

The Operability Advantages and Disadvantages of Twain, ISIS, WIA and external scan software

Twain	ISIS	WIA	Manufacturer s/w
Advantages of Twain	Advantages of ISIS	Advantages of WIA	Advantages of external s/w
Allows an operator to take scans directly into their own application without making a file first i.e. there is no need to import or open a scan file.	Guaranteed to work in applications that are ISIS compatible. ISIS is a rigorously controlled standard and ensures scanner system reliability.	The absolute minimum software installation since WIA is part of the Windows XP and Windows Vista operating system. Only the scanner USB driver needs to be installed.	Perfect for quickly and efficiently producing image files for archiving in all the popular file formats.
No need to learn how to use, install or maintain a separate scan program from the scanner manufacturer.	The ISIS user interface (GUI) will always look the same to the user, whatever the application - an immediate training advantage.	The WIA user interface remains the same for all scanners. In this respect it is like ISIS.	Optimised for speed and large format images.
Eliminates the problem of storing the scan file on disk	If the ISIS driver has been certified by the ISIS body then the user can be very confident that it will work as intended.	Works with MS Paint, Windows Photo Gallery (Vista) and Windows Fax and Scan.	Supported directly by the scanner manufacturer
There is no need to think about file format and potential loss of image quality if the wrong choice is made (i.e. TIFF or JPG etc.).	ISIS can be a very useful way of leveraging sales of Colortrac scanners since amongst the large format scanner manufacturers only Colortrac have it.		Has image editing tools designed to handle large images at speed.
Disadvantages of Twain	Disadvantages of ISIS	Disadvantages of WIA	Disadvantages of external s/w
Not guaranteed to work in all applications that are described as 'Twain' compatible as no official code standard exists that has been adopted by all Twain integrators.	There are fewer low-end applications supporting ISIS scanners than Twain scanners.	The WIA interface provides the basic settings for document size, resolution and colour mode. The choice of paper sizes is extensive but not ordered and easy to use. A1 size is missing.	Operator may need training to use the software
There are instances where the host software has not been designed specifically for large format images arriving from the Twain interface and this has crashed the application.	ISIS compatibility may mean the application is more costly.	Very slow in operation but produces good results.	
Twain drivers can have restricted functionality compared to the manufacturer's own external application	Not all scanners have ISIS drivers. Colortrac is the ONLY large format scanner manufacturer to have ISIS.		
The Twain interface may still appear very similar to the manufacturer's program and use terms unfamiliar to the untrained operator.	ISIS certification testing is costly for the scanner manufacturer.		
Twain can be expensive because of the problems involved its production, testing and field support. Colortrac do not produce a Twain driver for this reason.	ISIS applications like Twain applications can sometimes fail to manage large documents properly (more than A1/D size) – especially when full colour and above 300 dpi.		
Twain may not support or exploit the latest technical features of the scanner.	ISIS means that there is an extra driver to install with the scanner.		