Workflow Visualizer

Cavallo Support - 2026-01-06 - [Utilities](#)

Overview

SalesPad now offers a Workflow Visualizer, a helpful new feature that generates a visual flowchart diagram of your workflow so you can see exactly how your documents route through your processes. Review which queues make up your workflow, where workflow rules will trigger to reroute documents, and which automated plugins run along the way. This tool will help you understand and streamline your existing workflow, see how new changes will affect it, and catch missed configuration and orphaned queues.

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Setup

Securities

The Workflow Visualizer is enabled by default. If access needs to be adjusted, there are sub-securities available for the two screens where it is available:

- *Sales Document Workflow Setup > Enable Workflow Visualizer* - Allows users to open Workflow Visualizer. This affects the Sales Document Workflow Setup screen.

- *Workflow Card > Enable Workflow Visualizer* - Allows users to open Workflow Visualizer. This affects the Business Object Workflow Setup screen (used for PO workflow, customer workflow, item workflow, etc).

Settings

There is one setting for the Workflow Visualizer, which is automatically set to a default value that does not need to be adjusted unless you encounter any issues with generating the flowchart diagram.

- *Workflow Visualizer Tool Path* - The path to the rendering tool used by the Workflow Visualizer. Defaults to "https://cdn.jsdelivr.net/npm/mermaid@10.4.0/dist/mermaid.esm.min.mjs".

Usage

The Workflow Visualizer is available in both Sales Document Workflow Setup and Business Object Workflow Setup. This walkthrough will focus on Sales Document Workflow, but the principles are the same for Business Object Workflow.

Sales Document Workflow Setup ✕

Close | Save | Export Workflow | Import Workflow

Sales Document Types

Doc. Type	Doc. ID	
BACKORDER	BKORD	
INVOICE	CAINV	
INVOICE	FULORD	
INVOICE	POSINV	
INVOICE	RMAINV	
INVOICE	SERVINV	
INVOICE	SPECINV	
INVOICE	STDINV	
INVOICE	SVCZERO	
ORDER	BLKORD	
ORDER	MASTERSO	*
ORDER	ORDMAN	*
ORDER	PHNORD	*
ORDER	REPAIRWO	*
ORDER	REPORD	*
ORDER	RMAORD	*
ORDER	SPECORD	*
ORDER	STDORD	*

Workflow Queues

New Queue | Delete Selected Queues | Resequence Queues | Workflow Visualizer

| Seq ▲	Queue	Button Caption	Plugin	Eval	Print?	Force	Next Queue(s)	Description
10	NEW ORDER	Ready to Pick		☑	■	■	PICK PRINT+	New orders start here
20	MANAGER REVIEW	Ready to Pick		☑	☐	☐	PICK PRINT+	Order needs manager review
30	BACKORDER	Ready to Pick		☑	☐	☐	PICK PRINT+	Order has any backordered items
40	PICK PRINT+		Smart Printing	☐	☐	☐	READY TO PICK	Automatically email fulfillment notification
50	READY TO PICK	Ready to Pack	Run Script	☐	☐	☐	READY TO PACK	Order is ready for picking
60	READY TO PACK	Ready to Ship		☐	☐	☐	READY TO SHIP	Order is ready for packing
70	READY TO SHIP	Ready to Invoice		☐	☐	☐	READY TO INV	Order is ready for shipping
80	READY TO INV			☐	☐	☐		Order is ready for invoicing

Workflow Rules

New Rule | Delete Selected Rules | Copy To | Resequence Rules

Seq ▲	Description	Eval When In Queue	Move To Queue	Enabled
10	Order has any sales line with margin < 15%	NEW ORDER	MANAGER REVIEW	☑
20	Order has backorders	NEW ORDER; MANAGER REVIEW; BACKORDER	BACKORDER	☑

In the Sales Document Workflow Setup screen, there is a new Workflow Visualizer button available at the top right of the screen. Clicking this button launches a popup window that generates the flowchart diagram for the currently selected workflow.

