# Welcome!

**Welcome to the TWAIN Working Group Newsletter. The TWAIN Working Group is a not-for-profit organization which represents the imaging industry. TWAIN's purpose is to provide and foster a universal public standard which links applications and image acquisition devices. The ongoing mission of this organization is to continue to enhance the standard to accommodate future technologies. This quarterly newsletter is designed to keep you up to date on group initiatives, news and upcoming events.**

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## Application Developers and Scanner Manufacturers:

## Learn how you can quickly and easily adopt TWAIN Direct for driverless scanning!

**The TWAIN Working Group recently featured some well-attended webinars for users to learn more about the new TWAIN Direct standard and how one can adopt this standard now.**

**The new TWAIN Direct standard addresses the need for something simple and direct that shortens development time for software developers and scanner manufacturers, providing a feature-rich end user experience. TWAIN Direct eliminates the need to install vendor-specific drivers for scanning devices and image capture software. Instead, TWAIN Direct supports direct network communication between software and hardware regardless if it is a mobile device or desktop PC. Best of all, TWAIN Direct maintains backward compatibility, OS independence and can evolve to meet the needs of future technology.**

**View this valuable webinar recording**

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**Dynamsoft™**

# Creating a Smart Scanner with Raspberry Pi Sidecar and TWAIN Direct

By Xiao Ling, Technical Content Writer, Dynamsoft

TWAIN Direct is a new communication standard created by the TWAIN Working Group. It aims to simplify the development of document scanning applications. The data transmitted by TWAIN Direct is a serialized JSON object, which is not correlated to any programming language. To support TWAIN Direct, the corresponding drivers have to be pre-installed or embedded in scanner devices. With TWAIN Direct, it is convenient for developers to create document scanning apps for any platforms.

Document management automation is being widely adopted in many industries, in combination with wireless technology and cloud technology. However, according to shipment statistics for scanners, from 2010 to 2022 traditional scanners are still taking a large market share. To save cost, many companies are not ready to replace them with new smart scanners. Therefore, they have the critical problem of how to make their traditional scanners smart. Connecting scanners to a central PC is one way, but too expensive. A more economical workaround is to use Raspberry Pi - a kind of cheap microcomputer that costs around $35.

**Dynamsoft** is now experimenting on this front. The idea is to run a background service that supports TWAIN Direct on Raspberry Pi. When the service is running, an admin can remotely configure it from a desktop web browser through the IP address of the Raspberry Pi, just like an admin configures a network router. Once the configuration is done, you can connect the Raspberry Pi device to any scanner via the USB port and make the scanner instantly discoverable on the network. The next thing is to create an app (Java, Python, C/C++, C#, PHP etc.) for sending various commands in JSON format and receiving scanned documents encoded as a base64 string. Moreover, the electronic documents can be uploaded to cloud services like Google Drive, Azure, Dropbox, and Amazon S3, with programming.

This Raspberry Pi sidecar solution is economical and productive. It will benefit industries using traditional scanners, like education, insurance, banking, and government.

## Join the TWAIN Working Group at the Capture 2019 Conference September 4-5!

HSA's annual international Capture conference is relied on by the Industry's leading vendors as the must-attend conference to learn about where the market is heading, as well as provocative and leading edge technology areas.

The HSA Capture conference is THE place to meet key people in the Capture, RPA and Content Intelligence industries.  90% of attending companies return year after year, and many partnerships, mergers and acquisitions have developed at this conference.  Over 80% of the attendees are VP or C-level executives, and valuable networking time is offered over the course of this two day conference to meet and interact with these key decision makers.

The TWAIN Working Group is a proud sponsor of this event.  Please visit our booth and listen to our presentation at **Capture 2019** to see the very latest developments with TWAIN Direct and how you can easily adopt this technology today.


## Tired of TIFF??  Use PDF/raster!!

PDF/raster, a strict subset of the PDF file format is designed for storing and transporting multipage raster image documents, especially scanned documents. PDF/raster provides the portability of PDF while offering the core functionality of TIFF. Bitonal, grayscale and truecolor images are supported. Compression options include uncompressed, JPEG, and lossless CCITT Group 4 Fax.

PDF/raster is intended to be a standard format for storing, transporting and exchanging scanned documents. As a subset of PDF, it takes advantage of the widespread support for viewing, printing and processing PDF files. As a narrowly restricted subset of PDF, it is much simpler to generate and interpret, allowing it to replace the TIFF and JPEG file formats for capture and delivery of scanner output.

PDF/raster:

- is modern and extensible
- supports encryption and signatures

**View a presentation about PDF/raster**

**PDF/raster specification** (in process for ISO standardization May 2020)

# Gain early access to TWAIN Direct by Joining the TWAIN Working Group!

**Are you familiar with TWAIN Direct and the next generation of cloud-based image acquisition technology?**

**Did you know that TWAIN Direct offers a universal platform for scanning documents from any brand scanning device, without proprietary device drivers? Best of all it can be embedded into any document management application regardless if you are using a traditional PC or Mobile device regardless of its operating system.**

**The future of image acquisition is here. Regardless if you are an independent software vendor or hardware OEM. TWAIN direct is positioned to revolutionize the image acquisition process by creating a universal platform for both hardware and software!**

**The TWAIN working group has created everything you need to develop a TWAIN direct hardware or software solution. Beyond a working specification, we offer everything you need from sample code and applications, including our TWAIN bridge application which allows you to turn any USB based scanner into a network discoverable device.**

**Ready to get a jump start on developing a TWAIN direct enabled device or adding a universal scanning platform to your cloud-based software before TWAIN direct is formally launched?**

**Then we have the answer for you! To gain access to the new TWAIN Direct protocols, documentation support and even contribute to any improvements for the official release later this year, all you have to do is become a member of the TWAIN Working Group.**

**Be part of the early adopters of this new technology before everyone else has access to it!**

**More information about TWAIN Membership**

## TWAIN Has a YouTube Channel!

**The TWAIN channel features** videos for software application developers and scanner manufacturers demonstrating easy scanning for every application using TWAIN Direct. Our videos demonstrate how communication between software and scanners can be enabled using TWAIN Direct protocol over a network or in the cloud, including mobile applications.

## Recent News

- **LEAD Technologies Joins TWAIN Working Group as an Associate Member**
- **P3iD Technologies Joins TWAIN Working Group as an Associate Member**
- **ABBYY Joins TWAIN Working Group as an Associate Member**
- **HazyBits Joins TWAIN Working Group as an Associate Member**
- **TWAIN Working Group and PDF Association Announce PDF/raster: The Next-Generation Format For Imaging**
- **TWAIN Working Group Releases 2.4 Specification and Launches New Website**

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