox borders.
X-position: Set the horizontal position of the textbox.
Y-position: Set the vertical position of the textbox.
Width: Enter the width of the textbox.
Height: Enter the height of the textbox.
Visible: Display or hide the textbox.
Rotation: Rotate the textbox.
Anchor: Set the reference point of the textbox.
Pen: Change pen mode.

- **Normal**: Default mode. Use black pen.
- **Reverse**: Change the color of an object so it becomes visible on any background.
- **Replace**: Erase background before printing.
- **Erase**: Use white pen.

Change the source of the textbox

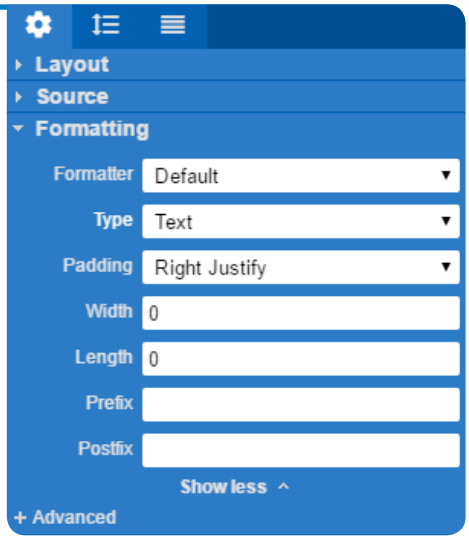
1. Select the textbox.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, the following options are available:



Source: Fix is selected by default. If another source is selected, the options below can change its properties.
Value: Type the value you want the textbox field to display.

Change the formatting of the textbox

1. Select the textbox.
2. On the **Properties Panel**, click the properties tab .
3. On the **Formatting** menu, the following options are available:



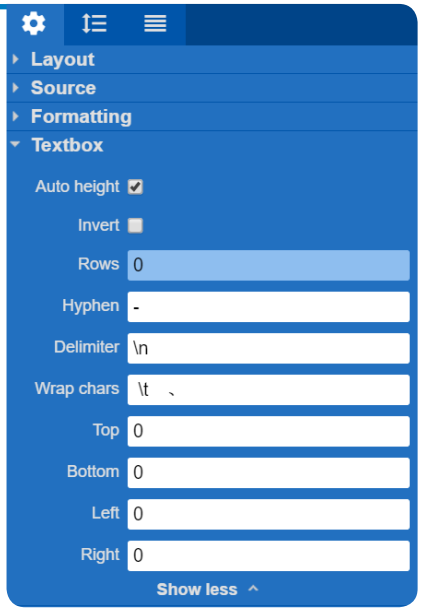
Formatter: Change the format of the field.
Type: Select if the field should contain text or digits.
Padding: Add spaces or zeros to the textbox.

- **Right Justify**: Add spaces so the text aligns to the right.
- **Left Justify**: Add spaces so the text aligns to the left.
- **Zero padding**: Add zeros to fill out the textbox.

Width: Enter the width of the textbox field.
Length: Enter how many digits or letters the textbox field should consist of.
Prefix: Type a prefix.
Postfix: Type a postfix.

Edit more textbox options

1. Select the textbox.
2. On the **Properties Panel**, click the properties tab .
3. On the **Textbox** menu, following options are available:



Auto height: Fit the text inside the box boundaries. The textbox will adjust its height to show all available text.
Invert: Invert the color of the background and the text.
Rows: Enter how many rows the textbox should contain.
Hyphen: Enter a hyphen character that indicates that a word continues on the following row.
Delimiter: Enter a Lua pattern that matches hard wrap points.
Wrap Chars: These characters defines suitable places to end a row in the textbox and start a new row if the string is wider than the textbox width.
Top: Adjust the top indent of the textbox.
Bottom: Adjust the bottom indent of the textbox.
Left: Adjust the left indent of the textbox.
Right: Adjust the right indent of the textbox.

PRICE

Add price fields to your label.

1. On the **Label Object** menu, select the price tool .
2. On the label sheet, click to place the price field.

Edit the layout of the price field

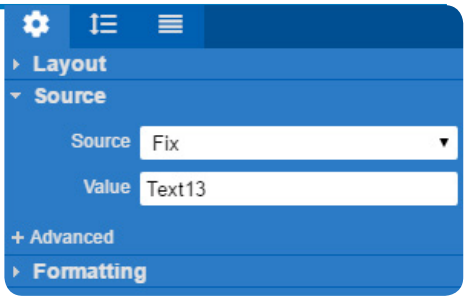
1. Select the price field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

Name: Enter the name of the price field.
Font: Adjust the type and size of the font.
Style: Select the style of the font.
X-position: Set the horizontal position of the price field.
Y-position: Set the vertical position of the price field.
Visible: Display or hide the price field.
Rotation: Rotate the price field.
Anchor: Set the reference point of the price field.
Pen: Change pen mode.

- **Normal**: Default mode. Use black pen.
- **Reverse**: Change the color of an object so it becomes visible on any background.
- **Replace**: Erase background before printing.
- **Erase**: Use white pen.

Change the source of the price field

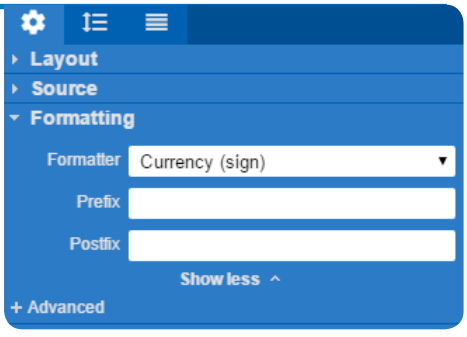
1. Select the price field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, the following options are available:



Source: Fix is selected by default. If another source is selected, the options below can change its properties.
Value: Type the value you want the price field to display.

Change the formatting of the price field

1. Select the price field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Formatting** menu, the following options are available:



Formatter: Change the format of the field.
Prefix: Type a prefix.
Postfix: Type a postfix.

COUNTER

Add counters whose value increments or decrements along with every printed label.

1. On the **Label Object** menu, select the counter tool .
2. On the label sheet, click to place the counter.

Edit the layout of the counter

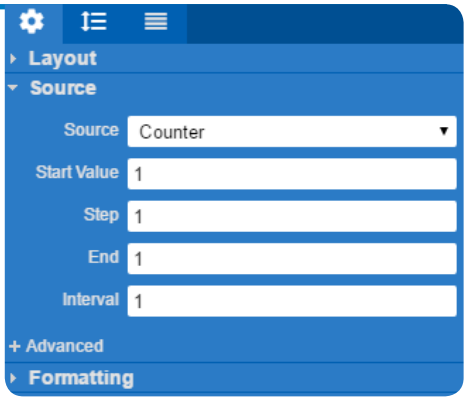
1. Select the counter.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

Name: Enter the name of the counter field.
Font: Adjust the type and size of the font.
Style: Select the style of the font.
X-position: Set the horizontal position of the counter.
Y-position: Set the vertical position of the counter.
Visible: Display or hide the counter.
Rotation: Rotate the counter field.
Anchor: Set the reference point of the counter field.
Pen: Change pen mode.

- **Normal**: Default mode. Use black pen.
- **Reverse**: Change the color of an object so it becomes visible on any background.
- **Replace**: Erase background before printing.
- **Erase**: Use white pen.

Change the source of the counter

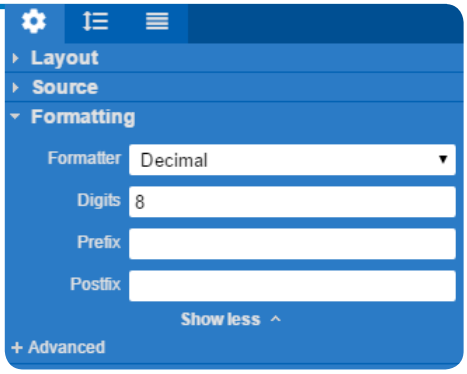
1. Select the counter.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, the following options are available:



Source: Counter is selected by default. If another source is selected, the options below can change its properties.
Start Value: Set the start value of the counter.
Step: Set the incrementing of the counter.
End: Set the max value of the counter. After the counter has reached the max value, the counter starts over from the entered start value.
Interval: Set the interval value of the counter. If the interval is set to 1, the value of the counter will increment for every printed label. If the counter is set to e.g. 5, it will increment the value of the counter on every 5th printed label.

Change the formatting of the counter

1. Select the counter.
2. On the **Properties Panel**, click the properties tab .
3. On the **Formatting** menu, the following options are available:



Formatter: Select the format of the field.
Digits: Enter how many digits or letters the counter should consist of.
Prefix: Type a prefix.
Postfix: Type a postfix.

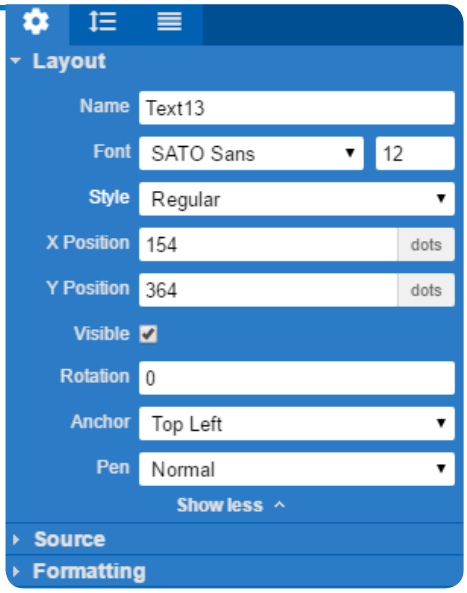
TIME

Add time fields to your label.

1. On the **Label Object** menu, select the time tool .
2. On the label sheet, click to place the time field.

Edit the layout of the time field

1. Select the time field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

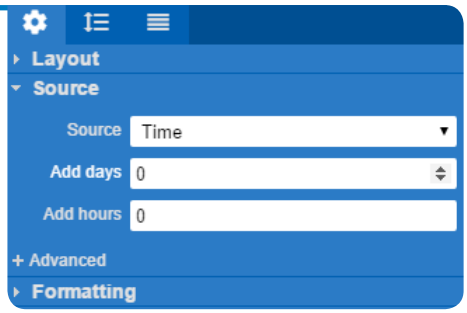


Name: Enter the name of the time field.
Font: Adjust the type and size of the font.
Style: Select the style of the font.
X-position: Set the horizontal position of the time field.
Y-position: Set the vertical position of the time field.
Visible: Display or hide the time field.
Rotation: Rotate the time field.
Anchor: Set the reference point of the time field.
Pen: Change pen mode.

- **Normal**: Default mode. Use black pen.
- **Reverse**: Change the color of an object so it becomes visible on any background.
- **Replace**: Erase background before printing.
- **Erase**: Use white pen.

Change the source of the time field

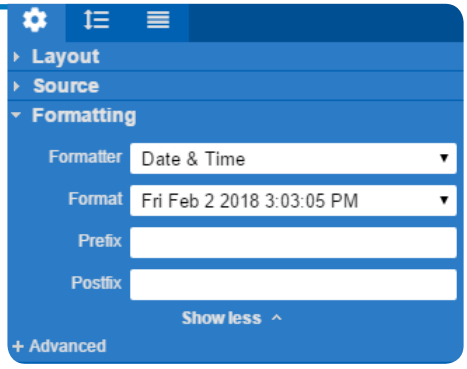
1. Select the time field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, the following options are available:



Source: Time is selected by default. If another source is selected, the options below can change its properties.
Add Days: Add or subtract the number of days.
Add Hours: Add or subtract the number of hours.

Change the formatting of the time field

1. Select the time field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Formatting** menu, the following options are available:



Formatter Select the format of the field.
Format: Select time format.
Prefix: Type a prefix.
Postfix: Type a postfix.

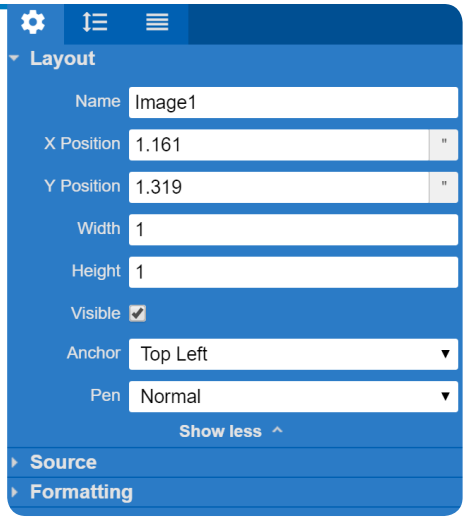
LABEL IMAGES

Add graphic content to your label.

1. On the **Label Object** menu, select the image tool .
2. On the label sheet, click to place the image. The first label image in your assets library will appear. For more information on how to add label images to your assets, go to Label Images on page 53.

Edit the layout of the label image

1. Select the image.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

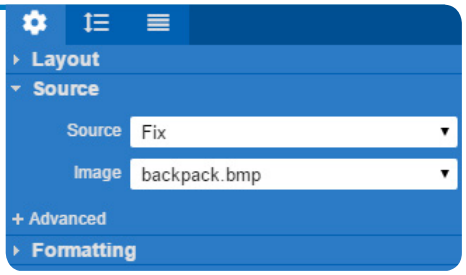


Name: Enter the name of the image field.
X-position: Set the horizontal position of the image field.
Y-position: Set the vertical position of the image field.
Width: Enter the width of the image.
Height: Enter the height of the image.
Visible: Display or hide the image.
Anchor: Set the reference point of the image field.
Pen: Change pen mode.

- **Normal**: Default mode. Use black pen.
- **Reverse**: Change the color of an object so it becomes visible on any background.
- **Replace**: Erase background before printing.
- **Erase**: Use white pen.

Change the source of the label image

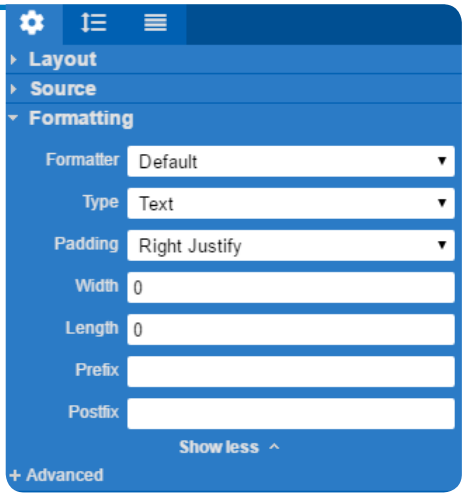
1. Select the image.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, the following options are available:



Source: Fix is selected by default. If another source is selected, the options below can change its properties.
Image: Select any of your images from your assets library.

Change the formatting of the label image

1. Select the image.
2. On the **Properties Panel**, click the properties tab .
3. On the **Formatting** menu, the following options are available:



NOTE! Formatting for label images just formats the value of the image and not the appearance.

Formatter: Select the format of the field.
Type: Select if the field should contain text or digits.
Padding: Add spaces or zeros to the field.

- **Right Justify**: Add spaces so the text aligns to the right.
- **Left Justify**: Add spaces so the text aligns to the left.
- **Zero padding**: Add zeros to fill out the data.

Width: Enter image magnification (0=0%, 1=100%)
Length: Enter image magnification. (0=0%, 1=100%)
Prefix: Type a prefix.
Postfix: Type a postfix.

BARCODE

Add and edit various types of barcodes to your label.

1. On the **Label Object** menu, select the barcode tool .
2. On the label sheet, click to place the barcode.

Edit the layout of the barcode

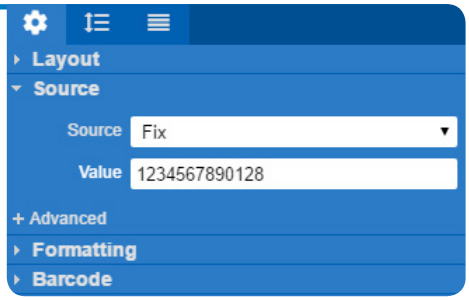
1. Select the barcode field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

Name: Enter the name of the barcode field.
X-position: Set the horizontal position of the barcode.
Y-position: Set the vertical position of the barcode.
Visible: Display or hide the barcode.
Rotation: Rotate the barcode.
Anchor: Set the reference point of the barcode.
Pen: Change pen mode.

- **Normal**: Default mode. Use black pen.
- **Reverse**: Change the color of an object so it becomes visible on any background.
- **Replace**: Erase background before printing.
- **Erase**: Use white pen.

Change the source of the barcode

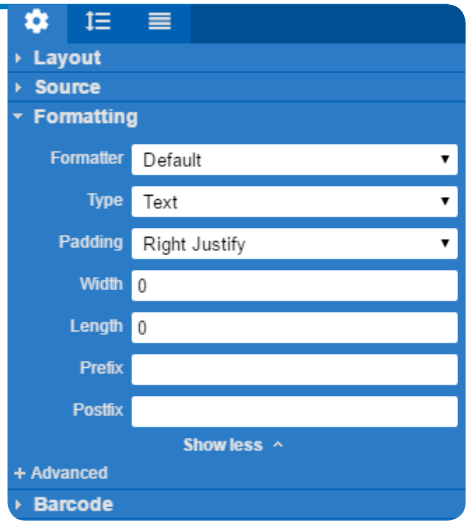
1. Select the barcode field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, the following options are available:



Source: Fix is selected by default. If another source is selected, the options below can change its properties.
Value: Enter barcode data.

Change the formatting of the barcode

1. Select the barcode field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Formatting** menu, the following options are available:



Formatter: Select the format of the field.
Type: Select if the field should contain text or digits.
Padding: Add spaces or zeros before the barcode digits.

- **Right Justify**: Add spaces so the barcode data aligns to the right.
- **Left Justify**: Add spaces so the barcode data aligns to the left.
- **Zero padding**: Add zeros before the barcode data.

Width: Enter the width of the barcode.
Length: Enter the length of the barcode.
Prefix: Type a prefix.
Postfix: Type a postfix.

Edit more barcode options

1. Select the barcode field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Barcode** menu, following options are available:

Barcode Type: Select the barcode type.
Narrow Width: Resize the width of the barcode
Length: Resize the length of the barcode.
Human Readable: Display or hide the barcode digits.

NOTE! Depending on which barcode type you select, the options in the **Barcode** menu can change.

LINE

Add lines to your label.

1. On the **Label Object** menu, select the line tool .
2. On the label sheet, drag out a line. The points where you pressed and then released the mouse button set the length and inclination of the line.

Edit the layout of the line

1. Select the line.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

Name: Enter the name of the line field.
X-position: Set the horizontal position of the line.
Y-position: Set the vertical position of the line.
X Delta: Set the horizontal offset to end position.
Y Delta: Set the vertical offset to end position.
Thickness: Change the thickness of the line.
Visible: Display or hide the line.
Pen: Change pen mode.

- **Normal**: Default mode. Use black pen.
- **Reverse**: Change the color of an object so it becomes visible on any background.
- **Replace**: Erase background before printing.
- **Erase**: Use white pen.

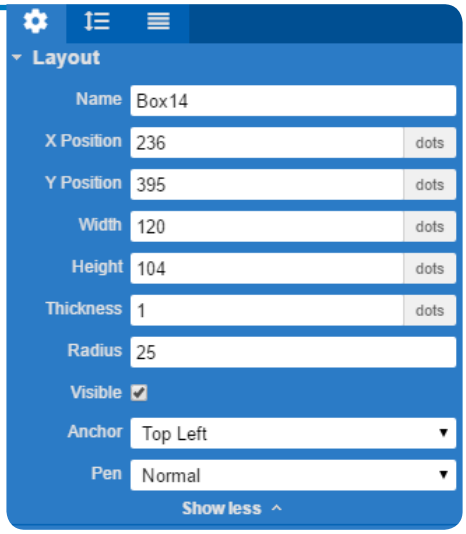
BOX

Add square or rectangular shapes to your label.

1. On the **Label Object** menu, select the box tool .
2. On the label sheet, drag out a box. The points where you pressed and then released the mouse button sets the size of the box.

Edit the layout of the box

1. Select the box.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:



Name: Enter the name of the box field.
X-position: Set the horizontal position of the box.
Y-position: Set the vertical position of the box.
Width: Enter the width of the box.
Length: Enter the length of the box.
Thickness: Change line thickness of the box.
Radius: Change corner radius of the box.
Visible: Display or hide the box.
Anchor: Set the reference point of the box.
Pen: Change pen mode.

- **Normal**: Default mode. Use black pen.
- **Reverse**: Change the color of an object so it becomes visible on any background.
- **Replace**: Erase background before printing.
- **Erase**: Use white pen.

CIRCLE AND ELLIPSE

Create a circle

1. On the **Label Object** menu, select the ellipse tool .
2. On the label sheet, double click to place the circle.

Create an ellipse

1. On the **Label Object** menu, select the ellipse tool .
2. On the label sheet, drag out an ellipse.

Edit the layout of the circle or ellipse

1. Select the circle or ellipse.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

Name: Enter the name of the circle- or ellipse field.
X-position: Set the horizontal position of the circle or ellipse.
Y-position: Set the vertical position of the circle or ellipse.
Width: Enter the width of the circle or ellipse.
Height: Enter the height of the circle or ellipse.
Start Angle: Set the starting angle of the circle or ellipse.
Stop Angle: Set the stopping angle of the circle or ellipse.
Thickness: Change line thickness of the circle or ellipse.
Visible: Display or hide the circle or ellipse.
Anchor: Set the reference point of the circle or ellipse.
Pen: Change pen mode.

- **Normal**: Default mode. Use black pen.
- **Reverse**: Change the color of an object so it becomes visible on any background.
- **Replace**: Erase background before printing.
- **Erase**: Use white pen.

GRID

Add and edit grids on your label.

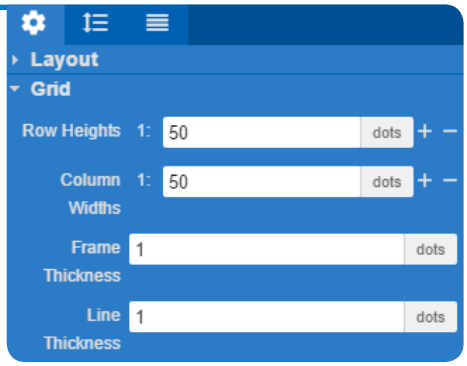
1. On the **Label Object** menu, select the grid tool .
2. On the label sheet, double click to place the grid.

Edit the layout of the grid

1. Select the grid.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

   Name: Enter the name of the grid.
   X-position: Set the horizontal position of the grid.
   Y-position: Set the vertical position of the grid.
   Width: Enter the width of the grid.
   Height: Enter the height of the grid.
   Visible: Display or hide the grid.
   Anchor: Set the reference point of the grid.
   Pen: Change pen mode.
   - **Normal**: Default mode. Use black pen.
   - **Reverse**: Change the color of an object so it becomes visible on any background.
   - **Replace**: Erase background before printing.
   - **Erase**: Use white pen.