The window can be resized as needed, and the flowchart can be scrolled vertically and horizontally. Hold CTRL while scrolling with the mouse wheel to zoom in and out.
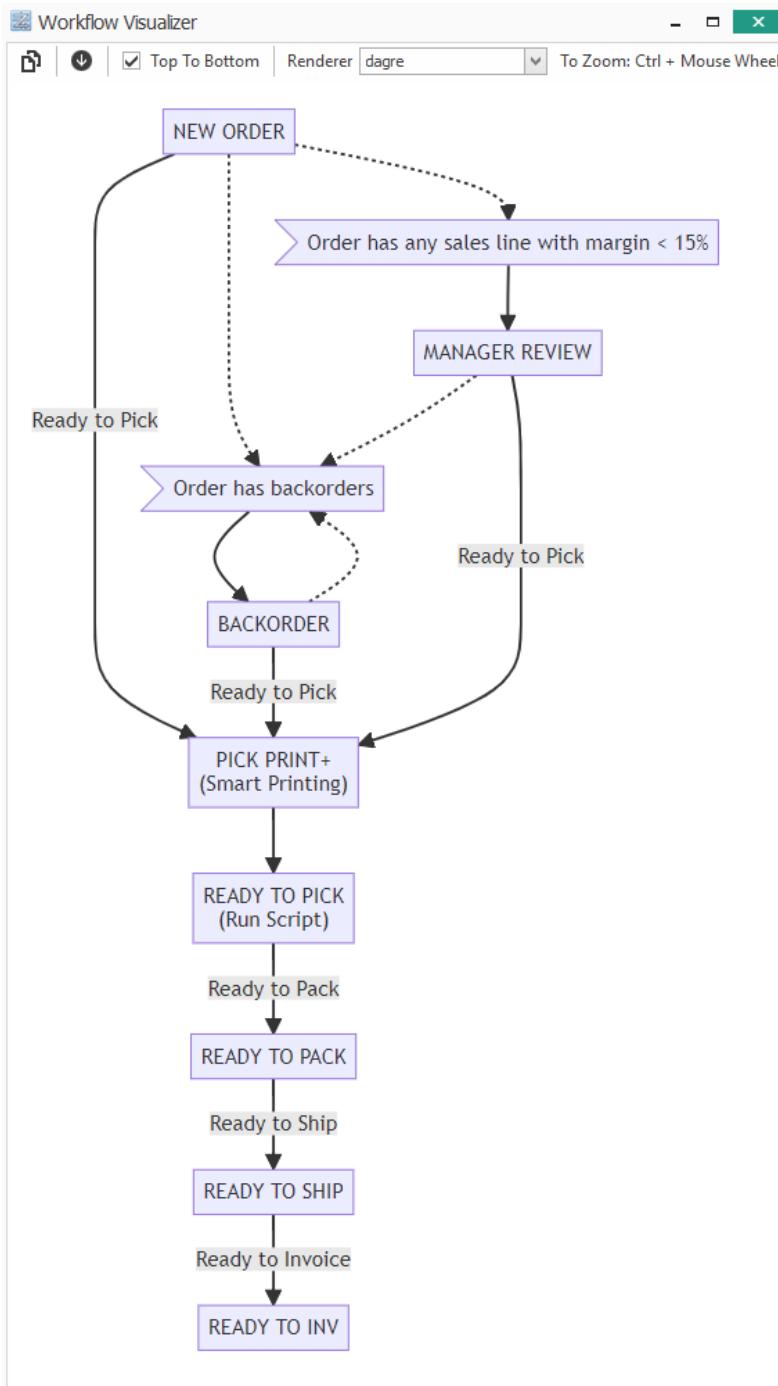
Flowchart Structure

Workflow Queues

In the flowchart, each workflow queue is displayed as a rectangle, which indicates a step in the workflow process. Arrows connect the queues, leading from the originating queue and pointing toward the destination queue. If that connection has a Button Caption configured in workflow, then that caption will be displayed on the arrow.

Workflow Rules

Workflow rules appear as flags. Arrows pointing into workflow rules show when that rule will be checked. If the rule passes, then the document would continue along the path that leads away from that rule. If the rule fails, then the next rule is checked, and this continues until no rules are left; then the document would continue along the path that leads to a queue instead of a rule. One of the renderer options shows these conditional paths as dotted lines, and the other shows them as solid lines.

