Get the benefits of mobile document capture with Zebra Technologies’ advanced document imaging

INSTANTLY CAPTURE ALL THE INFORMATION ON VIRTUALLY ANY FORM AND DRIVE ERROR-PRONE INEFFICIENT PAPERWORK OUT OF YOUR OPERATIONS

Are paper documents a big part of your business? If you are manually capturing and moving information on shipping labels, bills of lading, invoices, work orders and other documents, your workforce must spend time managing the paperwork and delivering it to a department that will then manually enter the data into a computer. The impact of this slow movement of information can ripple throughout your organization and ultimately affect your bottom line by inserting time and cost into your business processes, increasing the opportunity for errors, reducing customer service quality and increasing billing cycle times.

But imagine if your workers could accurately capture the contents of an entire form with the single press of a button — including bar codes, text fields, phone numbers, images, signatures, and even check boxes — and instantly send that information to your business applications. You have just imagined the power of SimulScan Document Capture. With this powerful software application on your Zebra Technologies’ Android mobile computers, you’ll get instant visibility into information, the moment it is captured, streamlining your business processes and driving efficiencies throughout your operations. No more paperwork for your workforce to manage. No more data entry. No more struggling to scan a specific bar code on a form with multiple codes. The result? Increased workforce productivity. Faster cycle times. “Greener” operations. Cost-effective compliance with recordkeeping requirements. Better customer service. And improved cash flow.
The Zebra Difference: Truly advanced document capture

When you choose SimulScan, you choose a document capture solution that sits in a class of its own. What sets SimulScan apart from the competition?

Powerful Template Builder

This cloud-based utility provides an easy-to-use graphical interface that allows you to quickly and easily define the data you want to capture on a standard form. Fields can be grouped if needed to meet the requirements of your back-end application — such as city, state and zip code. A template can be deployed to any number of mobile devices. And templates can be packed together to create multi-templates. The Template Builder helps you identify and validate the data you want to capture. You can upload, edit and store templates for quick retrieval. And you can easily install template XML files on your mobile devices easily manually or via an MDM tool, making deployment easy for any size enterprise — from small businesses to large multi-office operations.

Zebra’s Enterprise Mobility Developer’s Kit (EMDK)

Our EMDK enables the easy integration of all of the document capture features on Zebra enterprise mobile computers into your application. Design and deploy SimulScan in few hours with DataWedge, a built-in complementary software utility that allows you to easily integrate SimulScan functionality into your existing business application — without writing a single line of code. SimulScan can also be readily leveraged in your RhoMobile application via the powerful RhoElements API set for a more involved web-based programming interface. And for native-Android applications that require tighter integration and performance, the Enterprise Mobile Developers Kit (EMDK) for Android delivers a comprehensive set of APIs that allows you to take full advantage of the enterprise-grade features on our mobile devices.

Two ways to capture information: camera or 2D imager

Workers can use either the on-board color camera or the 2D imager to capture documents. The color camera is point-and-shoot, providing an ideal user experience for structured and unstructured data. Imagers provide enterprise-class performance when intensive bar code capture is required. And since imagers provide an aiming function instead of point-and-shoot, they are the ideal choice for picklist applications, where users need to capture just one specific bar code when other bar codes are present. Regardless of whether the camera or imager is utilized, you can enable a feedback loop that allows users to review the results and determine if they want to accept it or retake it.

Capture Structured and Unstructured Data

SimulScan offers the flexibility to capture whatever type of data you need – structured forms with predictable fields that can hold just about any type of data, from text fields to radio buttons, check boxes, bar codes and signatures, as well as unstructured and unpredictable data layouts, such as the example above with multiple bar codes placed randomly on a label.
Manual and automatic image capture modes

Two modes of operation ensure the capture of a high quality usable document. In automatic mode, users can simply aim at the form and SimulScan takes over and snaps the picture when conditions are optimal to process a high quality image — ensuring that the entire form is visible, the user is holding still and lighting is optimal. In manual mode, the user determines when to process the image by pressing the trigger or tapping on the screen.

Security — no locally saved data

Once the data has been sent to the host application, it no longer resides on the mobile computer. Since there is no locally saved instance of the data, sensitive information is secure.

Ease of use

The technology is easy to use — regardless of whether your workers are using the color camera or the imager to capture a document, no training is required. To capture documents with the camera, workers use the device screen to align the aiming reticule that appears with the document. To capture documents with the 2D imager, workers press a button to project the bright laser-aiming pattern (crosshairs) onto the target document. Either way, users will hear a beep tone to indicate that a quality image of the document was captured.

Flexible document sizes

You can capture a wider variety of document sizes than the typical competitive document capture solution — including Legal, Letter, A4 and A5.

Flexible document types

Capture structured documents that follow a defined template where fields and field placement are static and predictable, as well as unstructured documents where fields are completely dynamic and unpredictable. And documents can even have a colored background, such as those typically found on multi-part forms.

Comprehensive data capture capabilities

No matter what you need to capture, SimulScan is up to the job, including:

- Virtually any 1D or 2D bar code
- A specific bar code when multiple codes are present
- Multiple bar codes — simultaneously
- Signatures
- Checkboxes
- Any text in any field on a form and turn it into fully editable data with SimulScan’s Optical Character Recognition (OCR) capabilities
- Group fields as needed to meet the requirements of your back-end business application — for instance, you can group street, city and zip code together to create a single string of text.
- Check boxes, bubbles and radio buttons with SimulScan’s Optical Mark Recognition (OMR) capabilities
- Automatically add the date and time to an image capture — ideal for proof of delivery and proof of service for overnight and other expedited delivery services
- Magnetic Ink Character Recognition (MICR) data on checks and other negotiable documents
- Content in machine-readable zones (MRZs) found on documents such as passports and visas.