Edit more grid options



1. Select the grid.
2. On the **Properties Panel**, click the properties tab .
3. On the **Grid** menu, the following options are available:

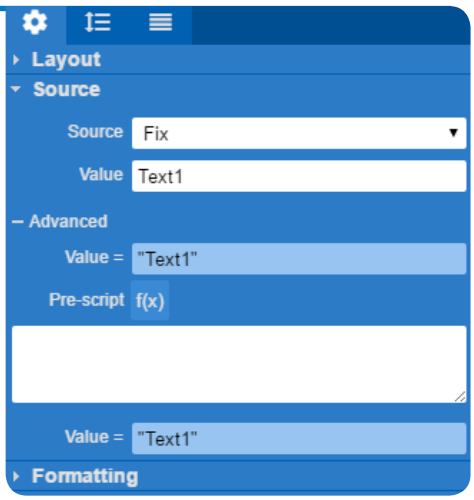
   Row Heights: Set row heights.
   Column Widths: Set column widths.
   Frame Thickness: Change the thickness of the frame surrounding the grid.
   Line Thickness: Change the thickness of the lines inside the grid.

ADVANCED SOURCE SETTINGS

For text, textboxes, counters, barcodes, price fields and images

1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click **Advanced.** The following options are now available:

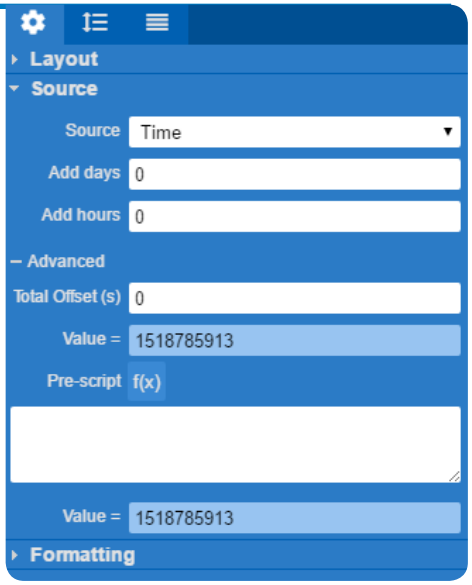
   Value: The value of the selected object before the script has been run.
   Pre-script: Select an existing script by clicking f(x) or create a new one in the text box below.
   Value: The value of the selected object after the script has been run.



For time fields

1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click **Advanced.** The following options are now available:

   Total Offset (s): The total time offset (in seconds) of the added hours and days.
   Value: The value of the selected object before the script has been run.
   Pre-script: Select an existing script by clicking f(x) or create a new one in the text box below.
   Value: The value of the selected object after the script has been run.

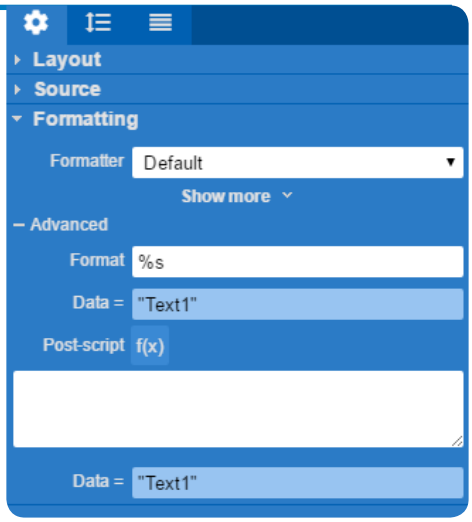


ADVANCED FORMAT SETTINGS

For text, textboxes, barcodes, time fields and images

1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click **Advanced.** The following options are now available:

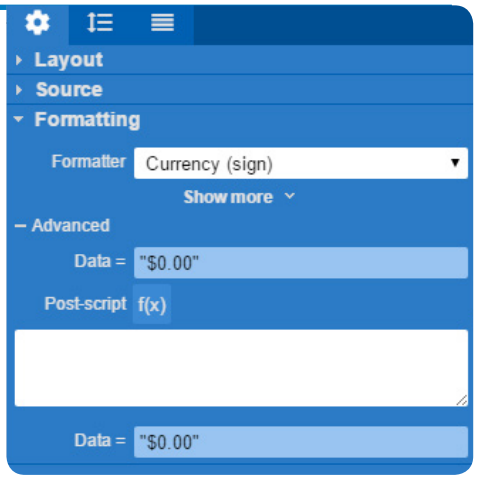
   Format: Enter a format string.
   Data: The value of the selected object before the script has been run.
   Post-script: Select an existing script by clicking f(x) or create a new one in the text box below.
   Data: The value of the selected object after the script has been run.



For counters and price fields

1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click **Advanced.** The following options are now available:

   Data: The value of the selected object before the script has been run.
   Post-script: Select an existing script by clicking f(x) or create a new one in the text box below.
   Data: The value of the selected object after the script has been run.



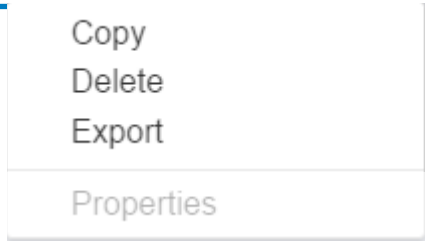
Manage Labels

Manage labels in your currently active workspace.

EDITING COMMANDS

Copy, delete and export labels

1. On the **Workspace Overview**, Right-Click the label you want to edit.
2. On the edit menu, the following options are available:

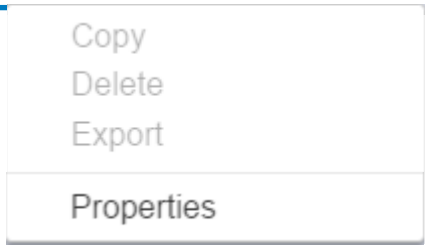


Copy: Copy the selected label and automatically paste it next to the original.
Delete: Permanently delete the selected label.
Export: Export the selected label to your computer or an external memory source.

LABEL PROPERTIES

Edit the properties of a label

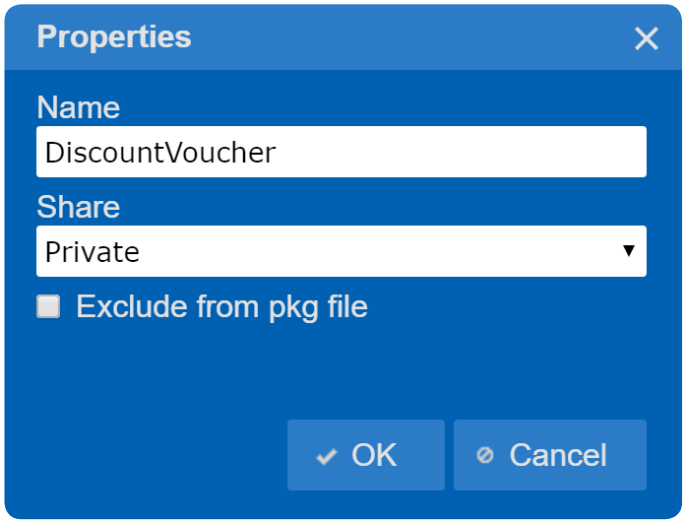
1. On the **Workspace Overview**, right-click the label you want to edit the properties of.
2. On the edit menu, select **Properties.**
3. The properties dialog window appear and leave you with the following options:



Name: Edit the name of the selected label.
Share: Choose sharing settings.

- Private: The label only belongs to the current workspace.
- Shared: The label is accessible by other workspaces.
- Custom: The label has a user-defined path.

Exclude from pkg file: To allow files within a workspace, that is not included in the built package, a way of telling the package builder to exclude a file is needed. One use-case is to allow workspace makers to include documentation of the application within the workspace, without having it included in the package.



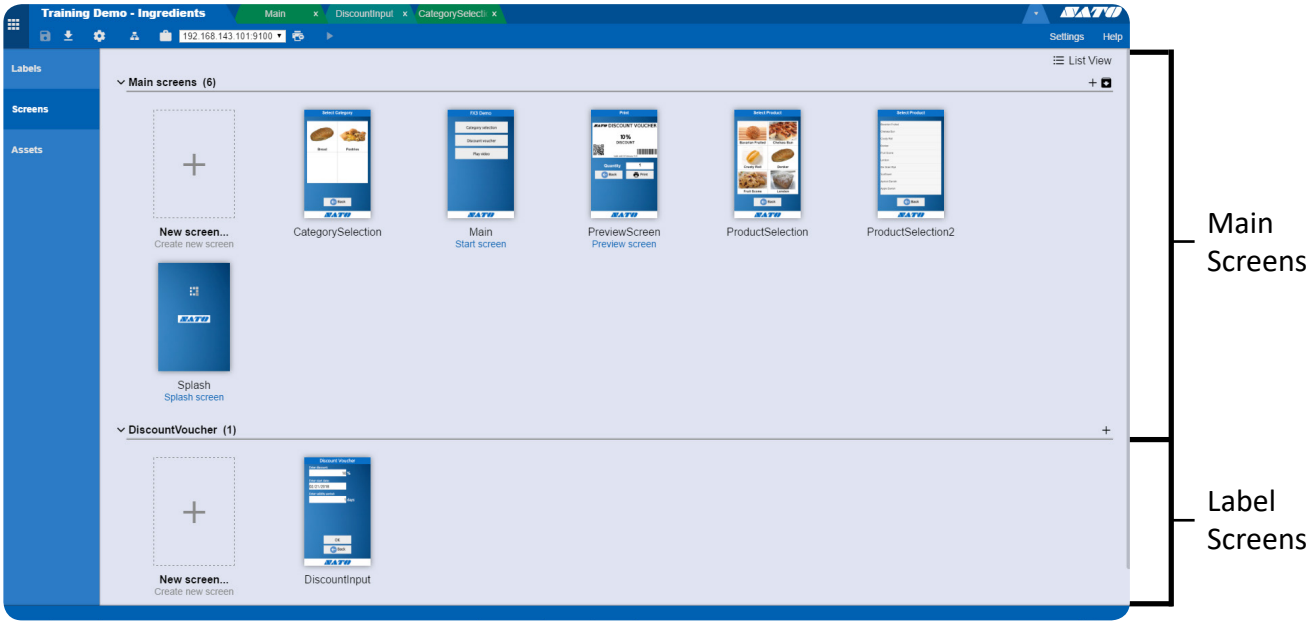
7 Screens

For industries using the FX3 printer, AEP Works 3 offers features for designing business-specific touchscreen applications. By using various screen editing tools, customized on-screen applications can be created to suit your business specific needs.

- Screen Types
- Create New Screen
- Add Content Screens
- Manage Screens

Screen Types

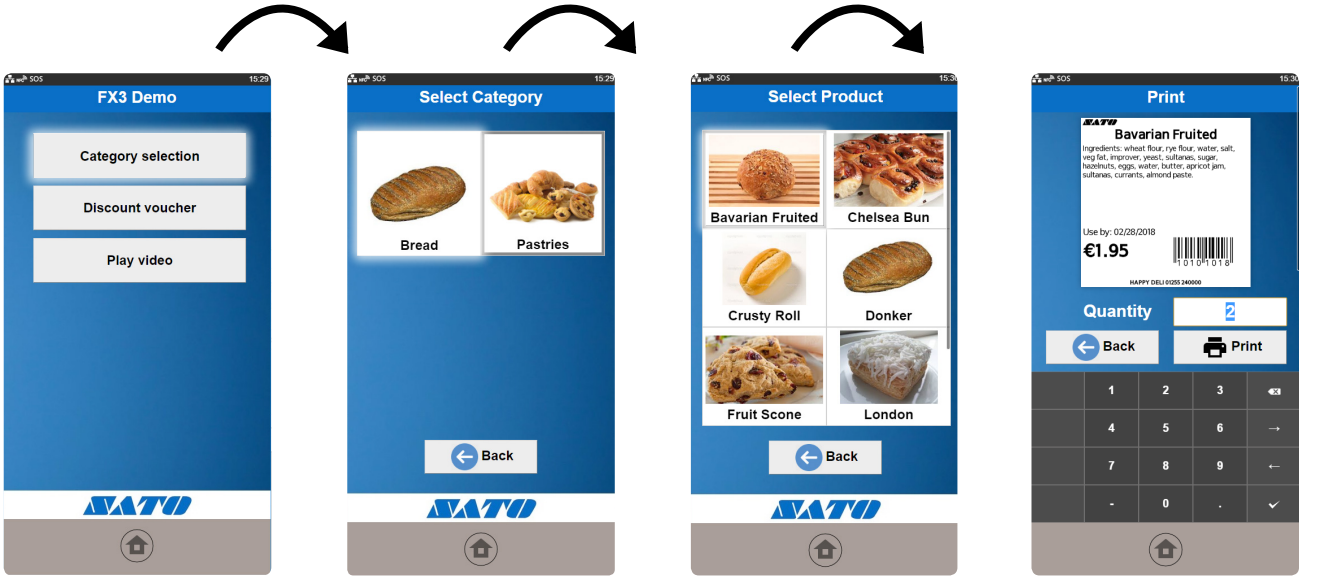
To make screen editing more versatile, AEP Works 3 offer different types of screens; **Main Screens** and **Label Screens**. All screens in your currently active workspace are shown in the screens overview window.



MAIN SCREENS

This type of screen is used by the screen designer to specify the next action for the operator to perform. Main screens can for example be used to let the operator navigate through applications with help of buttons and other interactive content.

The example below shows an outcome of navigating a demo application on the FX3 printer, that consists of 4 main screens.



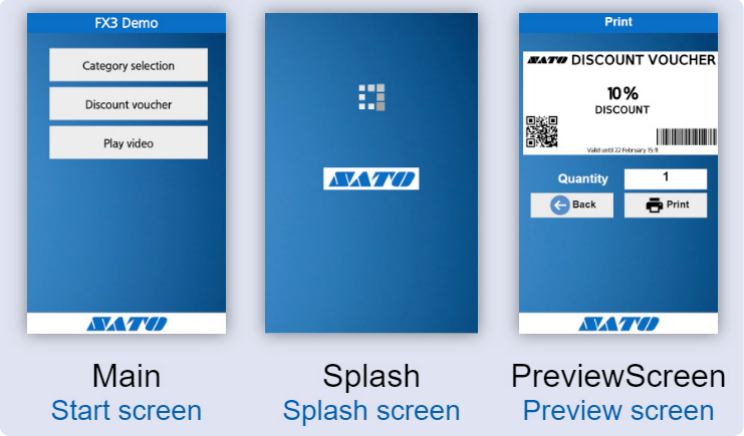
Main Screen (Start Screen)

Main Screen

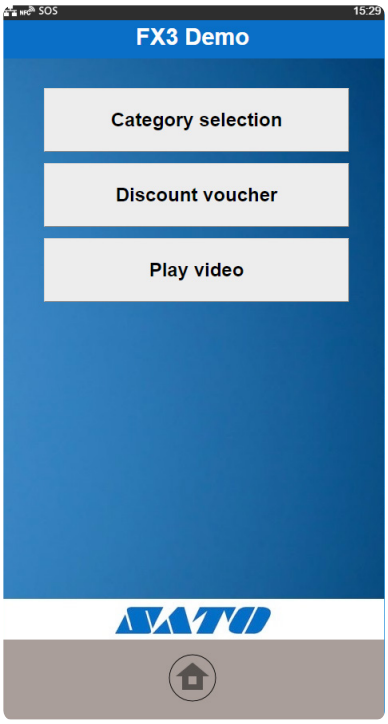
Main Screen

Main Screen (Preview Screen)

Main screens can also be assigned as your **Start Screen, Splash Screen** and **Preview Screen.** A **Normal Screen** is a screen that is not assigned as any of the earlier mentioned. For instructions on assigning screens, go to Manage Screens on page 99.

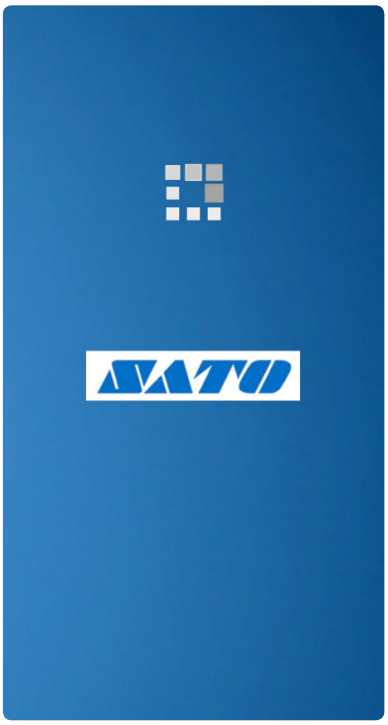


Start screen



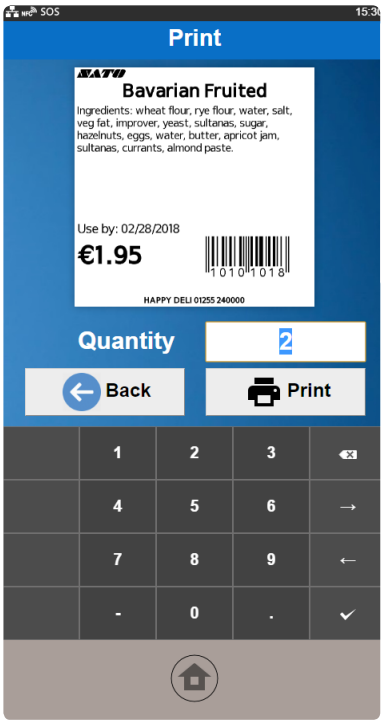
The screen shown after the printer has successfully loaded your workspace. The first screen you make in your workspace will by default be set to your start screen. You can easily change that by right-clicking on the screen you want to be your new start screen, and then select the **Start screen** check box.

Splash screen



The screen shown while the printer is loading your workspace.

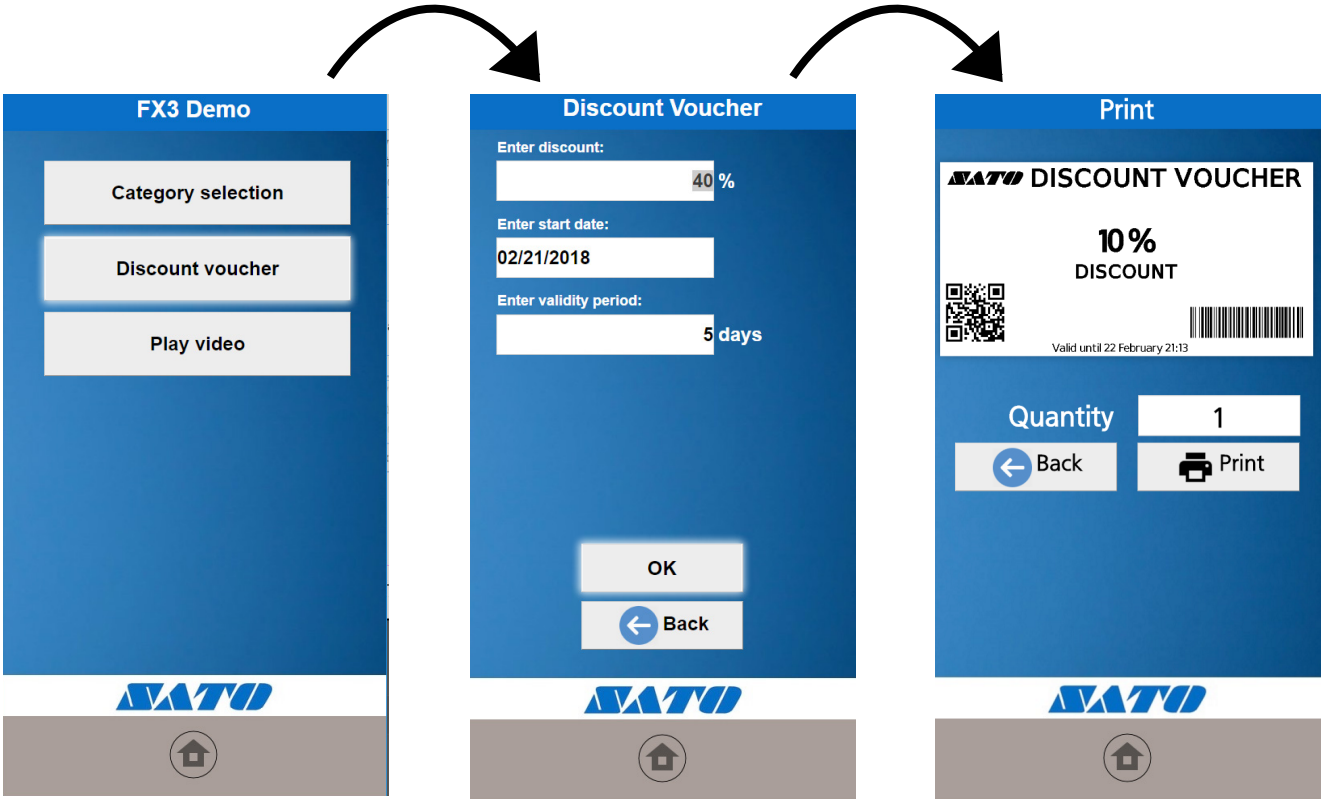
Preview screen



The screen shown in the end of your screen flow. This screen is useful for displaying a label preview and for entering print quantity.

LABEL SCREENS

Label screens are always connected to a specific label. The example below shows an outcome of navigating a demo application on the FX3 printer, that consists of 2 main screens and 1 label screen.