Workflow Plugins

Workflow plugins are noted in the same rectangle as the queue to which they are attached, shown in parentheses after the workflow queue name. This means that documents forwarding out of that queue will trigger that plugin.

This includes processing like Run Scripts and Smart Printing, although it does not include any more specific information regarding the scripts or printed/emailed reports.

Workflow Required Fields

Workflow required fields will appear within the same rectangle as the queue. Each required field for that queue will appear in a bulleted list under the queue's name, with details on the field, condition, and value.

Flowchart Generation Options

There are a few options available to change how the flowchart diagram is created:

Top To Bottom

- When checked, the flowchart will flow from top to bottom.

- When unchecked, the flowchart will flow from left to right.

Renderer

- The dagre renderer creates the flowchart with curved lines instead of straight lines, and with dotted lines to indicate the conditional workflow rule paths. The previous screenshot uses the dagre renderer.

- The elk renderer creates the flowchart with straight lines and no dotted lines. The following screenshot uses the elk renderer.
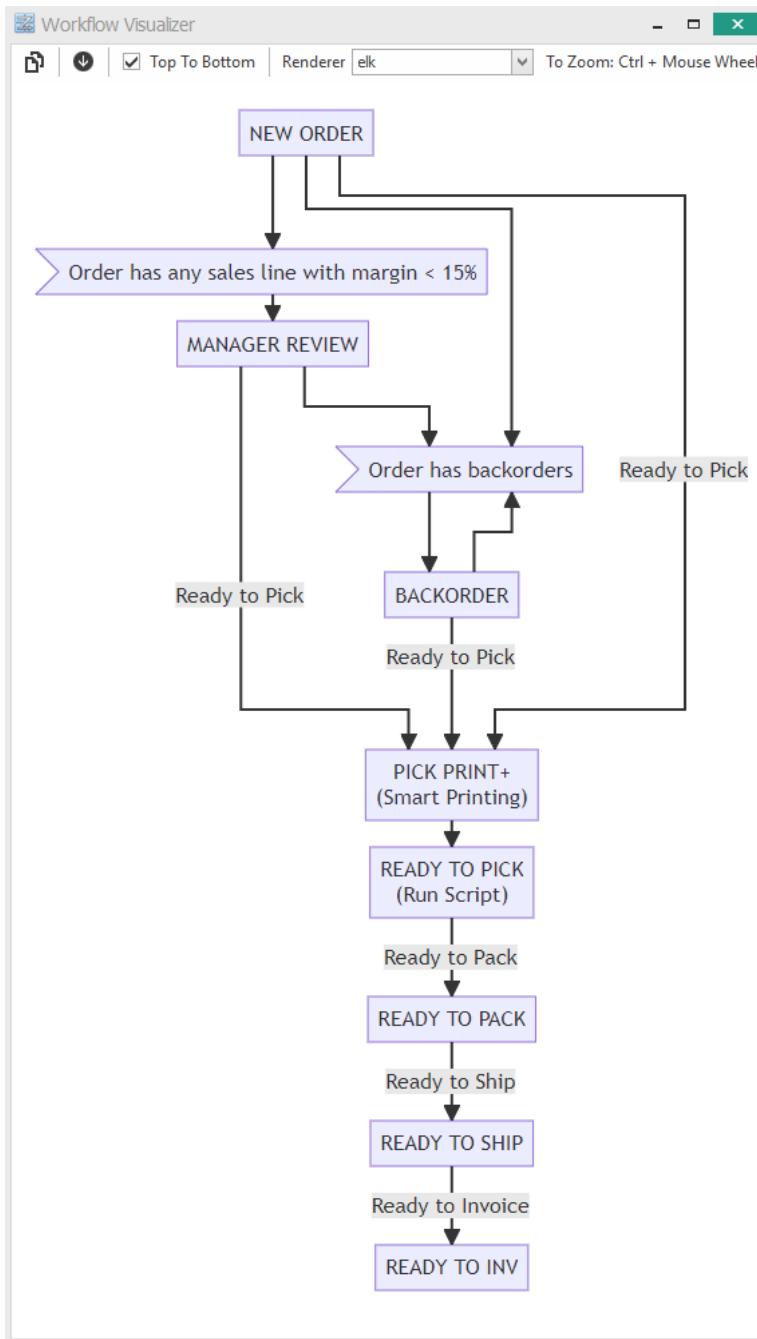
Flowchart Export

There are two options for exporting the flowchart at the top left of the Workflow Visualizer popup window.

