Overview

The TWAIN 2.2 Specification continues and expands upon refinements begun with version 2.0:

- TWAIN 2.2 Self-Certification and the white papers for Mandatory Features and Capability Ordering are incorporated into the body of the TWAIN Specification.
- A new section on “Best Practices for TWAIN Compliant Applications,” and improvements to the section on “Requirements for a Source to be TWAIN Compliant.”
- Information specific to operating systems are consolidated into a single chapter, “Operating System Dependencies.”
- A single chapter defines the entire symbolic and numeric space for the TWAIN 2.2 Specification, this information is sufficient to create the appropriate header file for any programming language (including TWAIN.H).
- The Specification references the Sample Code for Applications and Data Sources, allowing the reader to put the information into the context of live code that can be downloaded and modified.
- Constraining a capability is now distinct from the ability to get, set and reset its current value, this includes the ability to discern if the capability supports constraints.
- Data Sources advertise the DG / DAT operations they support.
- New definitions added for multiple color dropout, double document detection, negotiable image segments, greater control of warning and error dialogs from the data source, paper handling, printing, and the ability to detect both busy and locked data sources.

Detailed Breakdown

Major Features:

- TWAIN Self-Certification is included in the Specification
- Mandatory Features white paper has been folded into the Specification
- Capability Ordering white paper has been folded into the Specification
- Operating specific items have been moved into a single chapter
- Updates applied based on the TWAIN 2.1 Errata

2.2 adds these new triplets:

- DG_CONTROL / DAT_CALLBACK2 / MSG_REGISTER_CALLBACK
  Callback support for native 32-bit and native 64-bit applications

- DB_IMAGE / DAT_FILTER / MSG_GET
  DB_IMAGE / DAT_FILTER / MSG_GETDEFAULT
  DB_IMAGE / DAT_FILTER / MSG_RESET
  DB_IMAGE / DAT_FILTER / MSG_SET
  Controls multiple color dropout

2.2 makes these capabilities mandatory for any data source supporting a scanner:

- ICAP_XNATIVERESOLUTION
- ICAP_YNATIVERESOLUTION

2.2 adds these new Capabilities:

- CAP_DOUBLEFEEDDETECTION
  Controls the way the data source detects double feed events

- CAP_DOUBLEFEEDDETECTIONLENGTH
  Adjusts double feed detection for document length

- CAP_DOUBLEFEEDDETECTIONREPONSE
  Adjusts how the data source handles double feed events

- CAP_DOUBLEFEEDDETECTIONSENSITIVITY
  Adjusts double feed detection for ultrasonic

- CAP_INDICATORSMODE
  Controls GUI messages allowed when the full GUI isn't being displayed

- CAP_PAPERHANDLING
  Adjusts the way paper is physically handled by the device

- CAP_PRINTVERTICALOFFET
  Starting offset for the current CAP_PRINTER device

- CAP_SUPPORTEDCAPSEGMENTUNIQUE
  Lists all capabilities allowed to have unique values in segments

- CAP_SUPPORTEDDATS
  Lists pairs of DG/DAT values supported by this data source

- ICAP_FILMTYPE
  Specify the type of transmissive media (positive or negative).

- ICAP_JPEGSUBSAMPLING
  Selects JPEG quantization

- ICAP_MIRROR
  Controls output of a mirror image of the input document

2.2 modifies these existing Capabilities:

- CAP_SEGMENTED
  Added TWSG_MANUAL

- ICAP_SUPPORTEDBARCODETYPES
  Added TWBT_QRCODE

- ICAP_BITDEPTHREDUCTION
  Added TWBR_DYNAMICTHRESHOLD

2.2 adds these new Extended Image Information items:

- TWEI_PAPERCOUNT
  Counts the sheets of paper in the current batch

2.2 adds these new Query Support Bits:

- TWQC_SETCONTRAINT
  Capability supports MSG_SETCONSTRAINT

2.2 adds these new Return Codes:

- TWRC_BUSY
  Data source is busy

- TWRC_SCANNERLOCKED
  Data source is locked by another application