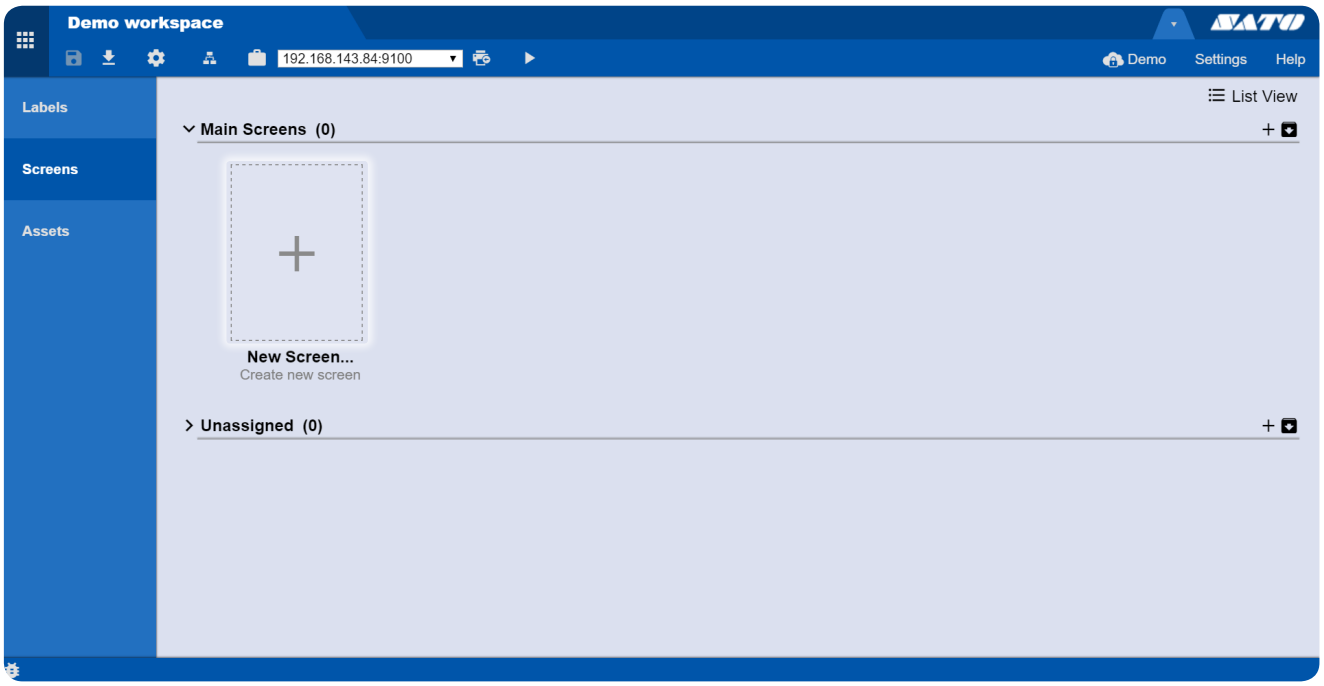
Main Screen (Start Screen)

Label Screen

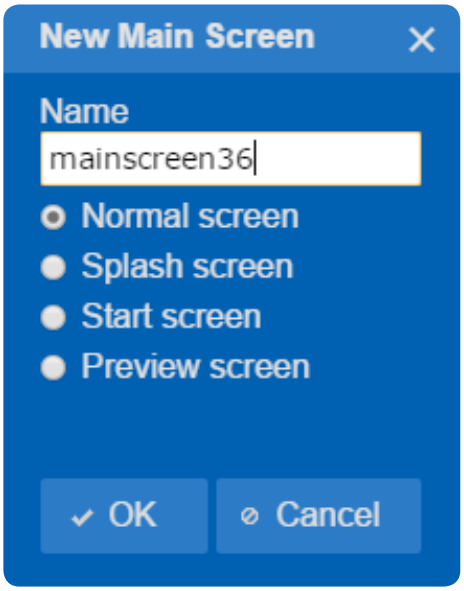
Main Screen (Preview Screen)

Create New Screen

1. On the **Workspace Overview**, click **Screens**, and then click **New Screen**.



2. In the **New Main Screen** dialog window, enter the name of your new workspace and select screen type. For more information on different screen types, go to Start, Preview and Splash Screen on page 79.

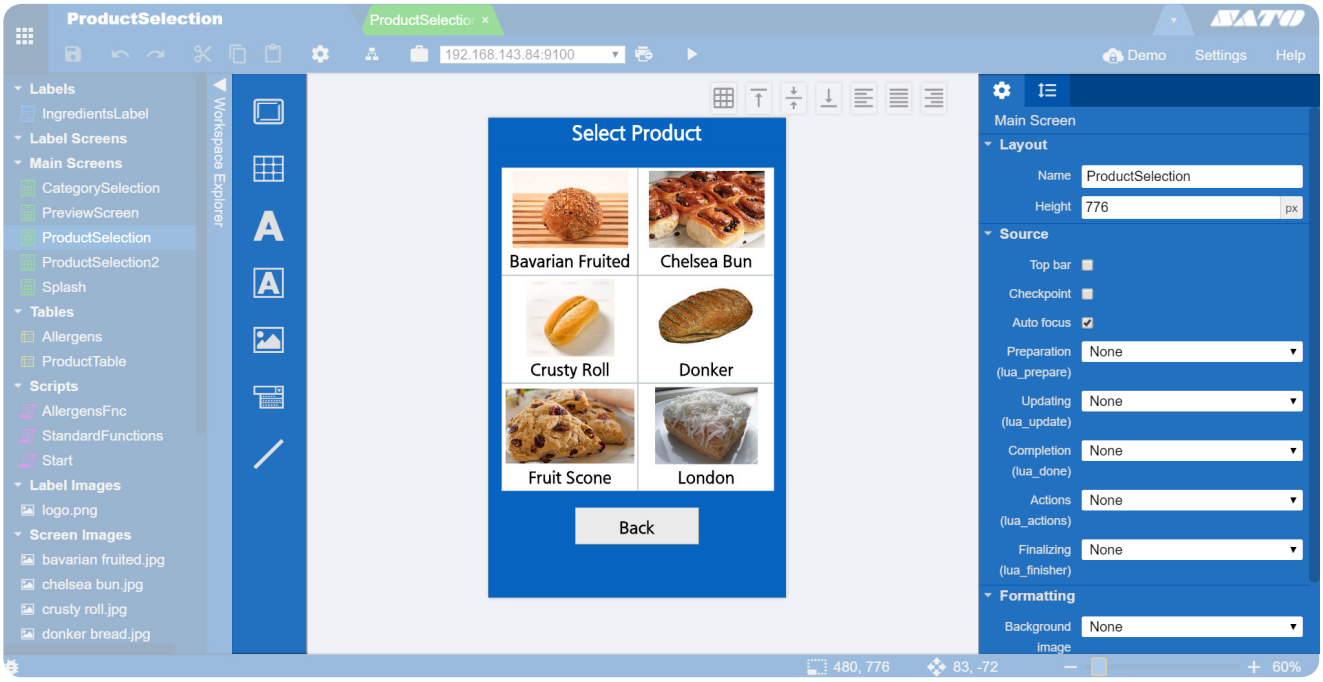


Add Content to Screens

AEP Works 3 offer a variety of tools to help you create and edit screens for your specific business needs. The tools for screen editing are located in the **Screen Object** menu on the left side of the editor. Depending on which object you choose to add, the **Properties** menu to the right is populated with specific controls for the selected object.

There are two ways of placing objects in the editor:

- Click the object you want to add and drag it to the screen surface.
- Click the object you want to add, and then on the screen surface, click again to place it.



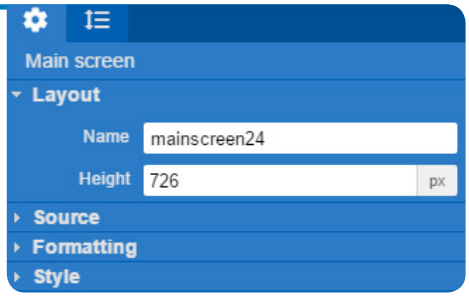
MAIN SCREEN GENERAL PROPERTIES

If no object on your screen is selected, the properties panel to the right is populated with options for editing and formatting the screen.

Edit the layout of the main screen

1. On the **Properties Panel**, click the properties tab .
2. On the **Layout** menu, the following options are available:

   Name: Enter the name of the main screen.
   Height: Enter the height of the main screen.

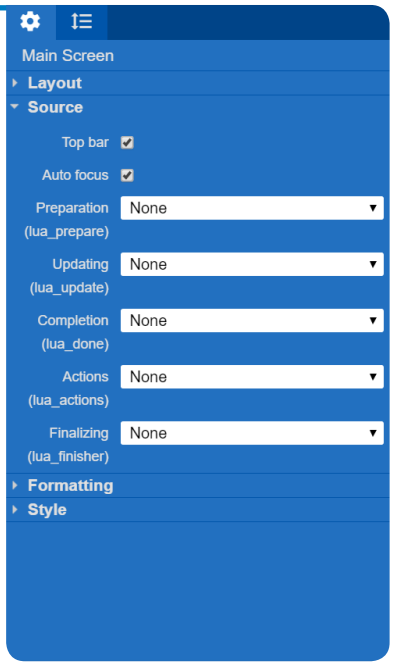


Set the source of the main screen

1. On the **Properties Panel**, click the properties tab .
2. On the **Source** menu, the following options are available:

   Top Bar: Allows you to navigate back to the previous step
   Auto Focus: Focuses on the first input field available

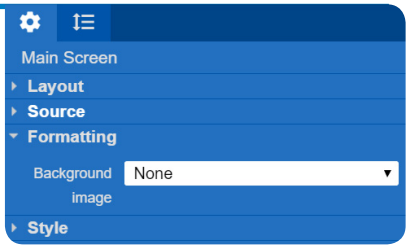
   For advanced usage: see SA Technical Screen specification STL00318.



Change the formatting of the main screen

1. On the **Properties Panel**, click the properties tab .
2. On the **Formatting** menu, the following options are available:

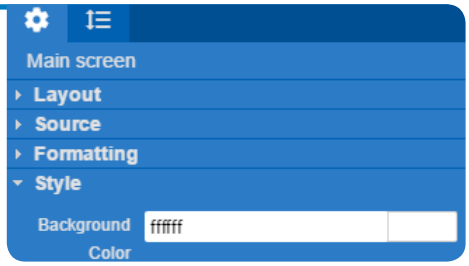
   Background Image: Select a background image for the main screen.



Change the style of the main screen

1. On the **Properties Panel**, click the properties tab .
2. On the **Style** menu, the following options are available:

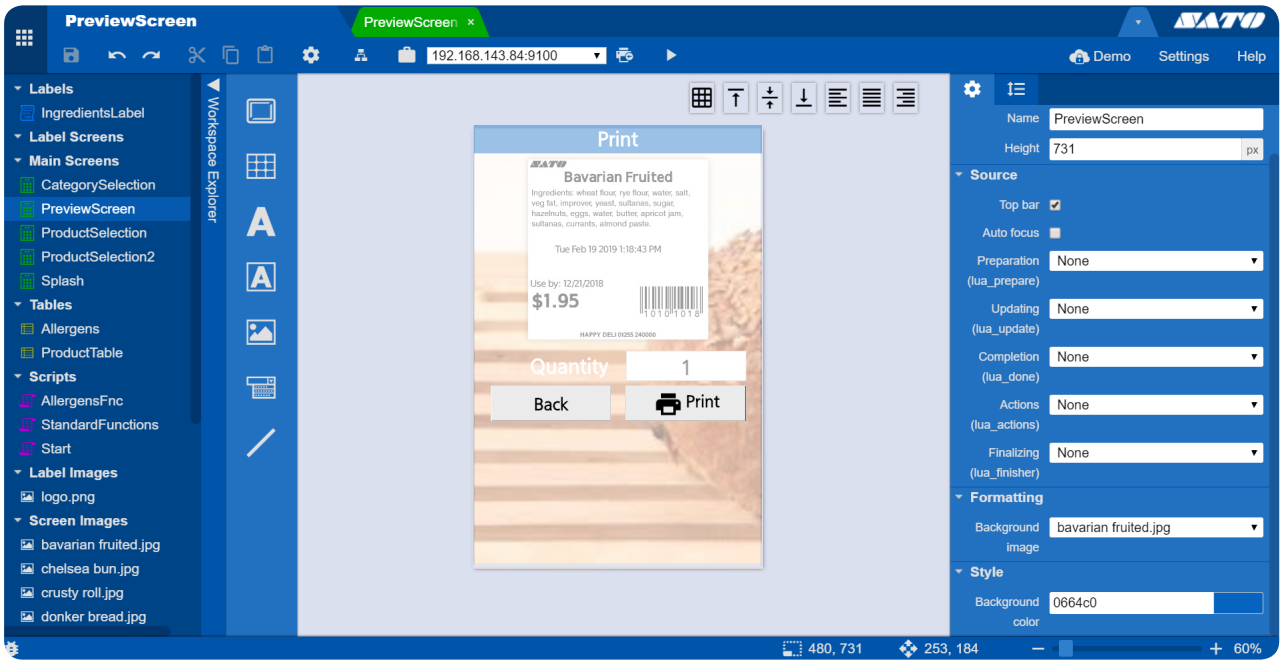
   Background Color: Select the background color for the main screen.



BUTTON

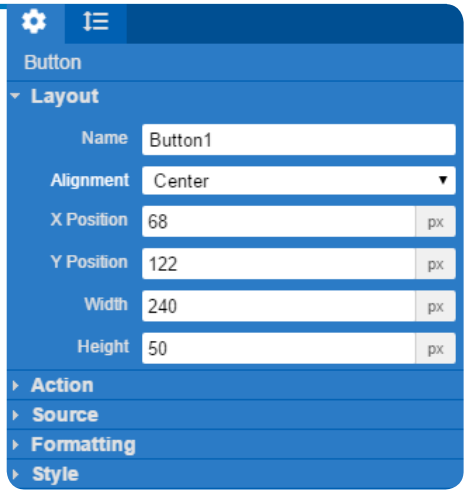
Buttons are interactive graphic content that allows you to trigger an action when clicked on. By assigning an action to a button, you can for example, go back and forth through different screens or execute a print job.

1. On the **Screen Object** menu, click the button tool .
2. On the screen, click to place the button.



Edit the layout of the button

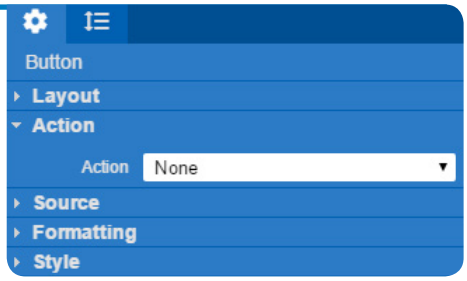
1. Select the button.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:



Name: Enter the name of the button.
Alignment: Align the text inside the button.
X-position: Set the horizontal position of the button.
Y-position: Set the vertical position of the button.
Width: Enter the width of the button.
Height: Enter the height of the button.
Visible: Display or hide the button.

Add actions to buttons

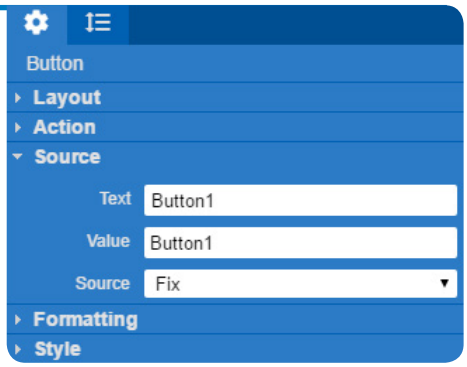
1. Select the button.
2. On the **Properties Panel**, click the properties tab .
3. On the **Action** menu, click the **Action** list, and then the following options are available:



Feed: Feed empty label.
Label: This action can be used to select a label.
Screen: This action redirects you to a given main screen.
Back: Go back to the previous screen.
Video: Launch a video file from your assets.
Script: Run a script.

Change the source of the button

1. Select the button.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, the following options are available:

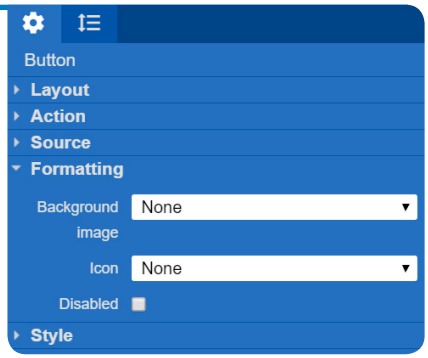


NOTE! The options in the source menu can change depending on which action the button has assigned to it.

Text: Type a text string you want the button to display.
Value: Type the value you want the button display.
Source: Fix is selected by default. If another source is selected, the options above can change its properties.

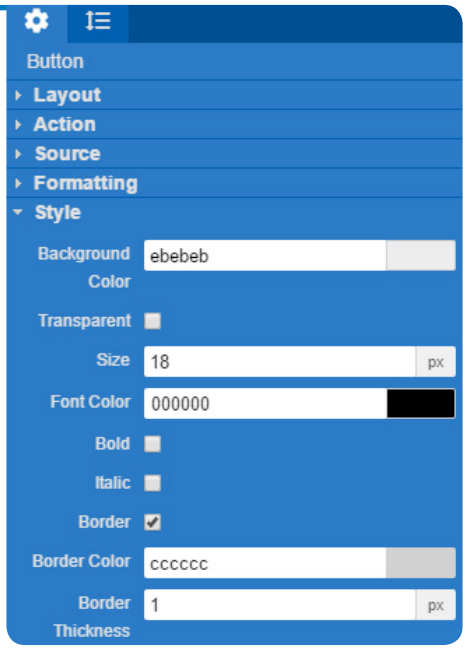
Change the formatting of the button

1. On the **Properties Panel**, click the properties tab .
2. On the **Formatting** menu, the following options are available:
   Background Image: Select an image that will fill the background of the button.
   Icon: Select an icon image.
   Disabled: Disable the button.



Edit the style of the button.

1. Select the button.
2. On the **Properties Panel**, click the Properties tab .
3. On the **Style** menu, the following options are available:

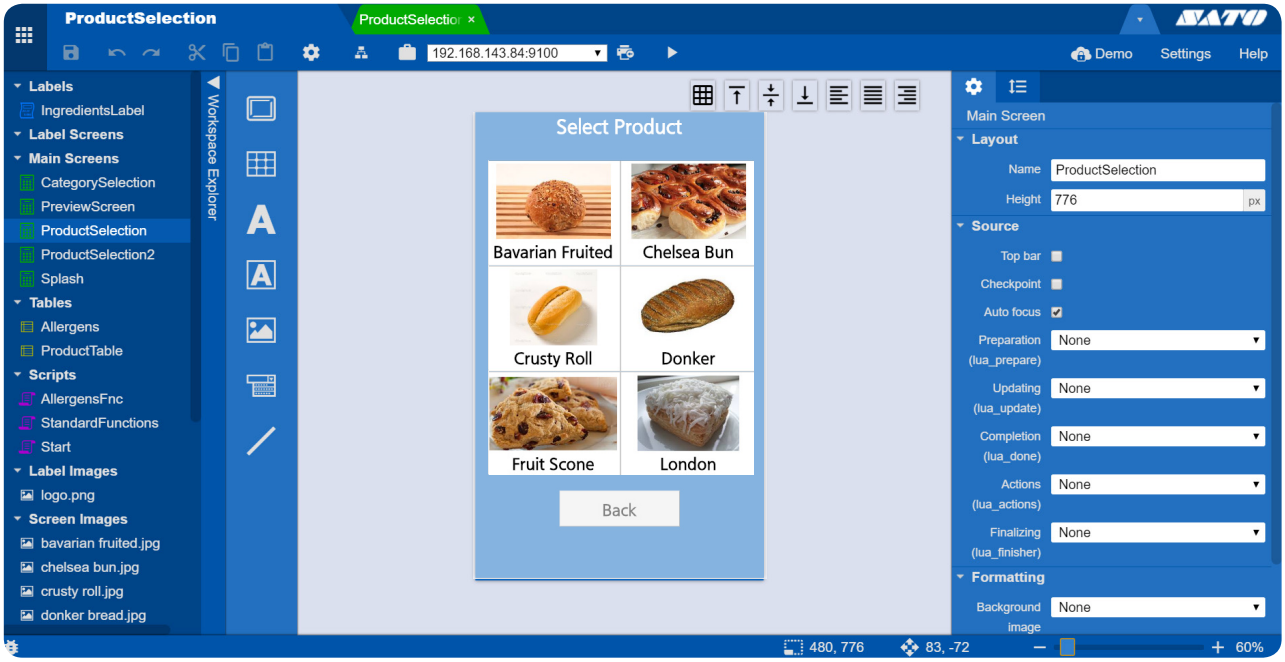


Background Color: Change the background color of the button.
Transparent: Make the background of the button transparent.
Size: Change the font size of the button.
Font Color: Change the font color.
Bold: Make the text bold.
Italic: Make the text italic.
Border: Add or remove a button border.
Border Color: Change the color of the border frame.
Border Thickness: Change the thickness of the border frame.

GRID VIEW

Grid views are interactive graphic content that allows you to trigger an action when selecting a grid item. The grid view is always connected to a table source in your workspace assets. They are especially useful if you want to display a range of options on your printer screen.

1. On the **Screen Object** menu, select the grid view tool .
2. On the screen, click to place the grid view.



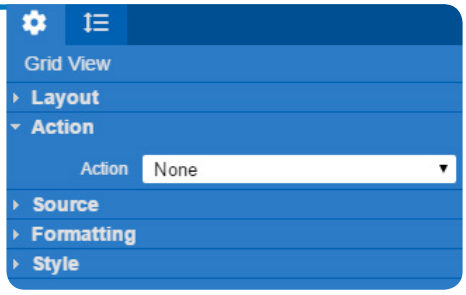
Edit the layout of the grid view

1. Select the grid view.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

Name: Enter the name of the grid view.
Alignment: Align the text inside the grid.
X-position: Set the horizontal position of the grid.
Y-position: Set the vertical position of the grid.
Width: Enter the width of the grid.
Height: Enter the height of the grid.
Columns: Enter the number of columns in the grid.
Rows: Enter the number of rows in the grid.
Scroll direction: Select vertical or horizontal scroll direction.
NOTE: If you select horizontal scroll direction, AEP Works 3 automatically changes the value in **Rows** dialog field to 1.

Add actions to the grid view

1. Select the grid view.
2. On the **Properties Panel**, click the properties tab .
3. On the **Action** menu, click the **Action** list, and then the following options are available:



Label: This action redirects you to a given label and executes it on the printer interface.
Screen: This action redirects you to a given main screen.
Script: Run a script.

Change the source of the grid view

1. Select the grid view.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, the following options are available:

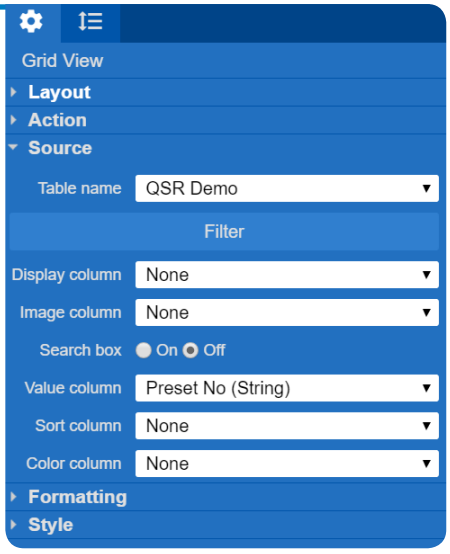
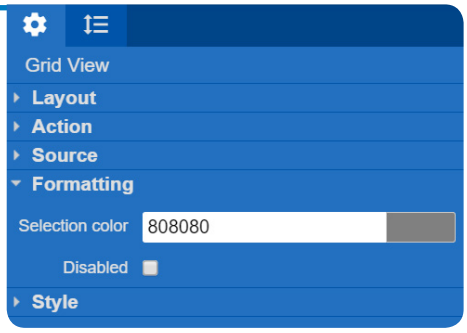


Table name: Select from which table you want to retrieve information.
Filter: You can use the filter feature to sort out unwanted data from a table. For more information on filters, go to Filter Tables on page 114.
Display Column: Select from which column in the table the grid view should display the information from.
Image Column: Select a column in your table that contains graphic content.
Search Box: Integrate a search function to the grid that allows you to search the information in selected column.
Value Column: Select from which column the field gets its value from.
Sort Column: Select the column you want your data to be

sorted from.
Color column: Select from which column the field gets its color from.