The Download SVG button will download the entire visual flowchart diagram as an SVG file, which can be launched for viewing at any time. This lets you save your visual workflow for later reference, and refer to it when making changes.

The Copy To Clipboard button will copy the flowchart code to the clipboard. This is useful when there is an issue with the network or the renderer that is causing the visual flowchart to not appear properly in SalesPad.

When a network or renderer issue occurs, the flowchart code remains displayed in the Workflow Visualizer popup window. However, you can still view the flowchart by copying that code using the Copy To Clipboard button and pasting it into the code side of the online Mermaid flowchart renderer. Continue to the next section for more information on Mermaid.

Mermaid Flowchart Renderer

SalesPad uses an open source flowchart generator named Mermaid to create the visual flowchart diagrams. Mermaid's API is called with the workflow code that is generated in SalesPad, and Mermaid renders the visualization that is displayed in SalesPad. The only data sent to Mermaid is the flowchart code, with no other identifying information, and that code is not stored by Mermaid.

Network issues or Mermaid API version issues could cause the flowchart to not display properly within SalesPad. When this happens, the Copy To Clipboard button can be used to copy the flowchart code, and then you can navigate to mermaid.live and paste into the code section on the left, replacing all code that was already there. This will allow you to view and interact with the flowchart diagram within Mermaid's interface, and the flowchart can still be downloaded from Mermaid via the Actions in the lower left.
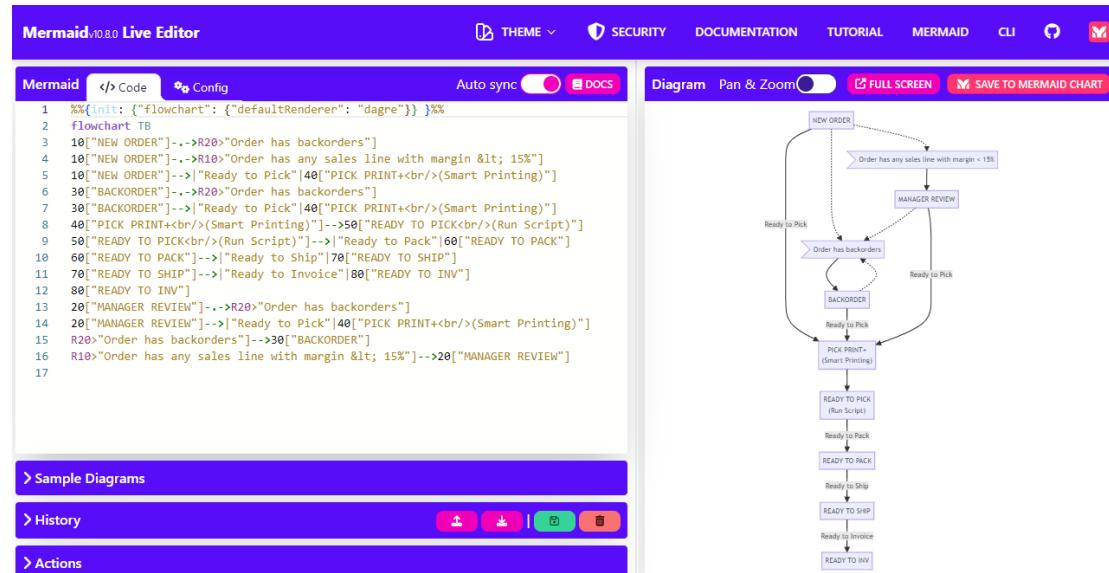

Finding Workflow Issues

Visual flowchart diagrams make it much simpler to find some kinds of issues in workflow, such as dead end

queues and orphaned queues.

Dead End Queues

When a workflow queue does not have a configured Next Queue, then it is a dead end. This means that opening a document that is in that queue will not show the Forward button to forward that document in workflow. This may be intentional if the queue is the final queue in the workflow (e.g. an order's last queue before it is transferred to invoice), or if a process requires a user to manually change the current queue in order to move sales documents out of that queue (e.g. a manager review queue where the manager must decide where the order needs to go next).

