

White Paper: Barcode Reader



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Why and how a barcode reader can be used to increase workflow efficiency for high volume photographic studios shooting for e-commerce retailers.

Manually naming image files can be time consuming and prone to error. The Capture One Enterprise integrated Barcode scanner tool helps ensure assets are quickly named and identified correctly as they are captured. This hardware and software integration should save time and avoid any human error that can occur with manual data input.





Introduction

This white paper describes the barcode scanning feature in the Capture One Enterprise solution, reviews the design, configuration and use cases, and can be used as a reference document for integration planning.

Data entry can be massively time consuming. Those users facing volume product capture have a daunting task to manually name assets with product data correctly and accurately – a costly process when error is introduced, and this risk increases when multiplied by workload.

Data entry is also a distraction from photography. Removing the laborious task of copy/pasting names from Excel can help with staff retention and let creative talent do what they do best – and that's produce quality imagery. To that end, a scanner can replicate the string perfectly if the data is encapsulated in a barcode, and this is also an efficient way to speed up data transfer.

To date, using a standard USB barcode scanner in a Capture One workflow is possible, however the solution is suboptimal when the hardware and software are not integrated. The barcode scanner works by emulating a keyboard; transferring characters in a single string to the receiving software. Out of the box a scanner can connect and (once the text cursor is in the right location) pass the scanned string to the application. This though still requires the operator to interact with the application and check the cursor position, commit data etc. and it still falls short of the clean, automated workflow desired.

For more advanced workflows, the scanner should achieve more with the scanned value. Consider a scanner on a supermarket checkout that replaces all manual steps. It reads a code, looks up prices and returns the values to a list, which is printed out ovwn a receipt. This "chaining" of events could conceivably be applied to a photo workflow to take away folder creation, metadata application, capture or whatever task the user wishes.



Solution

Version 1.0 solution (Capture One Enterprise 12.1 - June 2019)

The basic barcode reader function (as developed and as implemented in 12.1) is outlined here:

The integrated Barcode scanner tool in Capture One Enterprise is designed to ensure that the assets are named and identified correctly as they are captured.

It is important to note that the Barcode tool is intended to be used in conjunction with the Next Capture Naming tool. The scanned barcode ID needs to be inserted as a part of the image name created during capture. This is done by using the Barcode Token as a part of naming structure in the Next Capture Naming tool.

This setup means that it is important to scan the Barcode before capturing the associated image – otherwise it cannot be applied automatically to the image name.

If you are using Capture One Enterprise on a Mac, you will have additional possibilities to use the Barcode string by taking advantage of AppleScript.

Supported barcodes

The Barcode scanner feature only support scanners that can be set up with a prefix/suffix. This is needed for Capture One Enterprise to know precisely when the barcode text string starts and ends. These Linear 1D barcodes are supported:

- UPC-A
- EAN-13
- Intertleaved 2 of 5, Straight 2 of 5 industrial
- Code 39, Code 93, Code 128
- Codabar
- Matrix 2 of 5
- Rss-14

Note: 2D barcodes, for example a QR code, are not currently supported.

Scanners currently supported in 1.0 (Capture One Enterprise 12.1 - June 2019)

- DataLogic Gryphon
- Honeywell Xenon
- Symbol LS
- Download overview/example of configurable scanner hardware

Note: scanners not on this list might still work and that the list will be updated as more scanners are verified to work correctly. It is not possible to use multiple scanners at the same time. Only one scanner can be configured and used at a time.



Advanced use: Extending workflow (example automation)

In a retail environment the Enterprise may have one or more PIM (Product Information Manager), ERP (Enterprise Resource Planning) and CMS (Content Management Systems) systems backed by databases containing data related to the products being imaged by the photo team.

Advanced use: Barcode done script (mac only)

Barcode done is an "event" script that runs an action when the scanner scans. The user needs to enable this function by running one script pointing to the script to be invoked on the scan, and the script that is run itself.

Configuration of the barcode scanner

The USB devices need to be configured with a prefix and suffix wrapping the data so every scan sends the following struct - cyrefixcon dataconductc

By using the event script (which runs on every scan event) it is possible to scan an item in Capture One Enterprise, and look up the product information.

By leveraging the abilities of the new Next Capture Meta Data tools it is then possible to return this data to Capture One, providing a rich metadata workflow for the Capture One Enterprise team.

Next Capture Metadata & PIM Systems Ideal Use Case

Leveraging the Barcode tool's barcode value and barcode scanned script to pass the value elsewhere.

Client-Specific Caveats

- What product detail data exists in the PIM prior to capture, and is that data entry process efficient?
- How does the client PIM's API accept information?
- How does the client PIM's API export information?