Change the formatting of the grid view

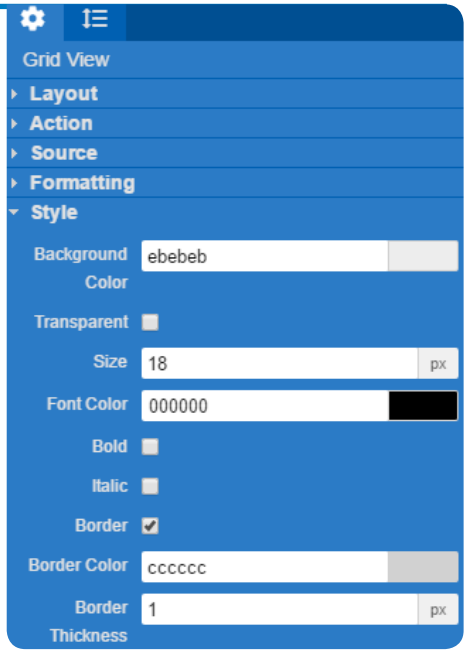
1. On the **Properties Panel**, click the properties tab .
2. On the **Formatting** menu, the following options are available:



Selection Color: Select a color that will appear as a border around the button in the grid, when it´s selected by the operator.
Disabled: Disable the grid view.

Edit the style of the grid view

1. Select the grid view.
2. On the **Properties Panel**, click the properties tab .
3. On the **Style** menu, the following options are available:

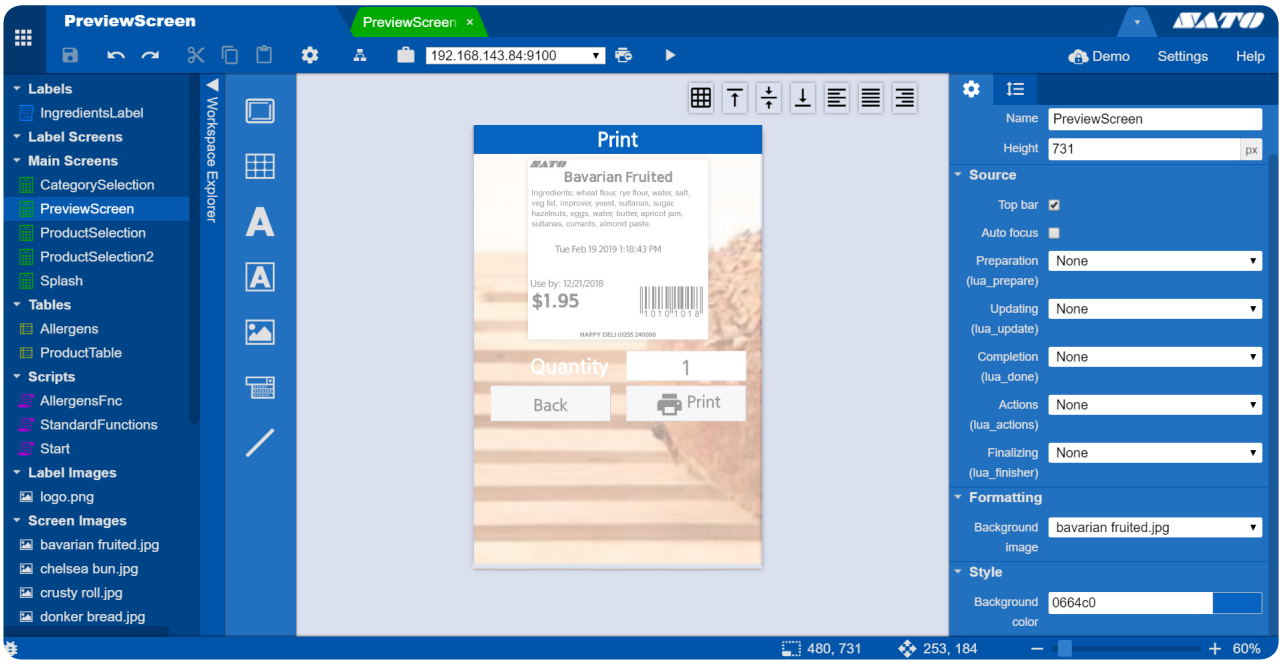


Background Color: Change the background color of the grid.
Transparent: Make the background of the grid transparent.
Size: Change the font size.
Font Color: Change the font color.
Bold: Make the text bold.
Italic: Make the text italic.
Border: Add or remove borders around the buttons.
Border Color: Change the color of the borders.
Border Thickness: Change the thickness of the borders.

TEXT LABEL

Add text labels to your screen. This object is useful when you want to display an instruction of some sort.

1. On the **Screen Object** menu, click the text label tool .
2. On the screen, click to place the text label.



7

Edit the layout of the text label

1. Select the text label.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

   Name: Enter the name of the text label.
   Alignment: Align the text inside the text label.
   X-position: Set the horizontal position of the text label.
   Y-position: Set the vertical position of the text label.
   Width: Enter the width of the text label.
   Height: Enter the height of the text label.

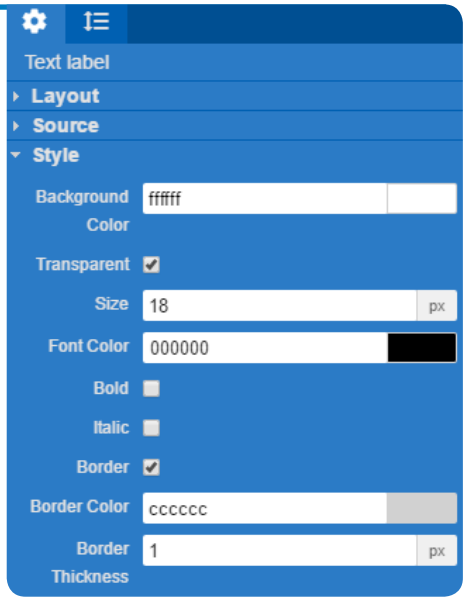
Change the source of the text label

1. Select the text label.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, the following options are available:

   Value: Type the value you want the text label to display.
   Source: Fix is selected by default. If another source is selected, the options above can change its properties.

Change the style of the text label

1. Select the text label.
2. On the **Properties Panel**, click the properties tab .
3. On the **Style** menu, the following options are available:

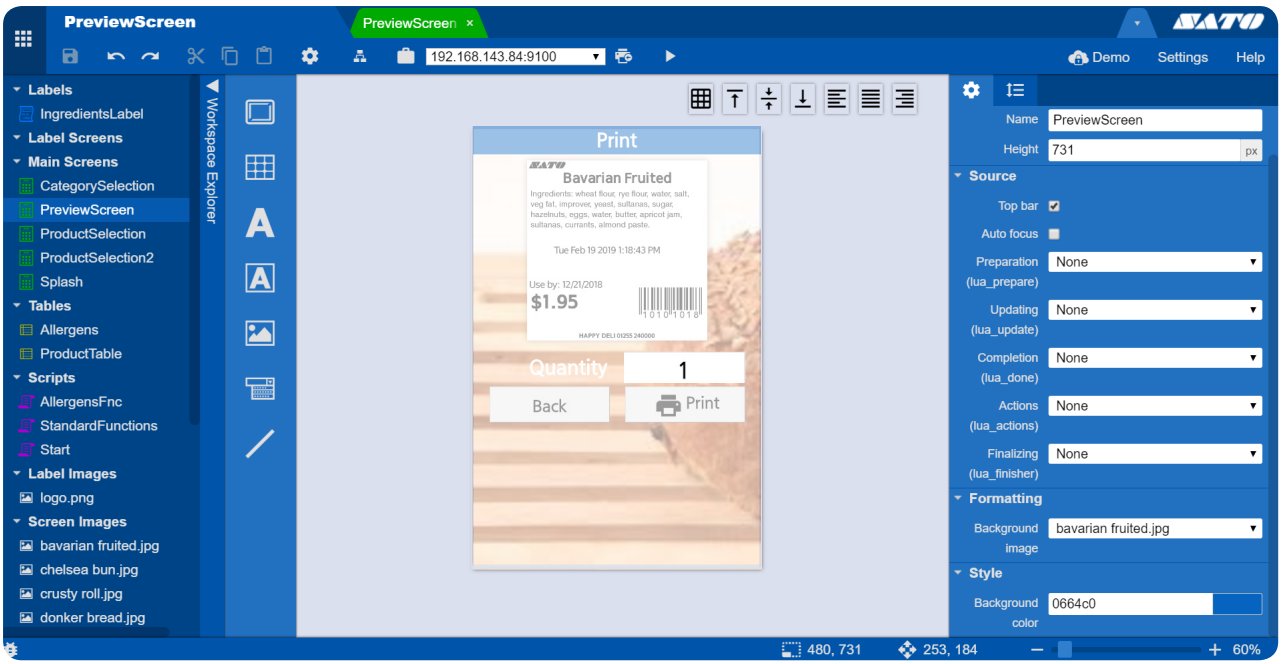


Background Color: Change the background color of the label.
NOTE! The **Transparent** check box must be deselected in order for the color to show.
Transparent: Make the text label background transparent.
Size: Adjust the font size.
Font Color: Change the font color.
Bold: Make your font bold.
Italic: Make your font italic.
Border: Add a rectangular border around the text label.
Border Color: Change the color of the border.
Border Thickness: Adjust the thickness of the border.

INPUT

An input box is a field where an operator is prompted to enter a text or numeric value in order to proceed, such as print quantity.

1. On the **Screen Object** menu, click the input tool .
2. On the screen, click to place the input field.



Edit the layout of the input field

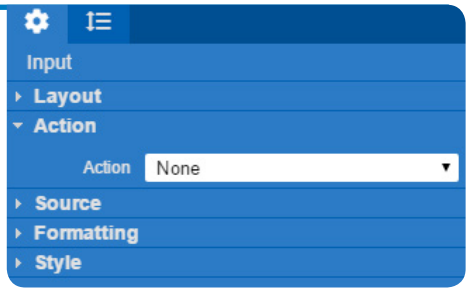
1. Select the input field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

   Name: Enter the name of the input field.
   Alignment: Align the text inside the input field.
   X Position: Set the horizontal position of the input field.
   Y Position: Set the vertical position of the input field.
   Width: Enter the width of the input field.
   Height: Enter the height of the input field.

Add actions to the input field

1. Select the input field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Action** menu, click the **Action** list, and then the following options are available:

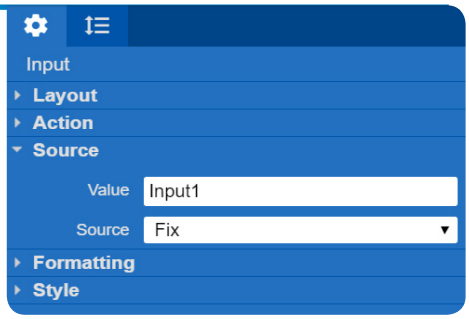
   Feed: Feed empty label sheet.
   Label: This action redirects you to a given label and executes it on the printer interface.
   Screen: This action redirects you to a given main screen.
   Script: Run a script.



Change the source of the input field

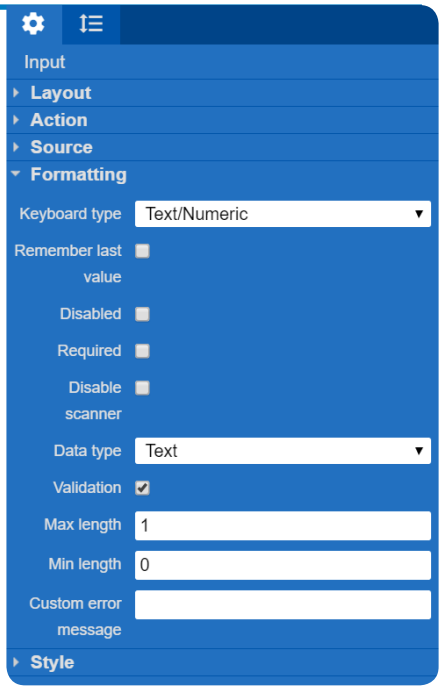
1. Select the input field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, the following options are available:

   Value: Type the value you want the text label to display.
   Source: Select the source of the input field.



Change the formatting of the input field

1. On the **Properties Panel**, click the properties tab .
2. On the **Formatting** menu, the following options are available:

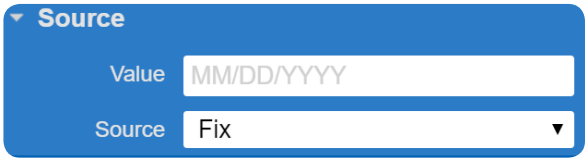


Keyboard Type: Select one of the following keyboard options:

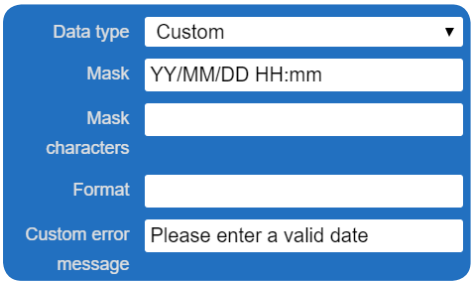
- **Text/Numeric**: When the label is sent to a printer and you are prompted to enter a value in the input field on the printer screen, the screen will initially display a text keyboard, with the option to use a numeric keyboard as well.
- **Numeric/Text**: When the label is sent to a printer and you are prompted to enter a value in the input field on the printer screen, the screen will initially display a numeric keyboard, with the option to use a text keyboard as well.
- **Numeric**: When the label is sent to a printer and you are prompted to enter a value in the input field on the printer screen, the screen will only display a numeric keyboard, with no option to use a text keyboard.

Remember Last Value: The input field will display the last entered value.
Disabled: Disable the input field.
Required Require an input value from the operator.
Disable scanner: Disable scanner input.
Data Type: Choose the type of data to be entered in the input field.

- **Text**: Set the input data type to text.
- **Number**: Set the input data type to numbers.
- **Currency**: Set the input data type to currency.
- **Date**: Set the input data type to date. When date is selected, the Value box in the source menu will show the format that the date should be entered on the printer's screen.



- **Custom**: Set the input data type to custom. When custom is selected, you can customize the input in the format box.
  If **Custom** is chosen, the following new options will become visible:
  - **Mask:** Enter a placeholder value mask that is displayed in the input field.
  - **Mask characters:** Enter which characters are to be used in the Mask. By default these characters are "dDmMyYhH".



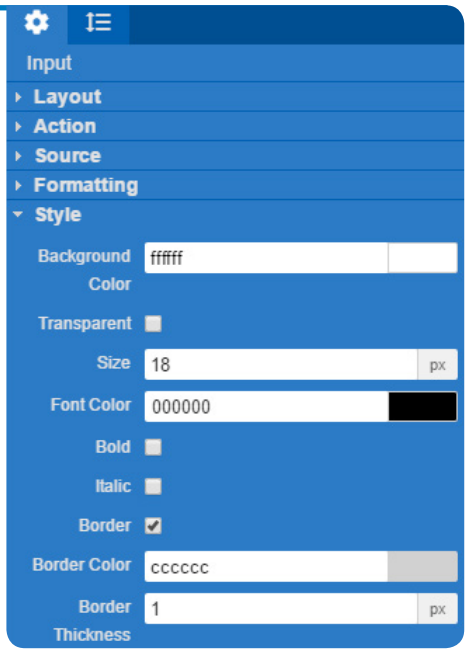
- Format: Enter custom values to be used as validation for input in the mask. E.g. a month needs to be represented by a number between 1-12.

The new format from the mask will show in the value box on the source menu.

Max Length: Set the maximal length of the input.
Min Length: Set the minimal length of the input.
Custom Error Message: Set a custom error message.

Change the style of the input field

1. Select the input field.
2. On the **Properties Panel**, click the properties tab .
3. On the **Style** menu, the following options are available:

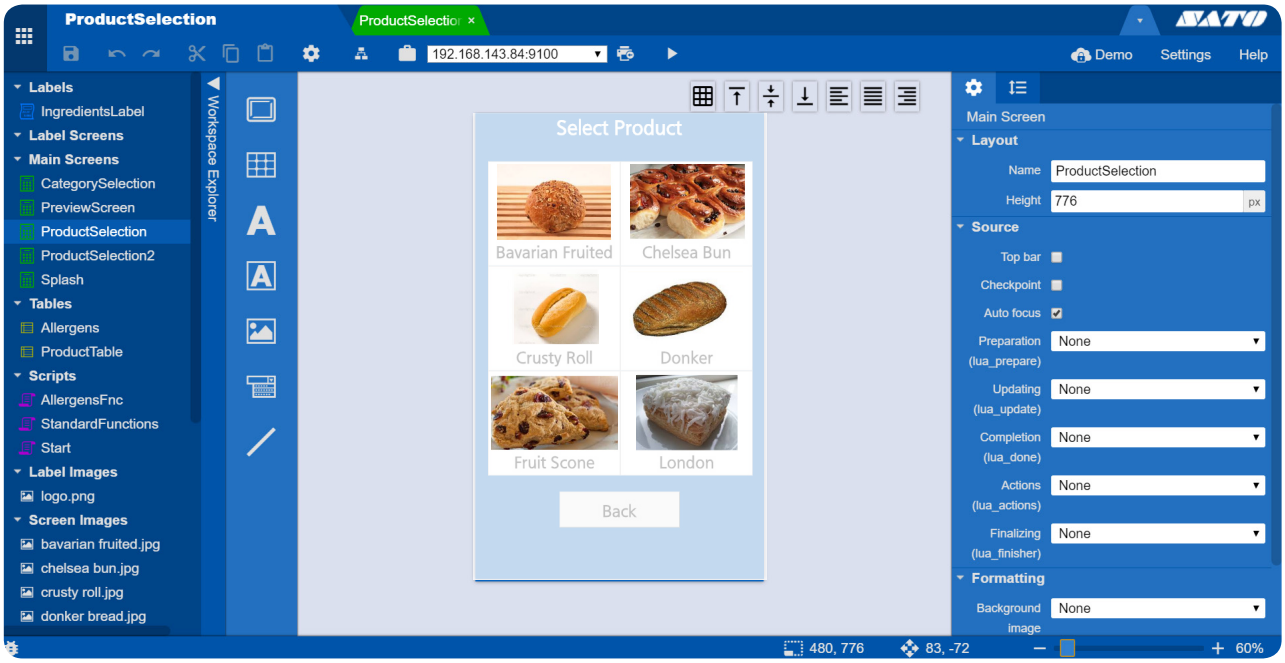


Background Color - Change the background color of the input field.
NOTE! The **Transparent** check box must be deselected in order for the color to show.
Transparent: Make the background of the input field transparent.
Size: Adjust the font size.
Font Color: Change the font color.
Bold: Make the font bold.
Italic: Make the font italic.
Border: Add a rectangular border around the input field.
Border Color: Change the color of the border.
Border Thickness: Adjust the thickness of the border.

SCREEN IMAGE

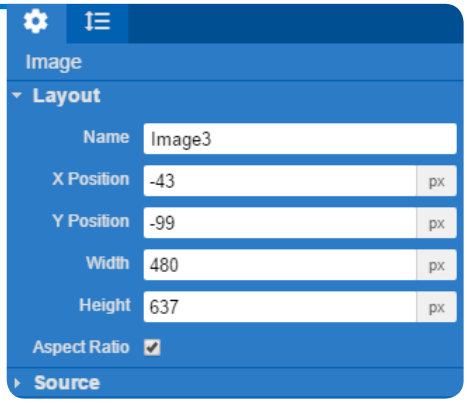
Screen images are graphic content that can be added directly to your screen, or as in the case below, appear in other objects like a grid view by using sources. Screen images are great assets for visualizing products and serves as a good complement to text-based information.

1. On the **Screen Object** menu, select the image tool .
2. On the screen, click to place the image. The first screen image in your assets library then appears.



Edit the layout of the screen image

1. Select the image.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:



Name: Enter the name of the image field.
X Position: Set the horizontal position of the image.
Y Position: Set the vertical position of the image.
Width: Enter the width of the image.
Height: Enter the height of the image.
Aspect Ratio: Fix the image ratio.

Change the source of the screen image

1. Select the image.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, the following options are available:

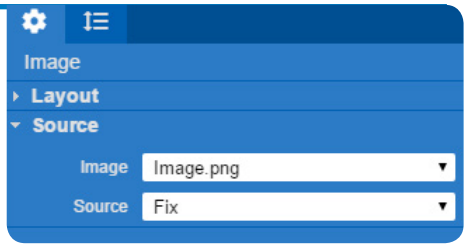
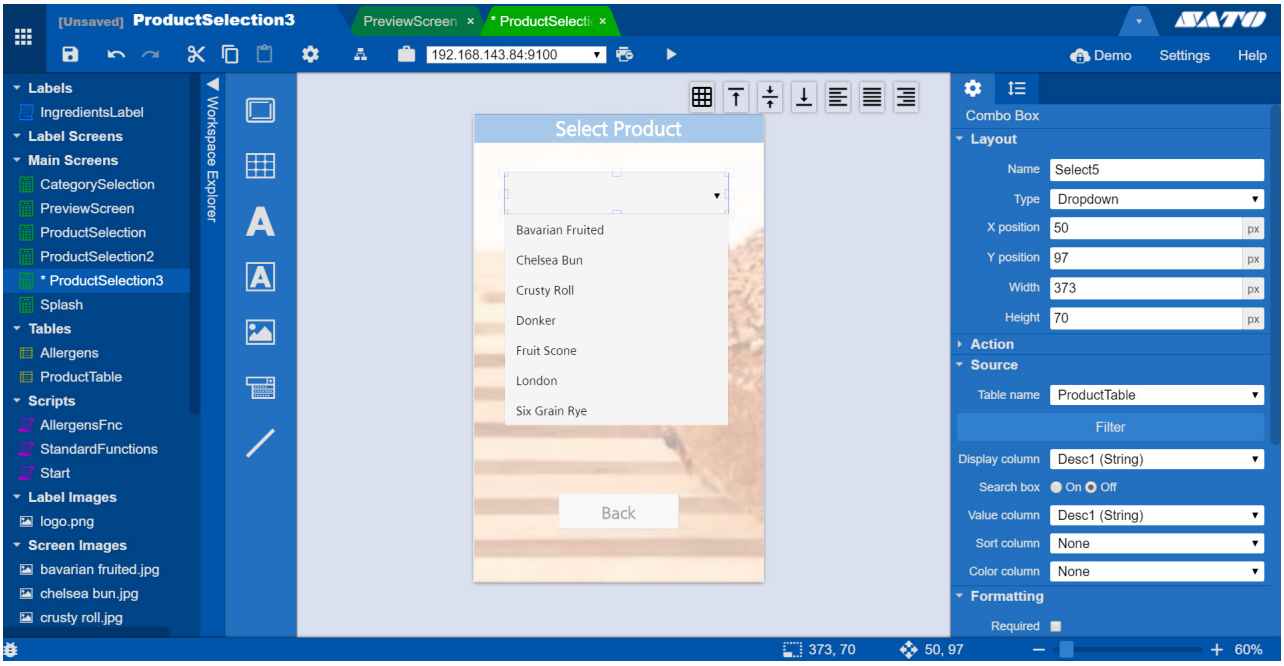


Image: Select any of your screen images from your assets library.
Source: Fix is selected by default. If another source is selected, additional options can populate the menu.