Real-time and batch modes

Your data can be processed and sent instantly to your business application or stored on the device and uploaded later. And if you choose real-time processing, in the event the wireless connection to a web-based back-end business application is lost, no problem — SimulScan will store the data locally and send the data when the connection is re-established.
Ensure high-quality image capture with comprehensive automatic image processing features

Capturing documents out in the field can be very challenging. There are different lighting conditions that can impact the ability to capture a good image of the document — the image may come out dark or part of the image may appear dark. There could be an undesirable obstruction in the field of view, such as a finger or mobile computer hand strap. A document might be small, resulting in an image with a lot of background around it. And then there is the file size associated with high-resolution documents that can sap battery power.

Our advanced document imaging technology is loaded with features to address these issues and more. Once the document has been captured, the software automatically assesses the image and utilizes the features below to create the best image possible, eliminating the need for users to assess the document image before they capture it — or view the document image to check its quality after it is captured. Features include:

<table>
<thead>
<tr>
<th>Automatic Image Processing Features</th>
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<tbody>
<tr>
<td>Auto De-skew</td>
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<tr>
<td>Any image skew (off-angle) is automatically detected and corrected, so the document is the proper size and shape.</td>
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<tr>
<td>Auto Rotate</td>
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<tr>
<td>Robust templates capture the document regardless of orientation — text and bar codes are always captured and processed accurately.</td>
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<tr>
<td>Auto Brighten</td>
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<tr>
<td>Brightens the image as a whole for optimal readability.</td>
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<tr>
<td>Auto Shadow Removal</td>
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<tr>
<td>Any shadows that are cast across the document are automatically corrected.</td>
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<tr>
<td>Auto Noise Removal</td>
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<tr>
<td>Any type of noise in the image — for example, caused by grain in the paper — is identified and removed.</td>
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<tr>
<td>Auto Sharpen</td>
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<tr>
<td>Automatically assesses text and graphics and sharpens as needed to ensure improved legibility.</td>
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<tr>
<td>Border Obstacle Detection</td>
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<tr>
<td>If an obstacle such as a finger or another piece of paper is in the field of view and blocking part of the border, the image will still be captured, preserving productivity. Since the user is able to validate the data captured, if an obstacle blocks any information, the user can edit or choose to rescan as needed.</td>
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<tr>
<td>Auto Crop</td>
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<td>Automatically detects document edges and eliminates unneeded background areas. The edges of the document are automatically detected and the extraneous background area cropped out of the image. Even if a document is missing a corner, the software extrapolates where that corner should be and crops appropriately so that the document is still sized correctly — critical in the capture of structured documents.</td>
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<tr>
<td>Auto Compression</td>
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<td>After all image processing has been completed, the software automatically compresses the document to a configurable small file size of your choosing. As a result, your workers can transmit smaller files that will protect device performance, battery power and possibly the cost of transmission (dependent upon the data plan).</td>
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<tr>
<td>Advanced Image Correction</td>
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<tr>
<td>If a doc is slightly crumpled or curved because it is held in hand, no problem. This proprietary Zebra-only feature will automatically make the necessary adjustments to ensure a quality image capture.</td>
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</tbody>
</table>

The many benefits of SimulScan

SimulScan streamlines data collection — and the benefits of that process efficiency reach far and wide throughout your operations:

- Improves worker productivity
- Increases operational efficiency
- Reduces cycle times — and the cost of doing business (or – transaction costs)
- Reduces errors
- Reduced network bandwidth usage
- Improves customer service
- Reduces order-to-cash cycle times
- Eliminates the need for manual data entry
- Increases the speed of data visibility
Flexible Device-side or Cloud-based information processing

Once a high-quality document image has been captured, the most important phase begins — extraction of the information you need from that document. SimulScan gives you your choice of two methods for processing documents, allowing you to select the method that works best for your workers and your technology environment:

**Device-side processing**

The mobile device processes image, extracts data and stores the extracted data in the right record on the device.

- **Advantage:** Since a wireless network connection is not required, device-side processing is ideal for workers in areas with spotty coverage; when network bandwidth is a concern; for native applications where all data is stored locally; or when application response times are critical — for example, for law enforcement officers.

**Cloud-based processing**

Use SimulScan to capture an image of your documents. Your application can then utilize cloud-based resources to complete the processing, extraction and storing of data in the appropriate record.

- **Advantage:** Leverage the power of the cloud for real-time operations or complex advanced processing.

**Put SimulScan to work in your business**

SimulScan is at home in many different vertical markets, where it can help streamline any business process that requires the capture and movement of information on forms, including:

**Transportation and Logistics**
- Proof of Delivery (PoD)
- Container ID reading
- Bill of Lading

**Manufacturing**
- Asset tracking
- Intelligent picking
- Process flow validation

**Healthcare**
- Product packaging

**Field Service**
- Invoicing / service automation
- Key text extraction

**Government**
- Travel document parsing (Machine Readable Zones (MRZs) in passports, visas and other similar documents)