Guide to IWNIST Samples

The purpose of these 4 Visual Studio 2008 Console Win32 projects is to demonstrate the simple creation and subsequent verification of several types of EBTS files. Each sample consists of a main section of about 100 lines of code and a "Helper.cpp" section about 400 lines long shared amongst all 4 samples.

IWNISTSample1

This sample creates an EBTS file of Transaction Type "CAR". It contains the following records:

Type-1	Regular mandatory transaction information record
Type-2	Descriptive text record containing mandatory CAR fields
Type-4	Loaded from file finger1.bmp
Type-4	Loaded from file finger2.bmp
Type-10	Loaded from file face1.jpg
Type-10	Loaded from file face1.jpg
Type-16	Loaded from file iris1.jpg
Type-16	Loaded from file iris2.jpg
Type-14	Loaded from file slap.bmp

The regular Aware ebts1_2.txt Verification File is used to verify compliance.

IWNISTSample2

This sample creates an EBTS file of Transaction Type "LFIS", to test the support of Type-7. It contains the following records:

Type-1	Regular mandatory transaction information record
Type-2	Descriptive text record containing mandatory LFIS fields
Type-4	Loaded from file finger1.bmp
Type-7	Loaded from file finger2.bmp

The regular Aware ebts1_2.txt Verification File is used to verify compliance.

Guide to IWNIST Samples

IWNISTSample3

For this sample a new Transaction Type "IWTST" was invented, and basic verification support was added to the stock ebts1_2.txt for Type-8, Type-15, Type-17 and Type-99 records. The new Verification File with this added support is called ebts1_2_extra.txt. It's sole purpose is to allow testing of these additional record types. Also, up to 99 Type-13 records are allowed.
This sample creates an EBTS file containing the following records:

Type-1	Regular mandatory transaction information record
Type-2	No descriptive text fields are required by "IWTST"
Type-8	Loaded from file signature.jpg
Type-13	Loaded from file finger1.wsq
Type-14	Loaded from file finger2.wsq
Type-15	Loaded from file slap.wsq
Type-17	Loaded from file iris1.jpg
Type-17	Loaded from file iris2.jpg
Type-99	Loaded from file cbeff.bin

The newly created ebts1_2_extra.txt Verification File is then used to verify compliance.

IWNISTSample4

The same ebts1_2_extra.txt from the last sample is used to create 29 Type-13 records, one for each possible combination of input and output type.

	Bit depth	Input format	Format within EBTS file
1	1	bmp	raw
2	1	bmp	fx4
3	8	bmp	raw
4	8	bmp	jpg
5	8	bmp	jp2
6	8	bmp	wsq
7	24	bmp	raw
8	24	bmp	jpg
9	24	bmp	jp2
10	8	jpg	raw

Guide to IWNIST Samples

11	8	jpg	jpg
12	8	jpg	jp2
13	8	jpg	wsq
14	24	jpg	raw
15	24	jpg	jpg
16	24	jpg	wsq
17	8	jp2	raw
18	8	jp2	jpg
19	8	jp2	jp2
20	8	jp2	wsq
21	24	jp2	raw
22	24	jp2	jpg
23	24	jp2	jp2
24	8	wsq	raw
25	8	wsq	jpg
26	8	wsq	jp2
27	8	wsq	wsq
28	1	fx4	raw
29	1	fx4	fx4

Compliance is once again verified before saving the EBTS file to disk. After the EBTS is saved it is re-opened and all the images are extracted (via IWGetImage) and written to disk for better scrutiny which makes for a good test of the imaging functionalities of IWNIST.