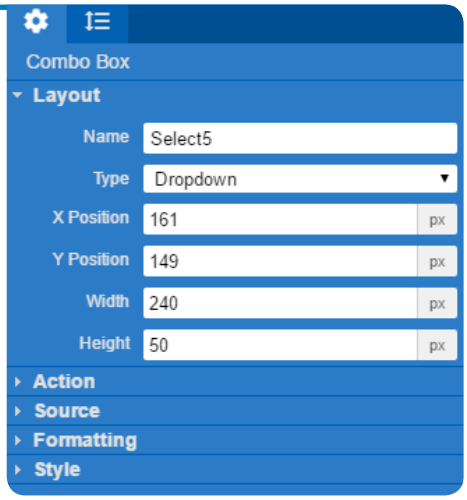
COMBO BOX

Combo boxes are objects that allow you to browse and search for product information in your tables and display the information on the screen. The combo boxes can take three different forms; A Drop-down List, that allows you to choose a value from a list that is hidden when it is inactive. A List, that allows you to choose a value from a list where all values are displayed. A Search Box, that allows you to search for data in a table.

1. On the **Screen Object** menu, select the combo box tool .
2. On the screen, click to place the combo box. AEP Works 3 will by default create a drop-down list based on the information from the first table in your assets library.



Edit the layout of the combo box

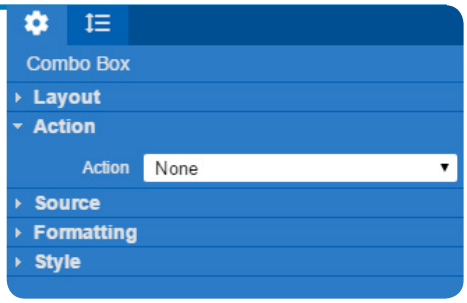


1. Select the combo box.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:

   Name: Enter the name of the combo box.
   Type: Select the output method of the combo box.
   Choose between the following types:
   - Drop-down list
   - Search box
   - List

   X Position: Set the horizontal position of the combo box.
   Y Position: Set the vertical position of the combo box.
   Width: Enter the width of the combo box.
   Height: Enter the height of the combo box.

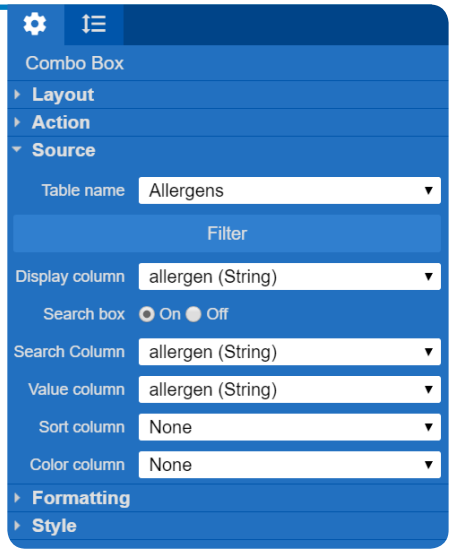
Add actions to the combo box



1. Select the combo box.
2. On the **Properties Panel**, click the properties tab .
3. On the **Action** menu, click the **Action** list, and then the following options are available:

   Feed: Feed empty label sheet.
   Label: This action redirects you to a given label and executes it on the printer interface.
   Screen: This action redirects you to a given main screen.
   Script: Run a script.

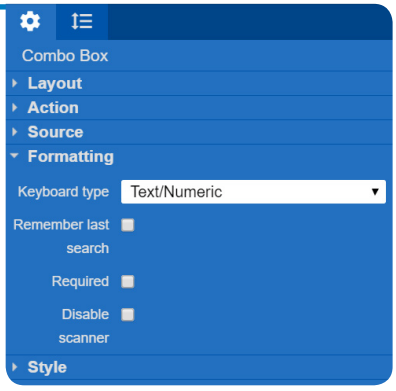
Change the source of the combo box



1. Select the combo box.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, the following options are available:

   Table name: Select from which table you want to retrieve information.
   Display Column: Select from which column in the table the combo box should retrieve from.
   Search Column: Select from which column in the table you want to the search field to retrieve information from.
   Value Column: Select from which column the field gets its value from.
   Sort Column: Select the column you want the data to be sorted from.
   Color column: Select from which column the field gets its color from.

Change the formatting of the combo box



1. On the **Properties Panel**, click the properties tab .
2. On the **Formatting** menu, the following options are available:

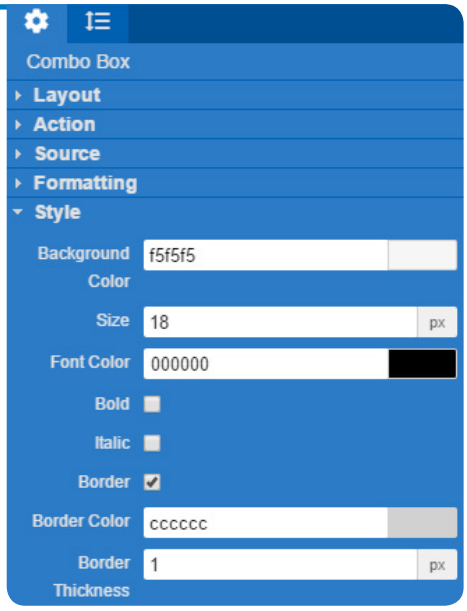
   Keyboard Type: Select one of the following keyboard options:
   - **Text/Numeric**: When the label is sent to a printer and you are prompted to enter a value in the input field on the printer screen, the screen will initially display a text keyboard, with the option to use a numeric keyboard as well.
   - **Numeric/Text**: When the label is sent to a printer and you are prompted to enter a value in the input field on the printer screen, the screen will initially display a numeric keyboard, with the option to use a text keyboard as well.
   - **Numeric**: When the label is sent to a printer and you are prompted to enter a value in the input field on the printer screen, the screen will only display a numeric, with no option to use a text keyboard.

   Remember Last Search: The combo box displays the last searched value.

Required: Require an input value from the operator.
Disable scanner: Disable scanner input.

Change the style of the combo box

1. Select the combo box.
2. On the **Properties Panel**, click the properties tab .
3. On the **Style** menu, the following options are available:



Background Color - Change the background color on the input field.
NOTE! The **Transparent** check box must be deselected in order for the color to show.
Size: Adjust the font size.
Font Color: Change the font color.
Bold: Make the font bold.
Italic: Make the font italic.
Border: Add a rectangular border around the combo box.
Border Color: Change the color of the border.
Border Thickness: Adjust the thickness of the border.

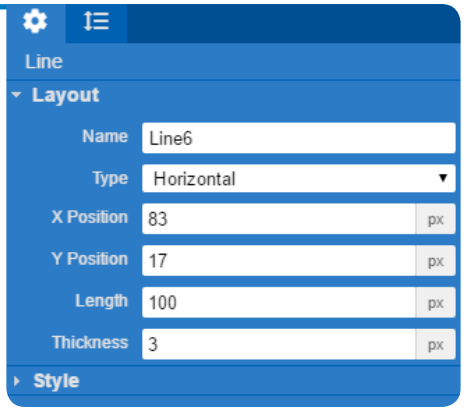
LINE

Add lines to your screen designs.

1. On the **Screen Object** menu, select the line tool .
2. On the screen, click to place the line.
3. Drag any corner of the bounding box to adjust the length of the line.

Edit the layout of the line

1. Select the line.
2. On the **Properties Panel**, click the properties tab .
3. On the **Layout** menu, the following options are available:



Name: Enter the name of the line field.
Type: Choose between a horizontal or a vertical line.
X Position: Set the horizontal position of the combo box.
Y Position: Set the vertical position of the combo box.
Length: Set the length of the line.
Thickness: Change the thickness of the line.

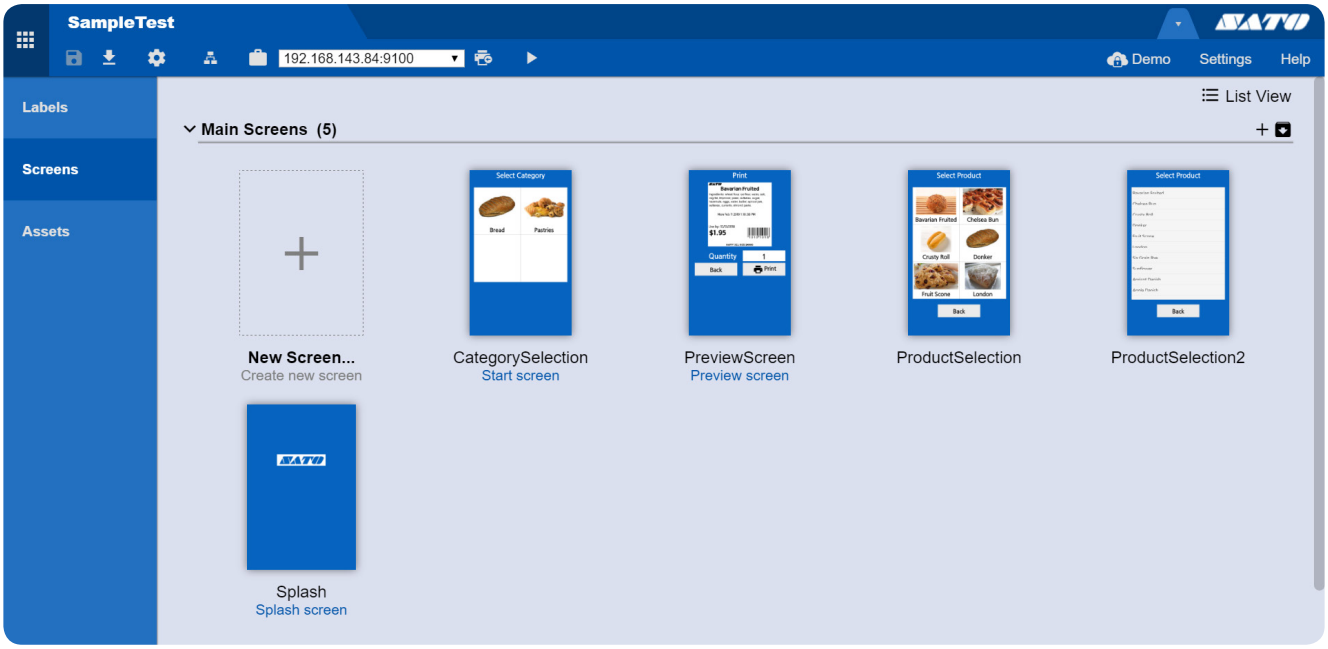
Change the style of the line

1. Select the line.
2. On the **Properties Panel**, click the properties tab .
3. On the **Style** menu, the following options are available:

Color: Select the color of the line.

Manage Screens

Manage the screens in your currently active workspace. The workspace overview window provide options for arranging and editing screens, as well as overviewing the screen flow of the active workspace.

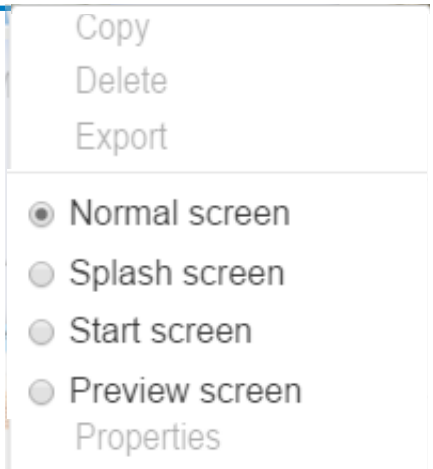


START, PREVIEW AND SPLASH SCREEN

When you have created your screens, you have the option to choose when to display them in your screen flow. The options available for arranging screens are made visible by **Right-Clicking** on the screen you want to edit.

Set start-, preview and splash screen

1. On the **Workspace Overview**, Right-Click the screen you want to set as your start,- preview,- or splash screen.
2. On the context menu, select the check box of the preferred screen type.



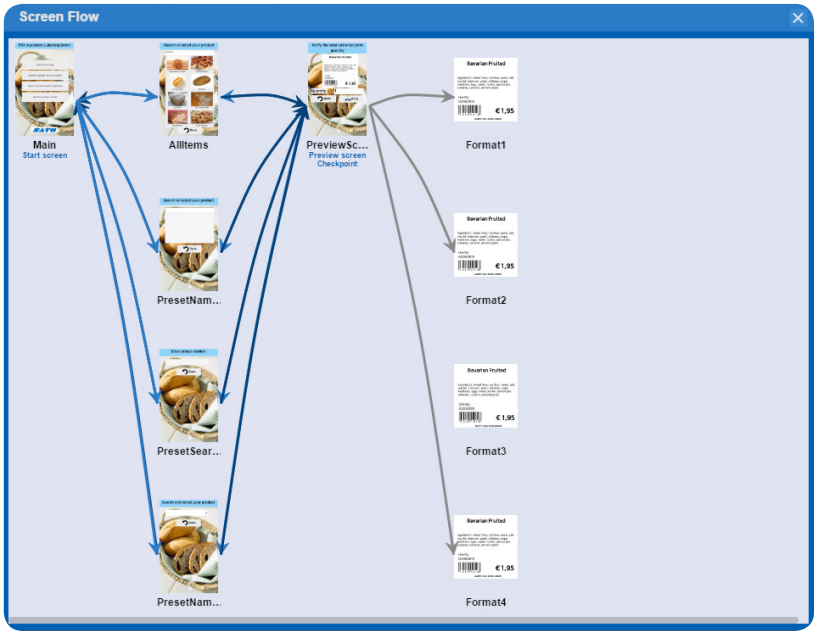
SCREEN FLOW

The screen flow feature allows you to easily view the execution order of your screens, which are represented by arrows. Double-headed arrows means that you can go back and forth between the two screens that the arrow links together. Single-headed arrows means that the action that is performed on that screen is irreversible, for example sending a print job. You can rearrange the arrows by dragging them to the preferred location.

NOTE! Rearranging the screen flow doesn't affect the screen flow of the application.

View screen flow

1. On the **Workspace Toolbar**, click . The **Screen Flow** window appears and provides you with an overview of the execution order of your screens, see illustration below.

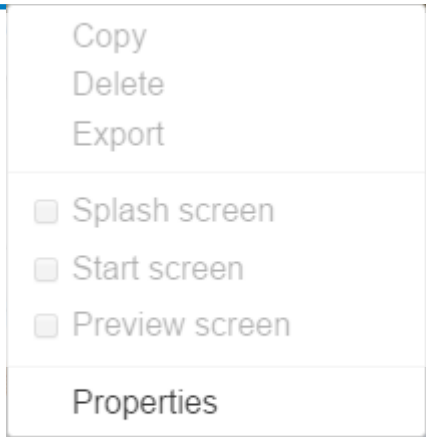


SCREEN PROPERTIES

The screen properties dialog window allows you to edit the name of your screens and select various sharing settings.

Edit the properties of a screen

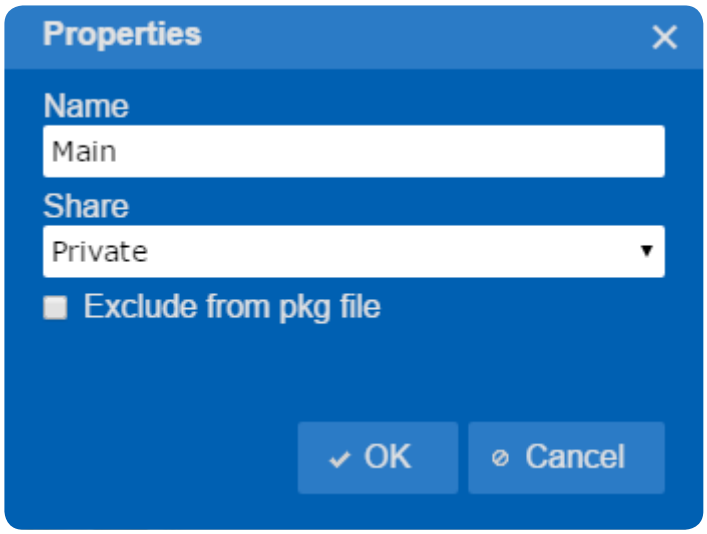
1. On the **Workspace Overview**, Right-Click the screen you want to edit the properties of.
2. On the edit menu, select **Properties.**
3. The properties dialog window appear and leave you with the following options:



Name: Edit the name of the selected screen.
Share: Select sharing settings.

- Private: The screen only belongs to the current workspace.
- Shared: The screen is accessible by other workspaces.
- Custom: The screen has a user-defined path.

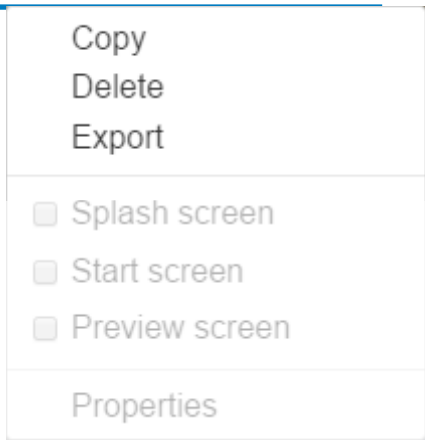
Exclude from pkg file: To allow files within a workspace, that are not included in the built package, a way of telling the package builder to exclude a file is needed. One use-case is to allow workspace makers to include documentation of the application within the workspace, without having it included in the package.



EDITING COMMANDS

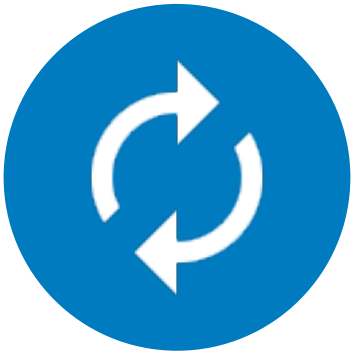
Copy, delete and export screens

1. On the **Workspace Overview**, Right-Click the screen you want to edit.
2. On the edit menu, the following options are available:



Copy: Create a copy of the selected screen.
Delete: Permanently delete the selected screen.
Export: Export the selected screen to your computer or an external memory source.

8 Dynamic Data Sources



Dynamic data sources are an important part of AEP Works 3, as businesses often need sets of labels, with each label following the same basic design pattern but containing different information. Product names, barcodes and prices are examples of content that may need regular updates. Dynamic data sources therefore allow easy updating of label- and screen objects, without having to re-design entire labels.

- Dynamic Data Sources for Labels
- Dynamic Data Sources for Screens

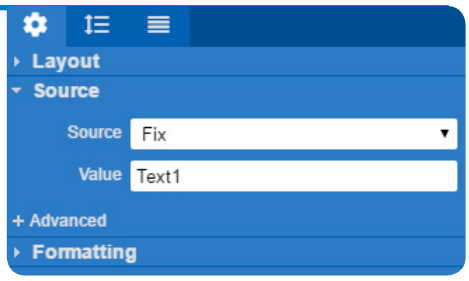
Dynamic Data Sources for Labels

FIX

Fix is the default setting which means that there is no link to a data source. It sets the object to its own specific value.

Fix the field value

1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click the **Source** list.
4. Select **Fix**.
5. On the **Source** menu, click the **Value** box.
6. Enter or select a value, depending on what type of object you selected.

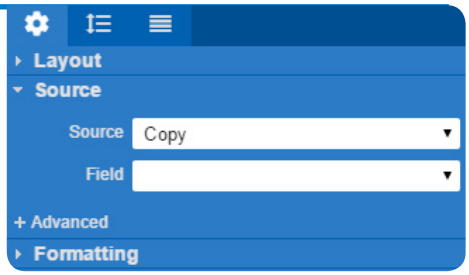


COPY

The field value is set to copy another field´s value on the same label. When you update the object that other objects copy its information from, the “copies” will automatically update.

Copy another fields value

1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click the **Source** list.
4. Select **Copy.**
5. On the **Source** menu, click the **Field** list, and then select the object you want to copy.



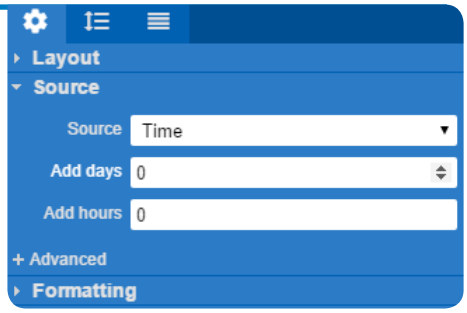
TIME

Allows you to make an object on your label display time. The time will by default be set to your system's current time. For more information on using time fields, go to Time on page 66.

Use time as data source

1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click the **Source** box.
4. Select **Time**.
5. On the **Source** menu, the following options are available:

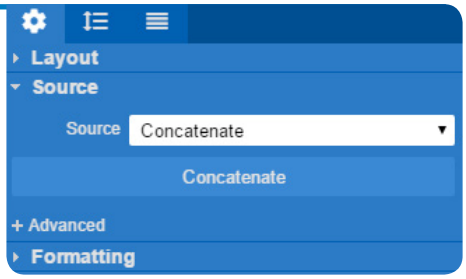
   Add Days: Add or subtract the number of days relative the current date.
   Add Hours: Add or subtract the number of hours relative your current time.



