

The TWAIN 2.1 Specification includes the following changes and features from TWAIN 2.0 Specification:

Adds these new triplets:

- DG\_CONTROL / DAT\_IDENTITY / MSG\_SET  
to allow applications to set the default datasource.
- DG\_CONTROL / DAT\_STATUSUTF8 / MSG\_GET  
to allow the application to get a localized string of the current status.
- DG\_CONTROL / DAT\_CAPABILITY / MSG\_GETHELP  
to allow the application to get a localized string that describes a capability.
- DG\_CONTROL / DAT\_CAPABILITY / MSG\_GETLABEL  
to allow the application to get a localized string that is the name of a capability.
- CONTROL / DAT\_CAPABILITY / MSG\_GETLABELENUM  
to allow the application to get localized strings that names the possible values of enumeration capability.

Adds these new Capabilities:

- ICAP\_AUTOMATICCROPUSESFRAME  
to improve the performance of the driver by reducing the amount of data captured when using auto crop and frames.
- ICAP\_AUTOMATICLENGTHDETECTION  
to crop image to length of page.
- CAP\_AUTOMATICSENSEMEDIUM  
to allow the scanner to switch between feeder and flatbed depending if paper is in feeder.
- ICAP\_AUTOSIZE  
to force the output image dimensions to match Supported Sizes.
- CAP\_CUSTOMINTERFACEGUID  
to uniquely identify a Data Source
- ICAP\_SUPPORTEDEXTIMAGEINFO  
to identify all supported Extended Image Info items including Custom items.
- ICAP\_AUTOMATICCOLORENABLED  
to enable Automatic Color detection.
- ICAP\_AUTOMATICCOLORNONCOLORPIXELTYPE  
to identify the non-color pixel type when color is not detected.
- ICAP\_COLORMANAGEMENTENABLED  
to output image data that could be considered "raw".

Adds the following defines:

- TWSS\_MAXSIZE for ICAP\_SUPPORTEDSIZES to scan the entire area.
- TWCC\_NOMEDIA to Condition codes.
- TWEI\_MAGDATA , TWEI\_MAGDATALENGTH, and TWEI\_MAGTYPE to DAT\_EXTIMAGEINFO items

Clarifies what is required to be a TWAIN 2.x Application and Datasource, and how to identify them.

Adds missing information or clarify the description of the following items:

- DAT\_IMAGEMEMFILEXFER
- TWEI\_PAGESIDE
- TWEI\_FILESYSTEMSOURCE
- TWEI\_IMAGEMERGED
- TW\_INFO

Clarifies that TWAIN uses UTF-8 to pass localized data back and forth between applications and sources.

Completes the removal of deprecated items from the specification.

- DAT\_SETUPFILEXFER2
- DAT\_SETUPAUDIOXFER
- ACAP\_AUDIOFILEFORMAT
- DAT\_TWUNKIDENTITY
- ICAP\_XYRESOLUTIONLINKED