Any queue that has arrows leading into it, but no arrows leading out of it, is a dead end queue. In the following workflow example, the READY TO INV queue is an intentional end queue. But the BACKORDER queue has been erroneously disconnected from its Next Queue. This would be fixed by setting the BACKORDER queue's Next Queue back to PICK PRINT+, which would make it match the previous screenshots again.
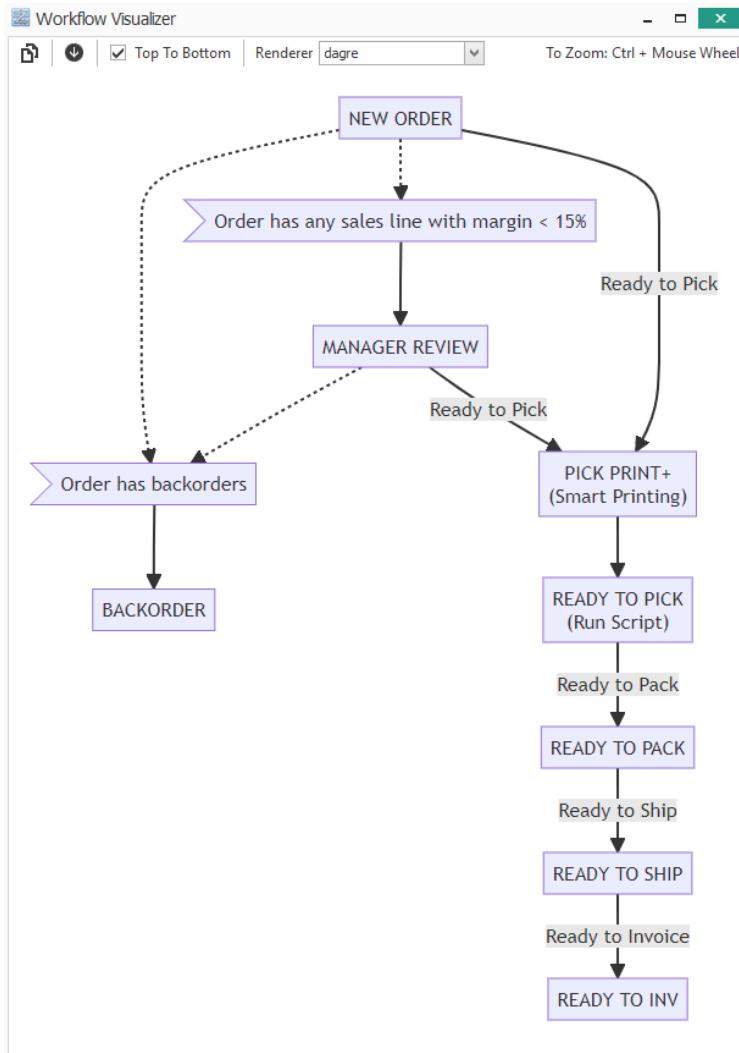
Orphaned Queues

When a workflow queue does not have a configured Next Queue, and it is not a Next Queue for any other queues, then it is an orphaned queue. This could be intentional if a process requires users to manually move documents to a particular queue, and then users also need to manually move documents out of that queue. This is typically not advisable because it interrupts the flow of workflow.

Any queue that does not have arrows connecting it to or from any other queues is an orphaned queue. In the following workflow example, the READY TO INV queue is displayed at the top without any connections. This would be fixed by setting the READY TO PACK queue's Next Queue back to READY TO INV, which would make it match the previous screenshots again.

⬍ ☑ Top To Bottom   Renderer dagre ⌄   To Zoom: Ctrl + Mouse Wheel

NEW ORDER   READY TO INV

Order has any sales line with margin < 15%

MANAGER REVIEW

Ready to Pick

Order has backorders

Ready to Pick

BACKORDER

Ready to Pick

PICK PRINT+
(Smart Printing)

READY TO PICK
(Run Script)

Ready to Pack

READY TO PACK

Ready to Ship

READY TO SHIP