CONCATENATE

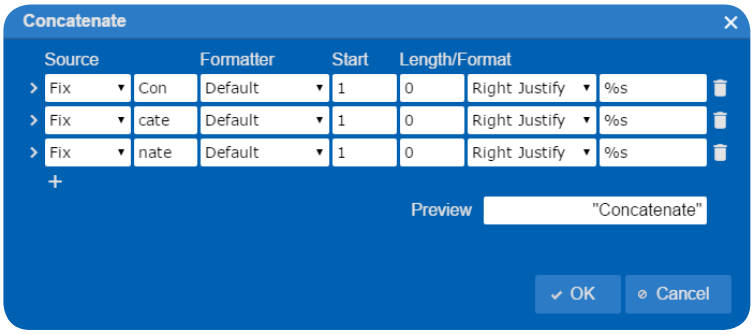
Allow you to concatenate information from multiple fields or sources into one object. This could be useful if you want to have a fixed and a dynamic value in the same object or combine values from multiple sources into a barcode.

Open the concatenate dialog window



1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click the **Source** box.
4. Select **Concatenate**.
5. Click **Concatenate** to open the concatenate dialog window and you are presented with the following options:

   Source: Select if you want to concatenate a fixed value or copy an already existing value.
   Formatter: Select Date & Time if you want to concatenate time fields. Select default if you want to concatenate other objects.
   Start: Select from which point you want each of the text strings to start.
   Length/Format: Select how many characters to retrieve from the source object.
   Preview: Preview the concatenated fields.



LIST

Using lists as a source for retrieving data is a fast and easy way to make a field on your editor sheet display different information. The list elements are entered directly in the properties panel, with a comma separating them. When running the application, a prompt will appear and let the operator select one element from the list.

Use lists as data source

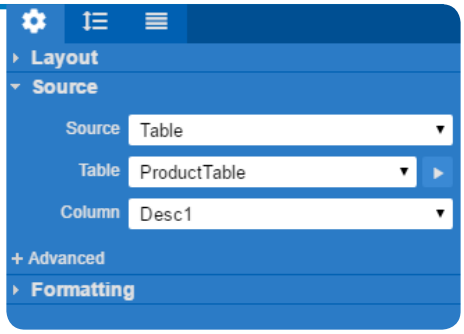
1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click the **Source** box.
4. Select **List**.
5. In the **List** box, enter your list elements.
6. In the **Index** box, enter which element you want to show on the screen or label sheet. In the example to the right, the index is set to 5, which means that the object will retrieve and display the text string "Five".

TABLE

You can use tables as a source for retrieving information to your labels and screens by specifying from which column in the table that the field should retrieve from. You can retrieve both text and images to your labels using this function. The example below guides you through the steps of linking a table to an object.

Link a table to an object

1. Select the object for which you want to retrieve information.
2. In this case, the **F1** textbox is selected.



3. On the **Properties Panel**, click the properties tab .
4. On the **Source** menu, click the **Source** list, and then in the **Table** list, select the table you want to link to the object. In this case, the **Product** table is selected.
5. In the **Column** list, select from which column in the table that the object should retrieve from. In this case, the **Bavarian Fruited** cell in the **Desc1** column is selected. On the **Source** menu, you can display and edit the source table by clicking . As shown below, the **Desc1** column was selected.

Product Table

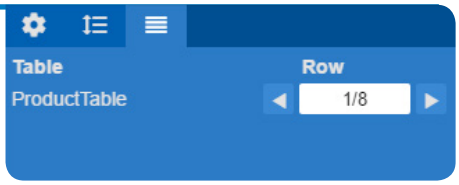
Search | Change row height | Word wrap

	Preset No	Desc1	Desc2	Ingred	Price	UseBy	ProdCode	Graphic	PresetNoDesc
1	1	Bavarian Fruited		wheat flour, rye	1.95	2	1010101	bavarian fruited.jpg	1 Bavarian Fruited
2	7	Six Grain Rye		wheat flour, rye	1.54	2	1010102	six grained rye.jpg	7 Six Grain Rye
3	4	Donker		wheat flour, rye	1.32	2	1010103	donker bread.jpg	4 Donker
4	8	Sunflower		wheat flour, rye	1.28	1	1010106	sunflower.jpg	8 Sunflower
5	5	Fruit Scone		white flour, sug	1.29	3	1010112	fruit scone.jpg	5 Fruit Scone
6	2	Chelsea Bun		white flour, sug	1.65	2	1010118	chelsea bun.jpg	2 Chelsea Bun
7	6	London	Cheesecake	white flour, veg	1.25	2	1010128	london cheese cake.jpg	6 London
8	3	Crusty Roll		wheat flour, salt	0.58	3	1010141	crusty roll.jpg	3 Crusty Roll
*									

6. The text field is now linked to the table and displays the value from the first row of the selected column. In this case it displays **Bavarian Fruited**.

Browse through your different labels

If you have linked several fields on your label to different columns in a table, you can browse through them using **Preview Rows.**

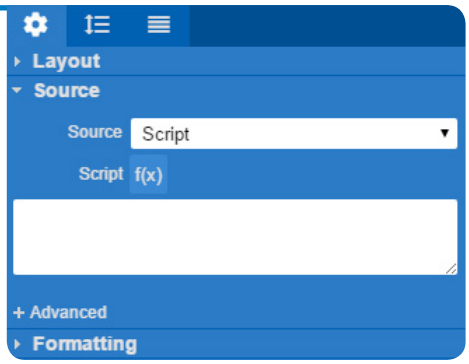


1. On the **Properties Panel**, click the preview rows tab .
2. Use the arrows to browse through the rows of your linked table. In this case the **Product Table**.
3. The labels below has retrieved information from row 2 and 3 from the **Product Table**, while in the previous example, row 1 was retrieved and displayed.

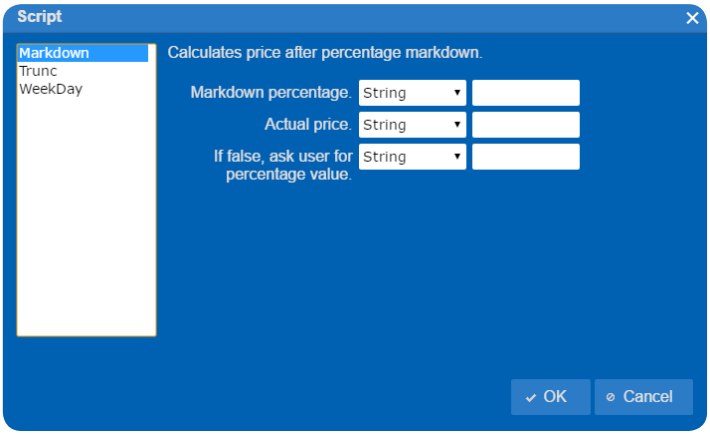
SCRIPT

Scripts let you define a set of functions to perform actions on your labels. AEP Works 3 provides a Lua script editor which allow you to execute inline Lua scripts and see the output. This should only be used by users with knowledge in the Lua scripting language, as it might lead to unexpected behavior if used incorrectly. For more information on using and creating scripts, go to Scripts on page 51.

Use scripts as data source



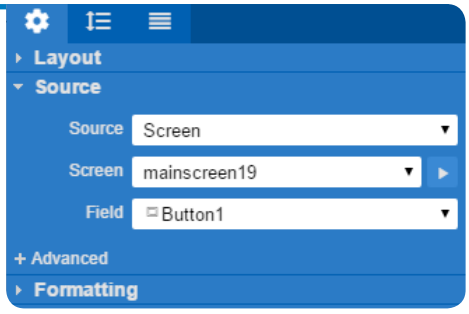
1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click the **Source** box.
4. Select **Script**.
5. Click f(x), and the **Script** dialog window appears.
6. In the **Script** dialog window below, 3 functions from a predefined Lua script are displayed; Markdown, Trunc and Weekday. If the workspace contain user defined scripts, it appears in the script list.
7. Enter or select the requested information of the Lua script.



SCREEN

You can retrieve field data to your labels from different screens in your active workspace. With this source selected, you can copy field values from screens in your workspace. This may be useful if you want a field on your label to display information entered on a screen by a user. When you update a screen object that a label object has assigned as its source of information, the label object will automatically update.

Connect screen objects to labels



1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click the **Source** box.
4. Select **Screen**.
5. In the **Screen** list, select the screen from which you want retrieve information.
6. In the **Field** list, select the screen object you want to copy to your label.

INPUT

The feature allows you to make an object on your label display the input of an operator. This means that the field on your label, which is linked to the input, displays what the operator types on the printer screen.

Display operator input on your label

1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click the **Source** box.
4. Select **Input**.
5. On the **Source** menu, select the **Prompt** box, and then enter the text you want to display on the printer screen.
6. In the **Pattern** box, enter a pattern format string.

COUNTER

The counter is a source whose value increments or decrements along with every printed label. For more information on using counters, go to Counter on page 65.

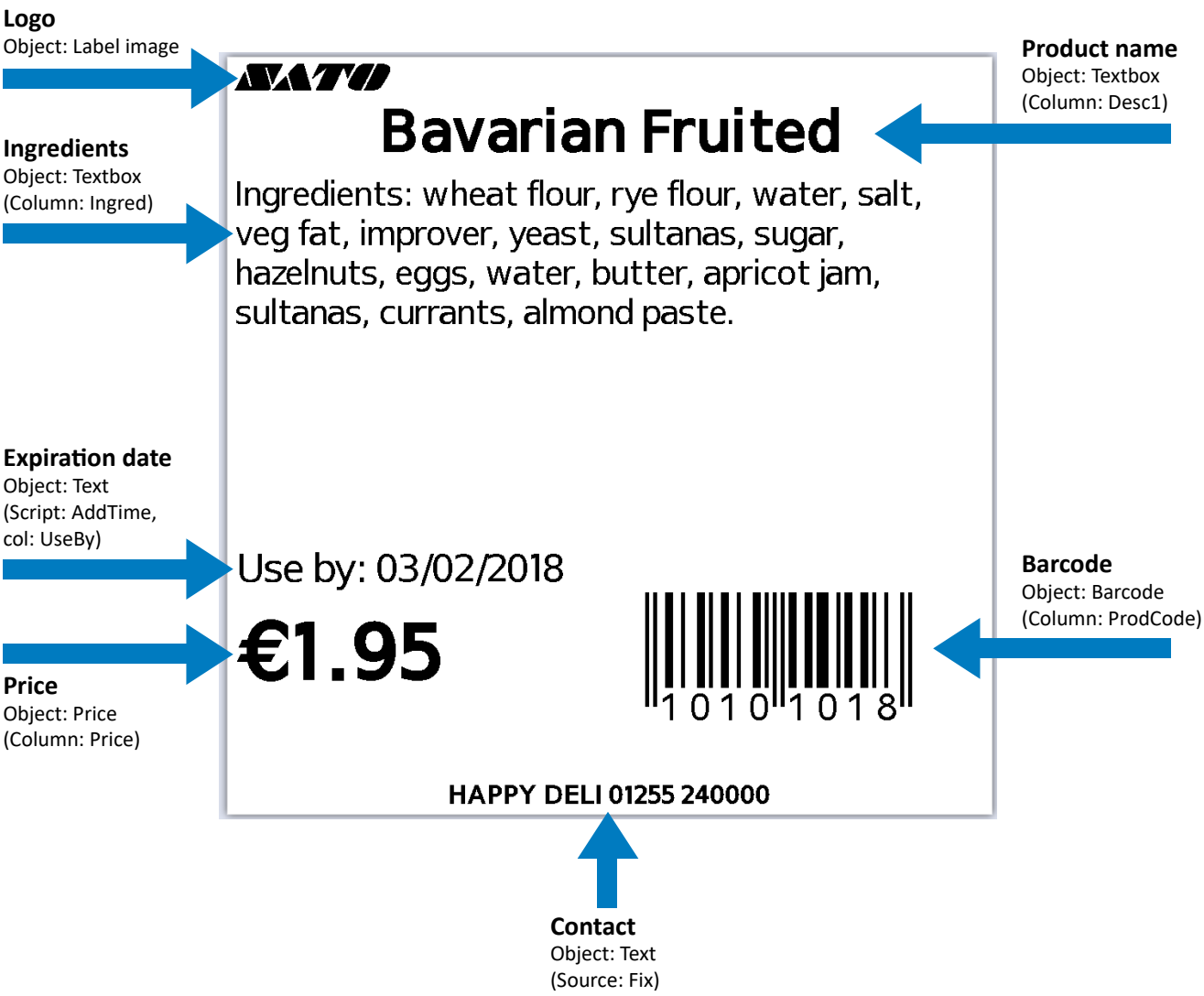
Use counter as data source

1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click the **Source** box.
4. Select **Counter**.
5. On the **Source** menu, the following options are available:

   Start Value: Set the start value of the counter.
   Step: Set the incrementing of the counter.
   End: Set the max value of the counter. After the counter has reached the max value, the counter starts over from the entered start value.
   Interval: Set the interval value of the counter. If the interval is set to 1, the value of the counter will increment for every printed label. If the counter is set to, for example 5, it will increment the value of the counter on every 5th printed label.

LABEL EXAMPLE

The label below contain different label objects and shows how they connect to a product table. The table used in the example is the same table that was used on page 85.



Dynamic Data Sources for Screens

FIX

Fix is the default setting which means that there is no link to an external source. It sets the object to its own specific value.

Fix the field value

1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click the **Source** list
4. Select **Fix**.
5. On the **Source** menu, click the **Value** box.
6. Enter or select a value.

COPY

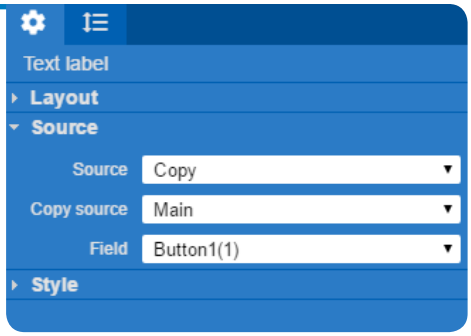
The field value is set to copy values from different labels, screens and tables in your active workspace. This means that an object can reappear in another object on your screen. When you update the object that other objects copies its information from, the “copies” will automatically update.

Copy another field value

1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click the **Source** list.
4. Select **Copy.**
5. On the **Source** menu, the following options are available:

   Source: Copy is selected by default. If another source is selected, the options below can change its properties.
   Copy source: Select from which label, screen or table the object is set to copy the information from.
   Field: Select the specific field for which the object is set to copy its information from.

   NOTE: If a table is selected in the **Copy source** box, the **Field** box will say "column".



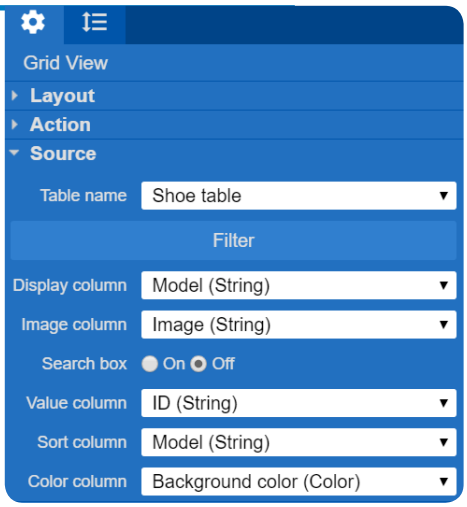
TABLE

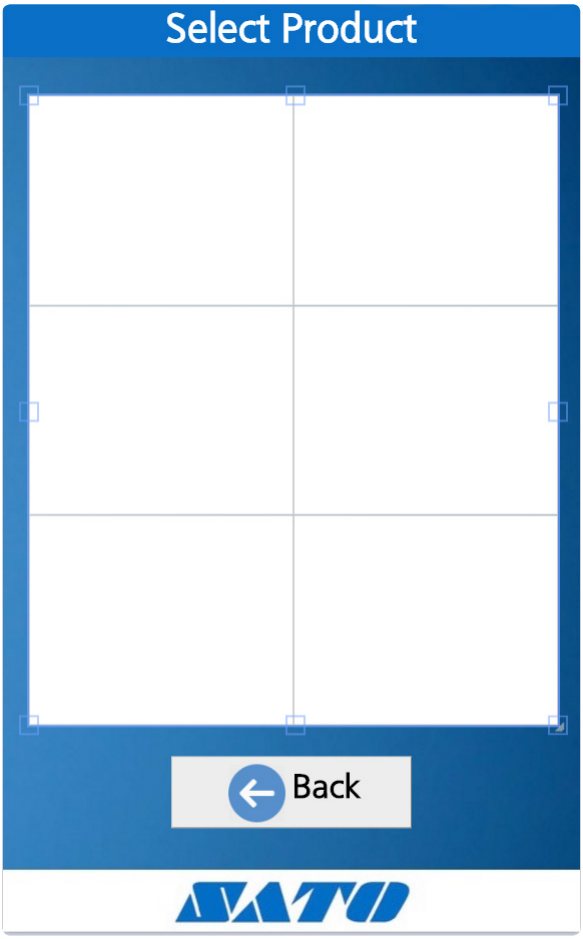
You can use tables as a source for retrieving information to your screens by specifying from which column in the table that the field should retrieve from. You can retrieve both text and images to your screens using this function. The example below will guide you through the steps of linking a table to an object.

1

Select source table

1. Select the object for which you want to retrieve information.
2. In the case below, the **Grid view** is selected.





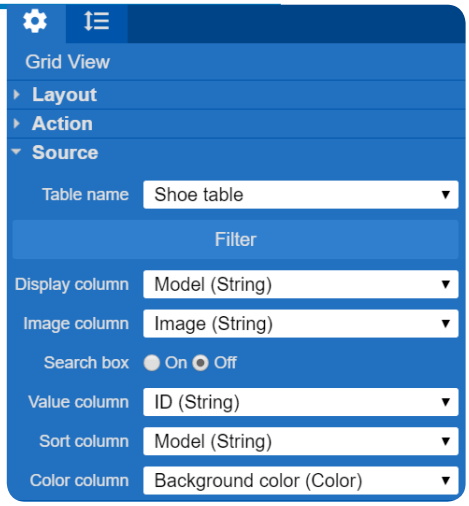
3. On the **Properties Panel**, click the properties tab .
4. On the **Source** menu, in the **Table Name** list, select the table you want to link to the object. In this case, the **ProductTable** is selected.

8

2

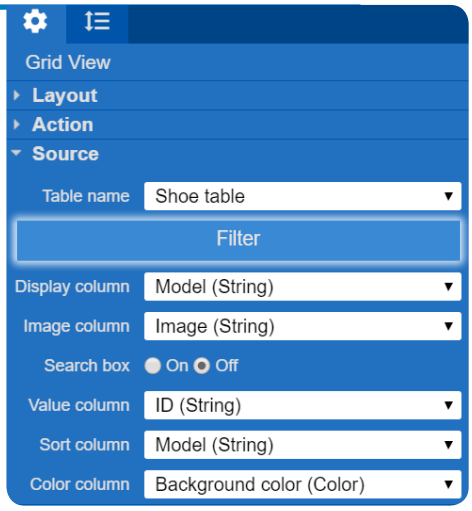
Select source columns

1. In the **Display Column** list, select from which column in the table the object should retrieve data from. In this case, the **Desc1** column is selected.
2. In the **Image Column** list, select a column in your table that contains graphic content. In the case below, the **Graphic** column is selected.
3. In the **Search Box**, select if you want to add a search field to the grid.
4. In the **Image Display** list, select whether you want the image to be displayed as an small icon or a larger image.
5. In the **Value Column** list, select from which column the field gets its value from.
6. In the **Sort Column** list, select which column to sort your data.
7. In the **Color column** list, select from which column the field gets its color from.



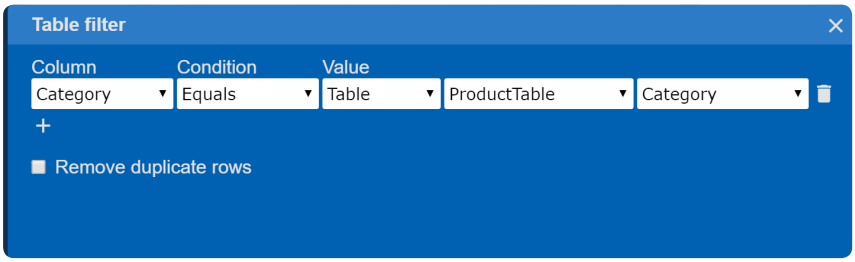
Filter tables

If you want to display specific data from a table, you can use the filter feature to sort out the unwanted data.



1. Select the object.
2. On the **Properties Panel**, click the properties tab .
3. On the **Source** menu, click **Filter**. The following options are available:
   Column: Select which column in your table to compare
   Condition: your operator of choice
   - Equals: The column you selected should be the same as your selected value
   - Contains (case sensitive): The column you selected should contain your selected value
   - Starts with: The column you selected should start with your selected value
   - Ends with: The column you selected should end with your selected value

   Value: the right hand side of your operator
   - String: Custom string
   - Screen: One of your screens
   - Table: One of your tables
   - Script: Custom Lua script



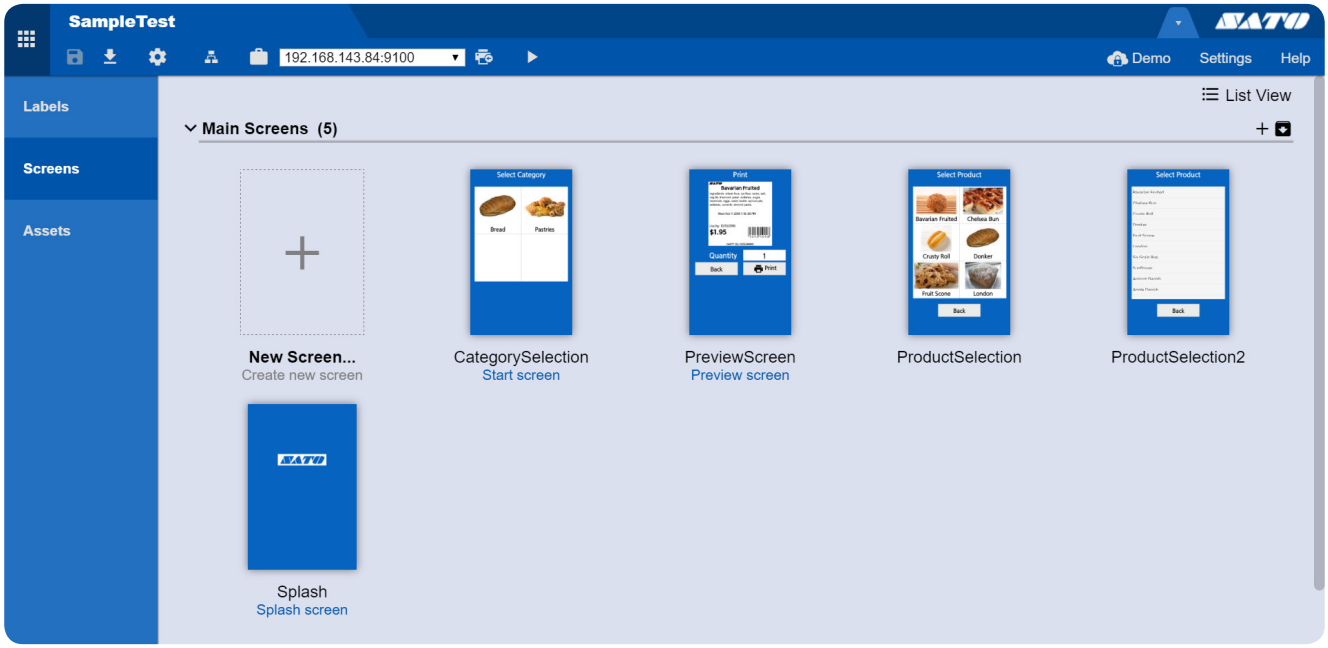
9 Simulate Workspace

Simulate workspaces via a copy of the printer's screen. A feature which enables you to run applications directly on the PC screen, and requires a network connected printer.

- Run in Simulator

Run in Simulator

AEP Works 3 offers the feature to simulate workspaces on your computer screen. This means you can test your applications to confirm that everything works as expected. This is useful when you don't have your printer nearby, and you want to run an application. Although, the printer has to be connected to your computer via LAN, Wi-Fi or USB for the simulator to work.

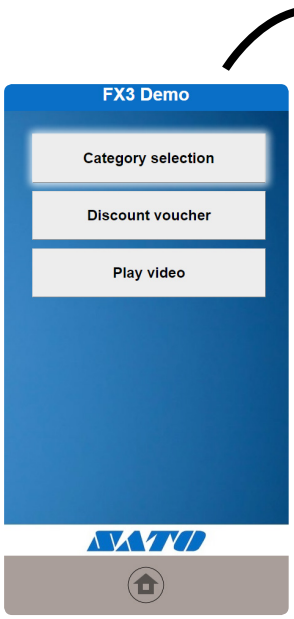


To run an application in the simulator

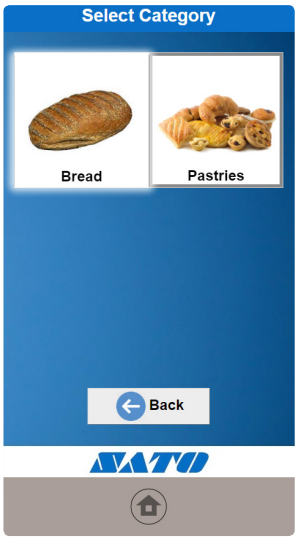
1. Send your workspace to the printer by clicking on the **Workspace Toolbar**.
2. When the printer has successfully loaded your workspace, click on the workspace toolbar to run the application. The screen simulator opens in a new window and displays the start screen of your application.

APPLICATION EXAMPLE

Below is an example of how applications can be designed in AEP Works 3. Under each of the screens are brief descriptions of the objects used in the screens. If objects in the examples have an outer glow, it means that the object was selected.



Category Selection Button
Action: Screen
Destination: Category Selection



Grid View
Action: Screen
Source: Product Table

Back Button
Action: Back

Grid View
Action: Label
Source: Product Table

Back Button
Action: Back

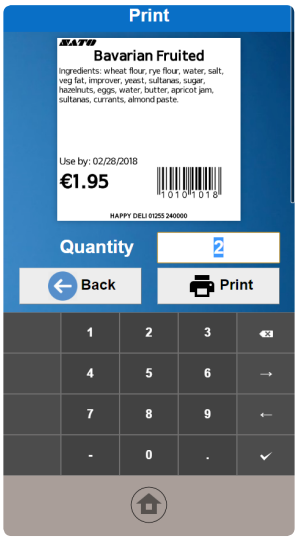
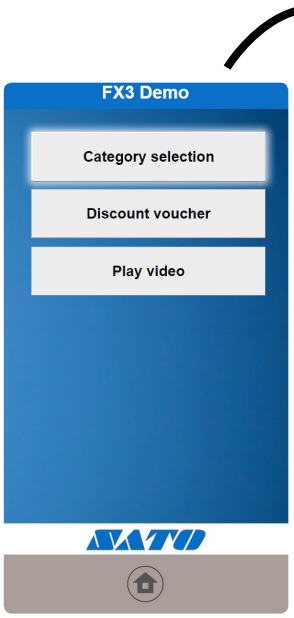


Image
Image: Label Preview
Source: Fix

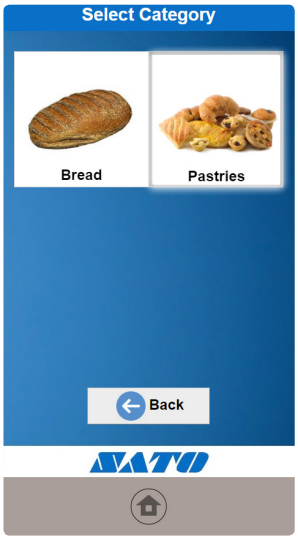
Back Button
Action: Back

Print Button
Action: Print

Input Field
Action: Print

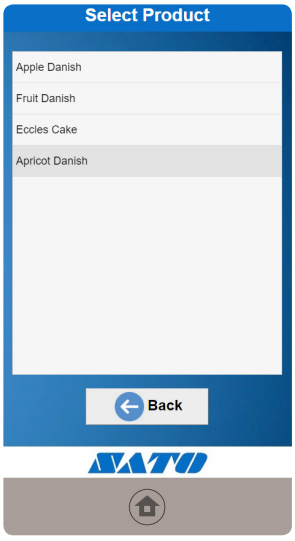


Category Selection Button
Action: Screen
Destination: Category Selection



Grid View
Action: Screen
Source: Product Table

Back Button
Action: Back



Combo Box
Action: Label
Source: Product Table

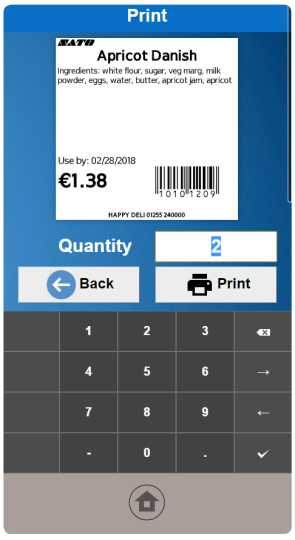
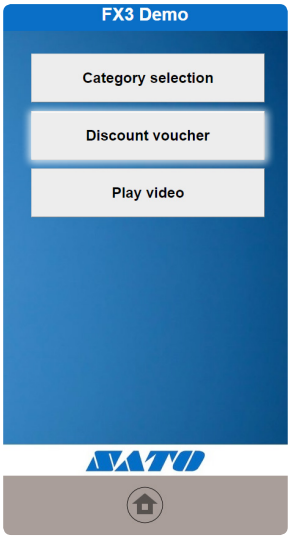


Image
Image: Label Preview
Source: Fix

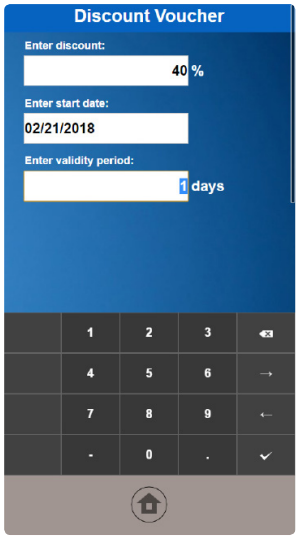
Back Button
Action: Back

Print Button
Action: Print

Input Field
Action: Print



Discount Voucher Button
Action: Label
Source: Fix



Enter Discount Input
Data type: Number

Enter Start Date Input
Data type: Date

Enter Validity Period Input
Data type: Number

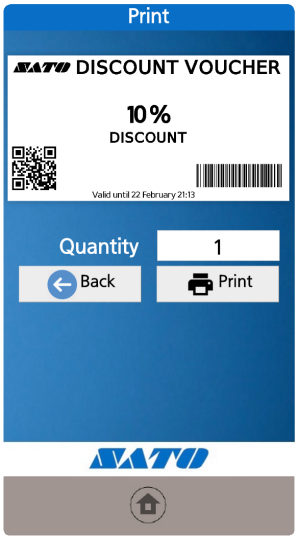
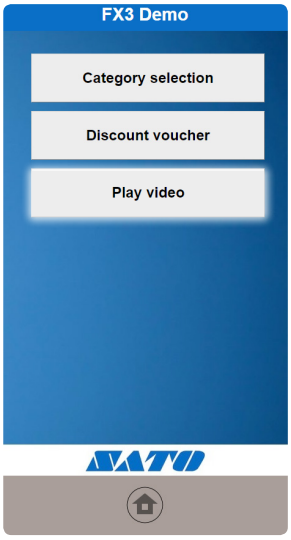


Image
Image: Discount Voucher
Source: Fix

Back Button
Action: Back

Print Button
Action: Print

Input Field
Action: Print



Play Video Button
Action: Video
(Plays the video on the printer screen only)

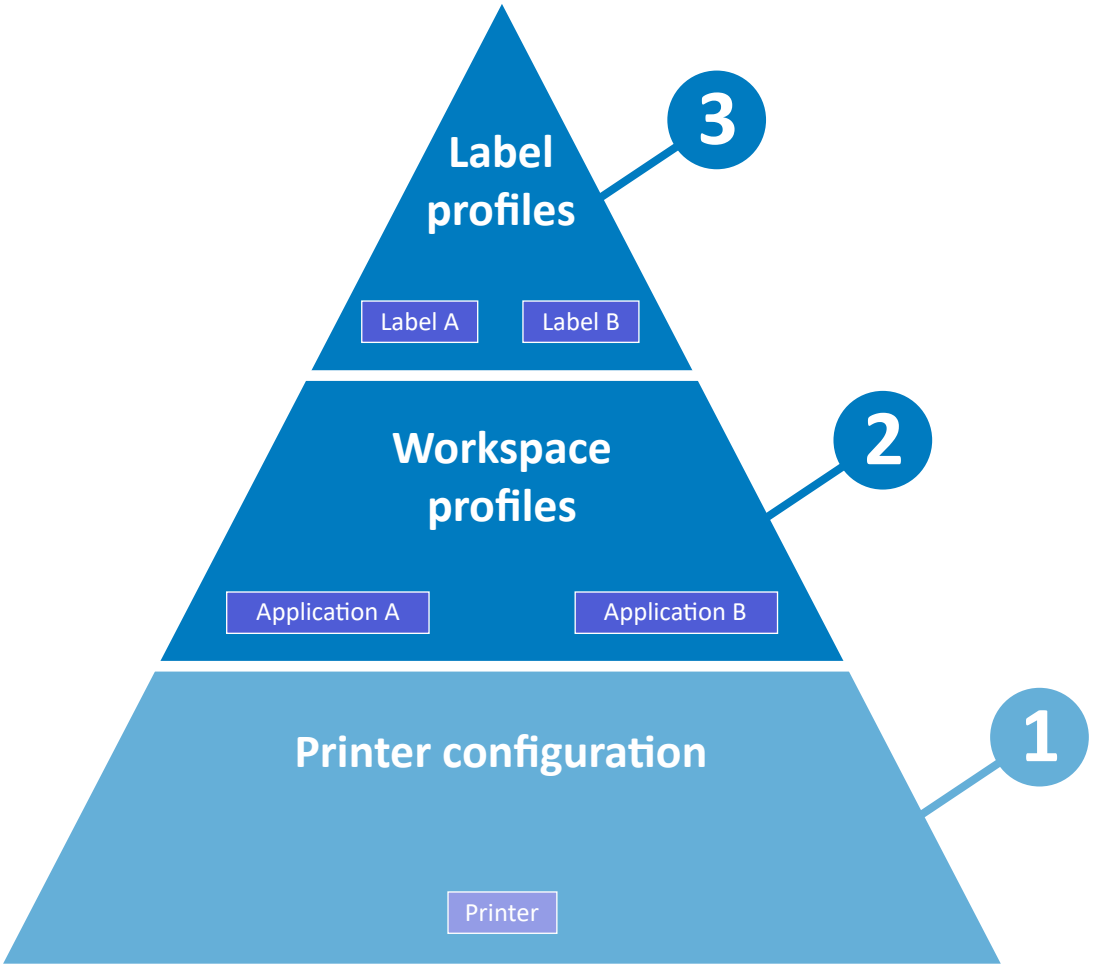
10 Profiles

A profile is a predefined printer setting configuration that will override the existing printer setting. A profile can be useful if an operator would like to use a different settings configuration e.g. to switch between LCD languages or change print conditions for a specific print media etc.

- Profile Types
- Create New Profile

Profile Types

Different applications, and different labels, within an application may have different needs relating to printer setup. In order to give you a flexible way of managing the settings, AEP Works 3 offers different ways of applying settings to your printer. The illustration below shows how different types of settings are applied in the printer. There are two types of profiles; label profiles and workspace profiles. For more information on printer configuration, go to Printer Configuration on page 127.



Printer configuration
A printer configuration is used to set up the global base configuration of a printer. If no workspace- or label profile is created, the printer configuration settings will be applied to all applications.

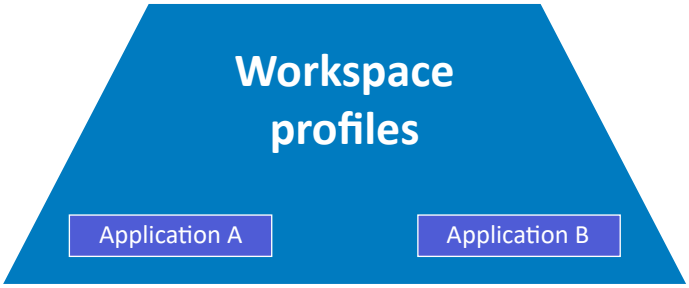
Workspace profiles
A workspace profile is the configuration that will be loaded once the application is started. A workspace profile will override the settings of the printer configuration.

Label profiles
A label profile can be used in order to load a specific profile when a label is selected. A label profile will override the workspace profile and the settings of the printer configuration.

WORKSPACE PROFILES

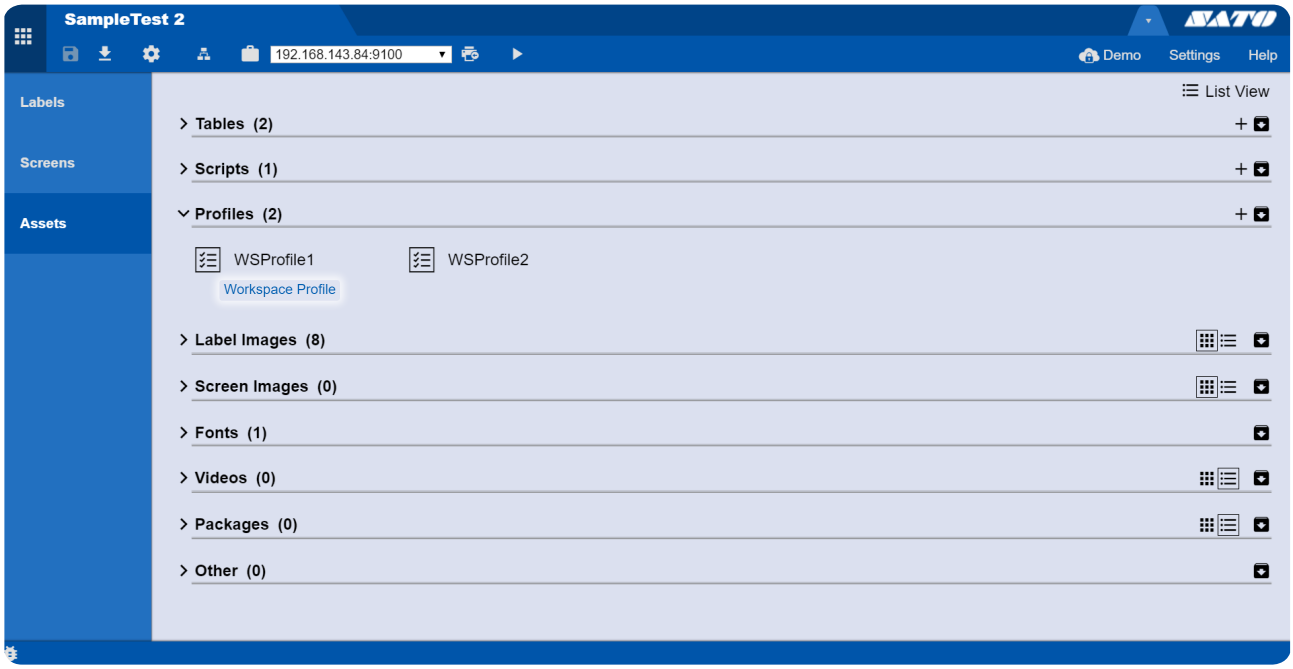
If a profile is assigned as the workspace profile, the settings in that application are applied to the printer every time the AEP application is started. When the application is closed or the printer turned off, the printer settings will go back to previous settings. When a new application is started, that application's workspace profile will be applied, or if the workspace hasn't got a profile, the previous printer settings are used.

If the printer settings are changed while an application is running, the workspace profile will be updated with the new settings when the application is closed, the printer turned off, or when a new application is started.



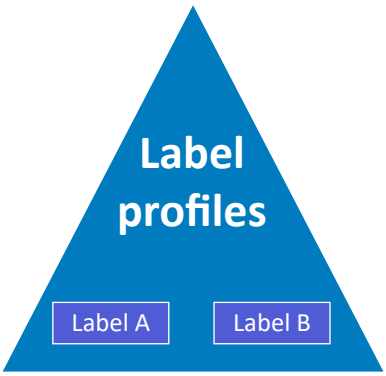
Set a Workspace Profile

1. On the **Assets** menu, under **Profiles**, Right-Click the profile you want to be your workspace profile.
2. On the context menu, select the **Workspace Profile** check box. "Workspace Profile" will now show under the name of the selected profile.



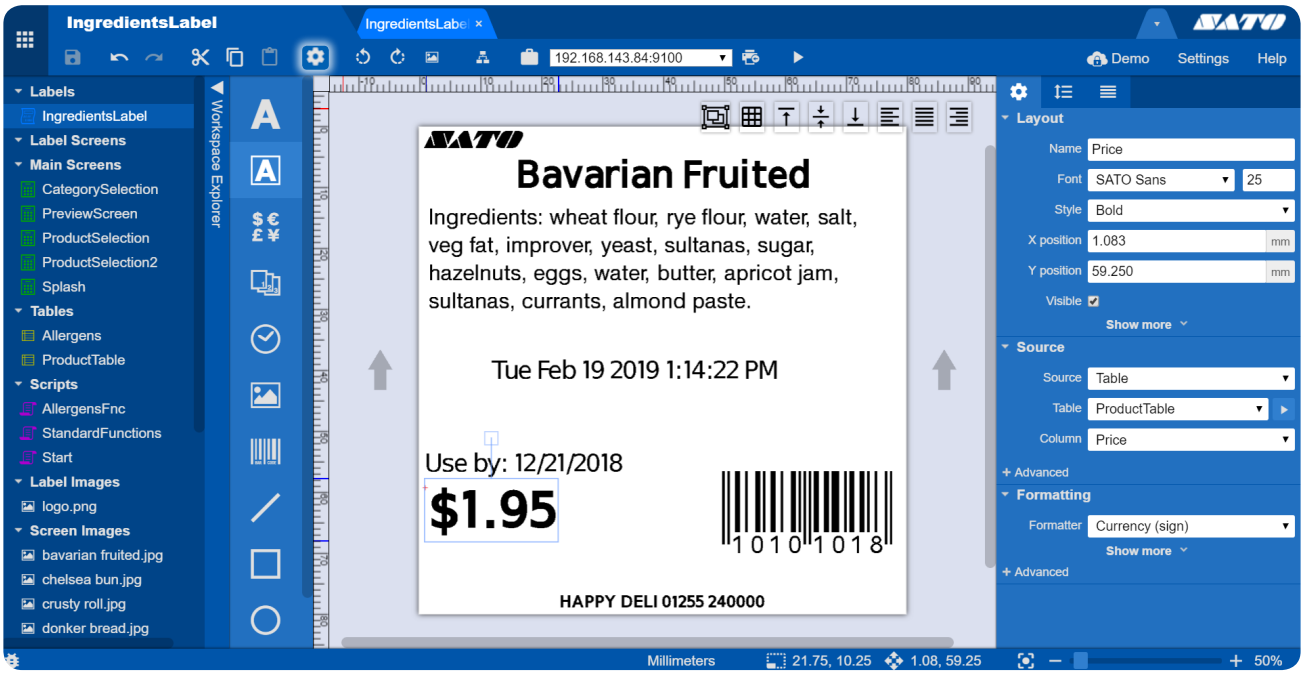
LABEL PROFILES

A label profile temporarily overrides the printer settings, including the workspace profile, when the label is selected. Label profiles are useful if you have labels in your workspace that requires individual printer configurations. If you change the settings of the printer, it does not affect the label profiles settings.



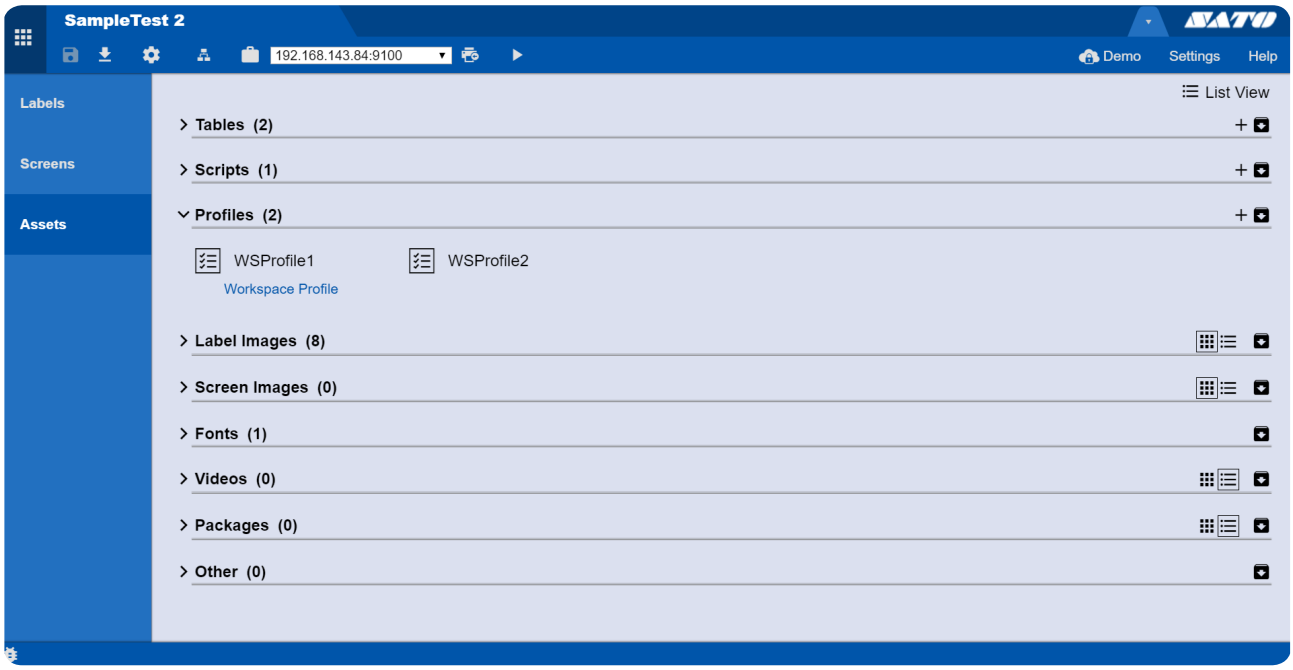
Set a Label Profile

1. Open the label you want to assign a profile to.
2. On the label editor toolbar, click .
3. In the label settings dialog window, click the profile list.
4. Select the profile.

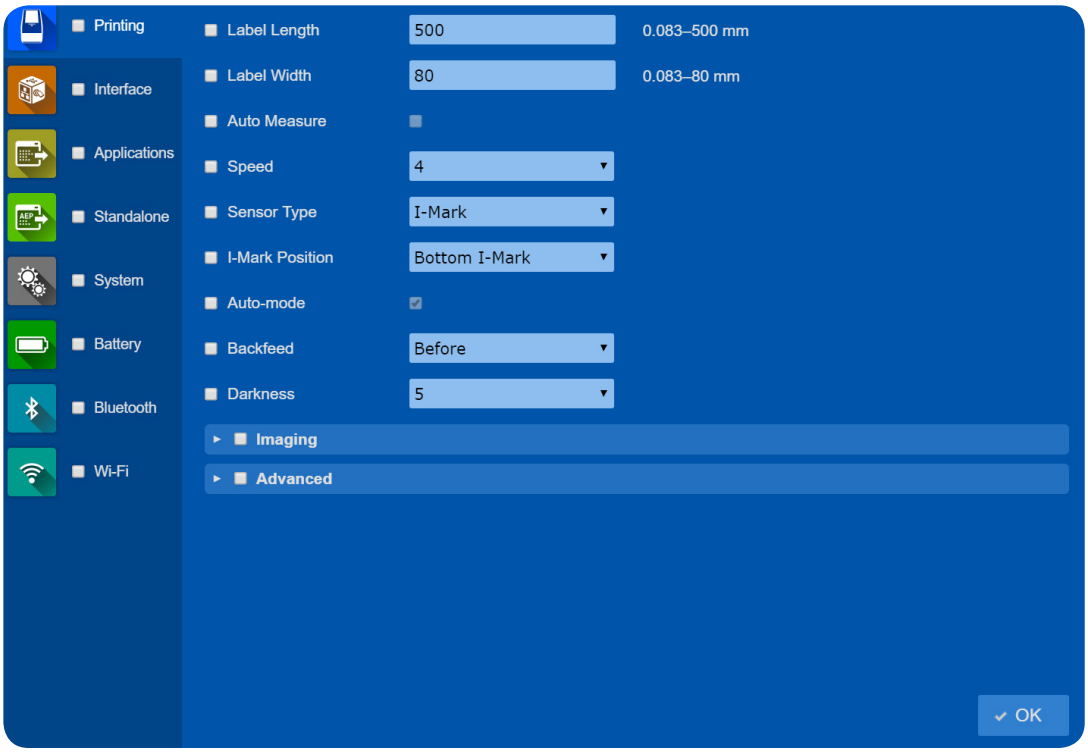


Create New Profile

1. On the **Profiles** tab, click +.
2. In the new profile dialog window, enter the name of the profile.
3. Click **OK**.



4. The **Printer Setting**s window pops up and offer you a wide range of options. In front of every profile option you want to edit, select the check box, and then edit the selected option.



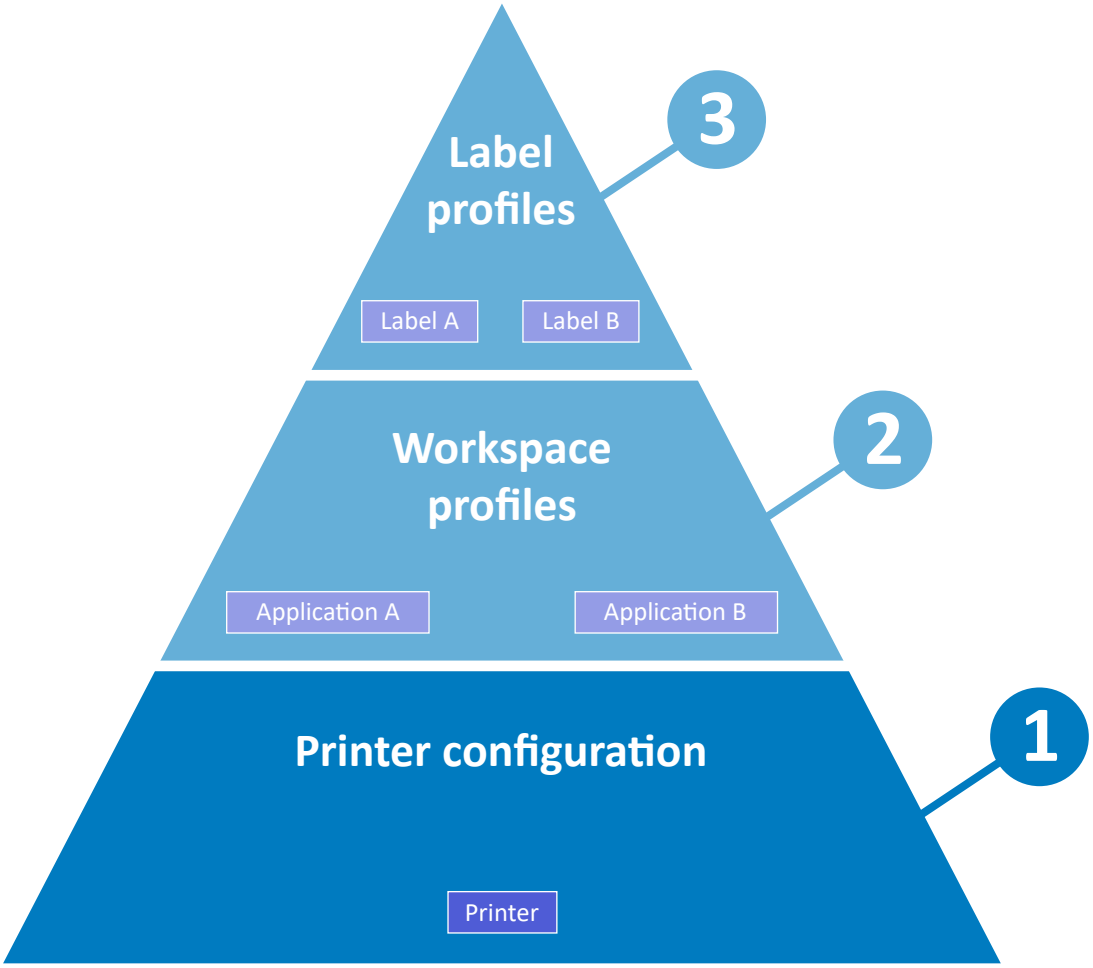
11 Printer Configuration

A printer configuration is used to set up the global base configuration of the printer, including password settings and options for start-up and shut-down screens.

- Printer Configuration
- Create New Printer Configuration

Printer Configuration

A printer configuration is used to set up the global base configuration of the printer, and is intended to set up the printer without having any relation to specific AEP applications. The printer configuration allows you to customize the settings of the printer such as start-up images and passwords. The printer configuration settings will be applied to all applications that neither got a workspace- nor label profile assigned to it.



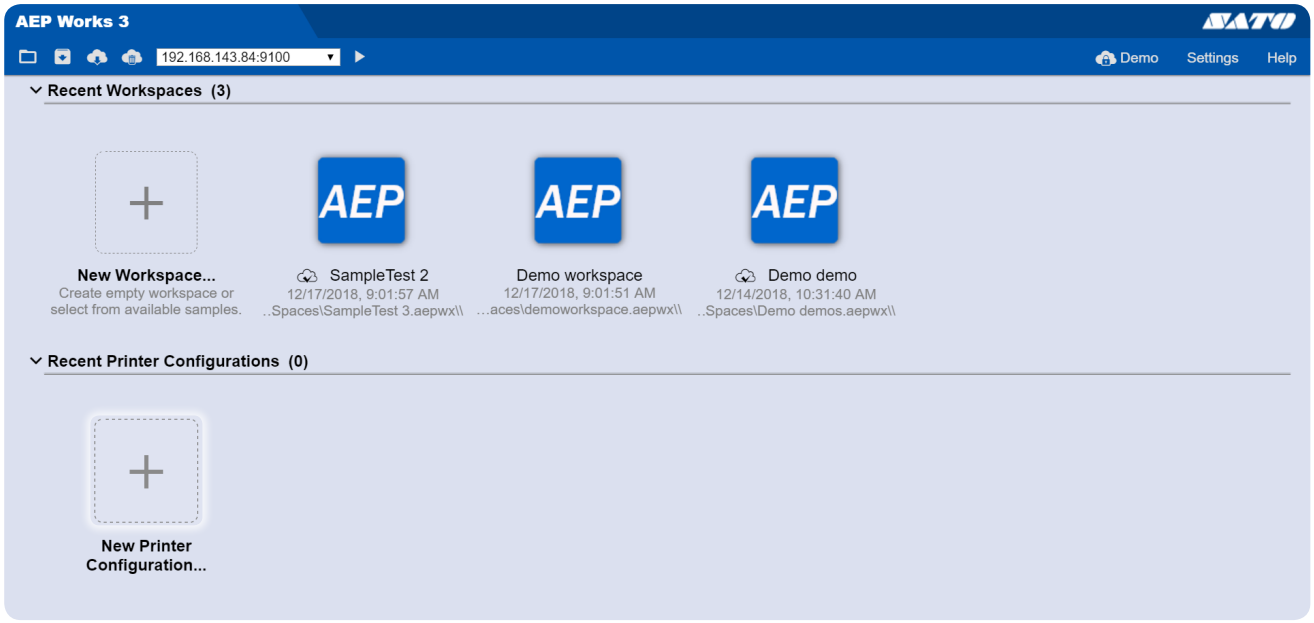
1 **Printer configuration**
A printer configuration is used to set up the global base configuration of a printer. If no workspace- or label profile is created, the printer configuration settings will be applied.

2 **Workspace profiles**
A workspace profile is the configuration that will be loaded once the application is started. A workspace profile will override the settings of the printer configuration.

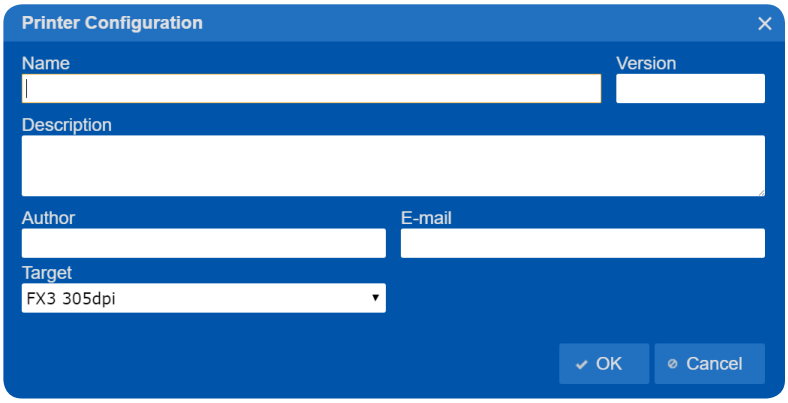
3 **Label profiles**
A label profile can be used in order to load a specific profile when a label is selected. A label profile will override the workspace profile and the settings of the printer configuration.

Create New Printer Configuration

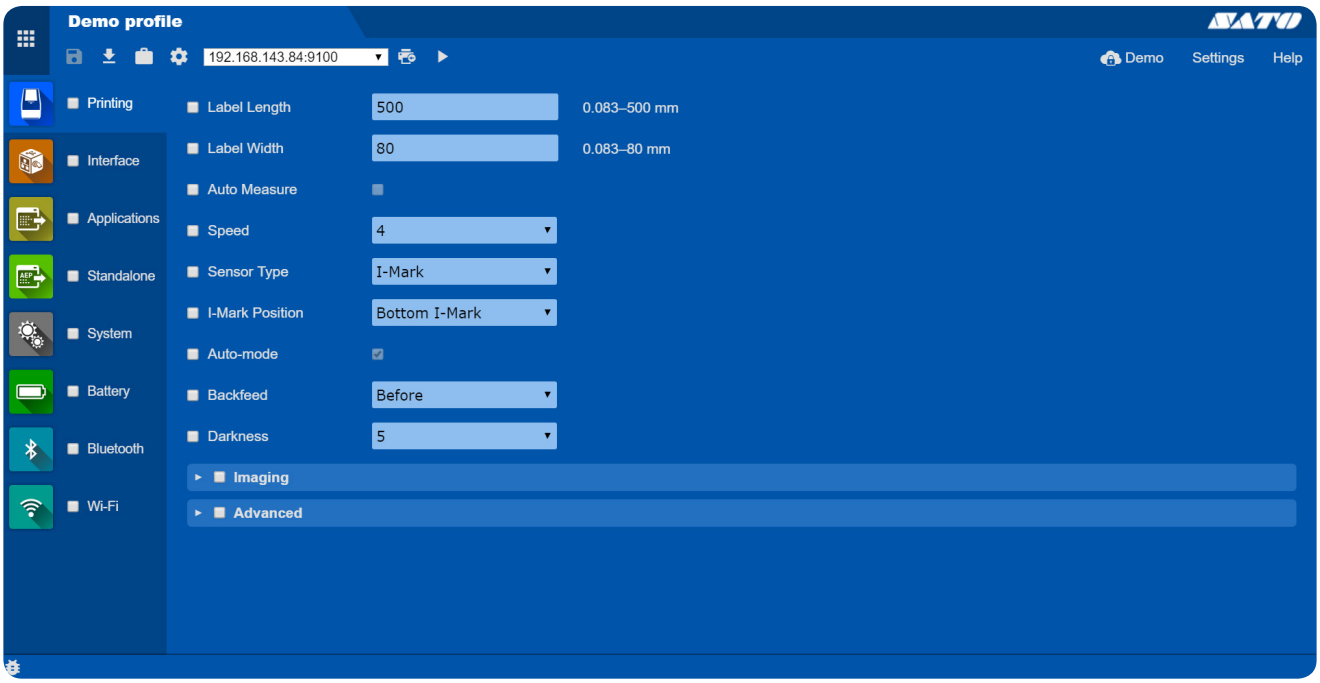
1. On the start screen, under **Recent Printer Configurations**, click **New Printer Configuration**.



2. In the **Printer Customization** dialog window, enter the details of your new printer configuration.
3. In the **Target** list, select the targeted printer model.
4. Click **OK**

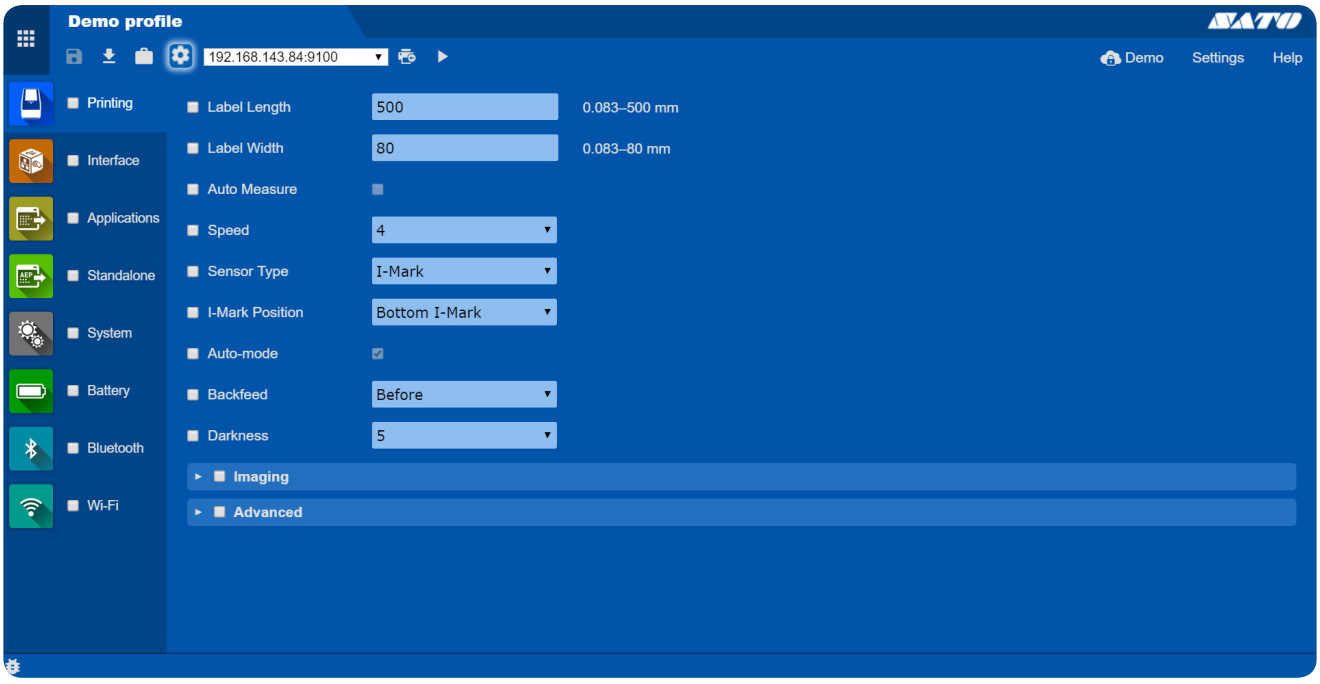


5. The printer settings window pops up and offers you a wide range of options. In front of every profile option, select the check box, and then edit the selected option. The printer settings are applied on the printer at the start-up, following installation of the printer configuration.



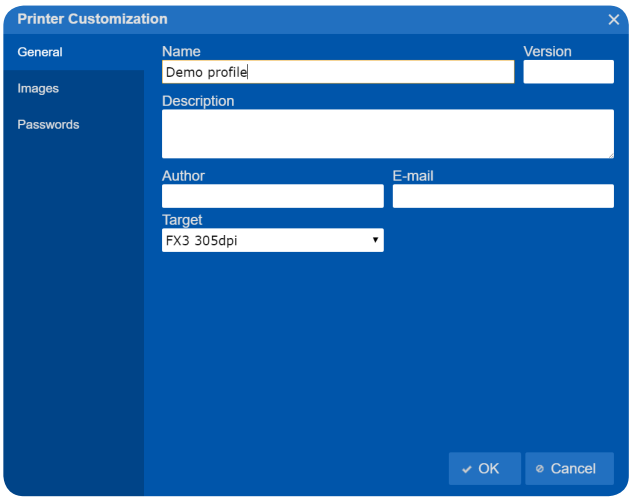
PRINTER CUSTOMIZATION

In addition to the printer settings shown above, there are more options for customizing your printer. By clicking the , you can access settings such as start-up and shut-down images, as well as password options.



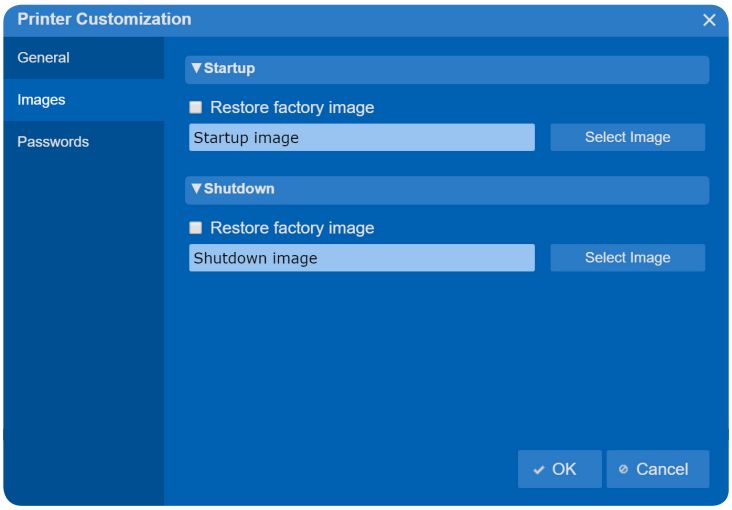
General

In the general menu, you can edit the printer customization information and change the targeted printer model.



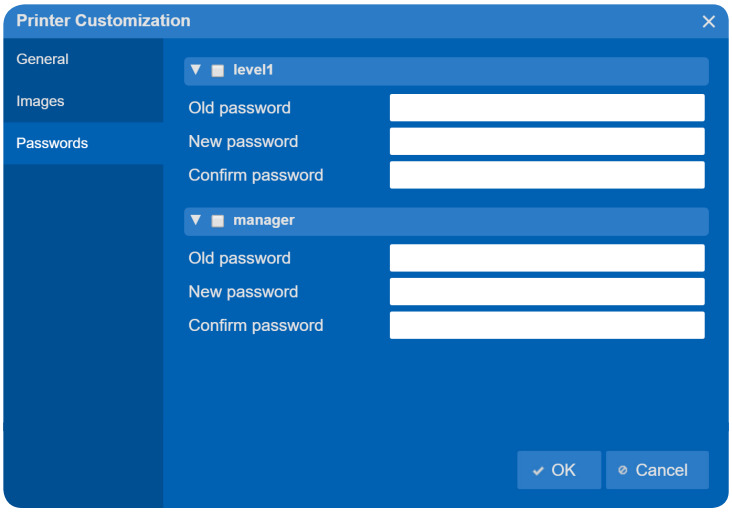
Images

In the images menu, you can select start-up and shut-down images from your computer or from an external memory source. You can always reset the images back to the factory images by selecting the **Restore factory image** check box.



Passwords

In the passwords menu, you can change the passwords of the printer.



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- License Agreements

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