

## IPMService.exe from v1.0.0 to 3.1.0

### **Version 3.1.0 (03.11.2020) [ISS 5.0.0 26/11/20]**

- Back to previous ICC code for B&W images (otherwise black stripes... Chrbnnt case)
- Fixes crash cause by invalid ICC description content [improved]
- Fixes ICC issue with B&W images
- Fixes crash caused by wrong size in ICC profile [improved]
- Fixes issue for jpeg stereoscopic images [kept or removed?]
- Fixes crash for 16 bits TIFF images
- .PS file format detection to avoid being detected as .EPS

### **Version 3.0.0 (28.04.2016) [ISS 3.0.0 29/04/16]**

- Protection with virtual dongle now also available  
Keyword to enable use of virtual dongle:  
IPM\_BPK=value (the value is a 256 hexadecimal characters string)
- Fixes ipm crash caused by invalid ICC description length and content

### **Version 2.3.5 (24.04.2015) [ISS 2.5.0 24/04/15]**

- Better improvement with IPM Simulator
- Fixes problem with management of damaged/truncated icc profiles (appeared in 2.3.2)

### **Version 2.3.3 (20.02.2015) [ISS 2.4.2 20/02/15]**

- Strength and width of Yellow/Blue stripes is now optimized/reduced to allow a better display/rendering of the the processed images in Demo Mode.

### **Version 2.3.2 (12.01.2015) [ISS 2.4.1 12/01/15]**

- Enhances management for damaged/truncated icc profiles (output somehow inverted)
- Fixes a problem with TIFF Gray images & alpha channel. Now going directly in ERROR

### **Version 2.3.1 (16.12.2014) [ISS 2.4.0 16/12/14]**

- Automatic backup of Result file when size > 100000 bytes

### **Version 2.3.0 (30.10.2014) [ISS 2.3.0 30/10/14]**

- Allowing JPEG images processing using reserved markers (previously going in error)
- Fixes problem with empty paths causing service crash
- Fixes multi-threading problem with multiple EPS input images (EPS library not compatible with multi-threading). In that case, a keyword (and value) must be added in registry.

Registry location:

HKEY\_LOCAL\_MACHINE\SOFTWARE\binuscan\bService\binuscan IPM Service

String value to add ("1" as string):

SERVICE\_NUMBER\_OF\_PROCESS REG\_SZ 1

After restarting the service, this will set it in mono-threading mode, i.e. same behavior as IPM WS.

To set it back in multi-threading mode, string value must be:

SERVICE\_NUMBER\_OF\_PROCESS REG\_SZ \$\_PROCESS\_AUTOMATIC)

**Version 2.0.0 (25.02.2014) [ISS 2.0.0 25/02/14]**

- keyword to enable demo mode of IPM Service  
IPM\_DEMO\_MODE=ON/OFF (default=OFF if keyword is missing)  
IPM Service can now start without dongle.  
With a valid dongle connected, IPM Service processes images as before.  
With no dongle connected:
  - if keyword is set to ON, images will be processed in demo mode (damaged with stripes)
  - if keyword is set to OFF, images will stay in the input folder (until a valid dongle is connect)Stripes are only on the Blue (or Yellow) channel, instead of Red+Green as before.
- Fixes crash on jpeg with incorrect exif tag

**Version 1.2.3 (18.12.2013) [ISS 1.9.3 18/12/13]**

- Fixes side effect with IPM\_REMOVE\_SPEC\_ON\_MIN\_SCALE\_FACTOR
- Support specification files (old style) with values containing also separator ',' (not only '.') so now decimal values can may contain either '.' or ','  
List of concerned fields: TOP, LEFT, WIDTH, HEIGHT, SCALEX, SCALEY, RESX, RESY, ANGLE, SKEWH

**Version 1.2.2 (26.09.2013) [ISS 1.9.1 26/09/13 – 1.9.2 27/09/13]**

- keyword to remove specification file (from .\Data\tmp) depending on a minimum scaling factor:  
IPM\_REMOVE\_SPEC\_ON\_MIN\_SCALE\_FACTOR=value  
Default value should be 0.0 which means that any scaling value is allowed in specification files.  
If keyword is missing, behavior is the same than with value 0.0.

Otherwise, some examples:

IPM\_REMOVE\_SPEC\_ON\_MIN\_SCALE\_FACTOR=1.25  
means that if a specification file contains a scaling  $\geq 125\%$ , then spec file won't be processed and will be removed from .\Dara\tmp.

IPM\_REMOVE\_SPEC\_ON\_MIN\_SCALE\_FACTOR=11.03  
means that if a specification file contains a scaling  $\geq 1103\%$ , then spec file won't be processed and will be removed from .\Dara\tmp.

**Version 1.2.1 (17.09.2013) [ISS 1.9.0 18/09/13]**

In the structure of new specification files (and for general settings too):

- global keyword IPM\_RESAMPLE\_SCALE\_FACTOR is now deprecated
- it has been replaced by 2 keywords to allow different scaling values for X and Y  
IPM\_RESAMPLE\_SCALEX\_FACTOR=value (default is 1.00 which means 100%)  
IPM\_RESAMPLE\_SCALEY\_FACTOR=value (default is 1.00 which means 100%)
- Internal default value for scaling is now 1.00 (was previously 0.00...) in case of reading problem
- keyword to allow output filename change for new specification files:  
PROCESS\_DESTINATION\_FILE=filename (without path as output path already specified in PROCESS\_DESTINATION\_FOLDER)  
if keyword is missing or empty, then output filename stays the same as input filename (extracted from path specified in PROCESS\_SOURCE\_FILE)
- to avoid mismatch behavior between new spec files and workflow settings, in the .ini file of the workflow dedicated to new spec files, the following keywords should be set like this (done automatically by latest version of IPM Service Manager):

IPM\_RESAMPLE\_WIDTH=0  
IPM\_RESAMPLE\_HEIGHT=0  
IPM\_RESAMPLE\_MAIN\_DIMENSION=0

**Version 1.2.0 (23.07.2013) [ISS 1.8.0 05/07/13]**

- keyword to enable/disable writing of EXIF block in JPEG format  
IPM\_REMOVE\_EXIF\_ON\_JPEG\_OUTPUT=ON/OFF (default ON, previous behavior changed)

**Version 1.1.9 (05.07.2013) [ISS 1.8.0 05/07/13]**

- fixes crash with images including damaged/truncated icc profiles

**Version 1.1.8 (21.05.2013) [ISS 1.7.9 02/04/13]**

- fixes crash for spec file with ANGLE value > 359 or <-359 (for example -360 or 757)
- fixes crash for big images (side effect with memory on cache strip allocation)
- fixes crash for spec file with incorrect Right + Bottom value in crop

**Version 1.1.7 (27.03.2013) [ISS 1.7.9 02/04/13]**

- fixes error for jpeg image with incorrect icc tag. As a side effect icc data contained an unknown jpeg tag causing invalid reading of header
- fixes crash for spec + image with working path (with scaling etc...):  
if working path is empty, then it will be deleted. If it is incorrect, image+spec will go in ERROR
- fixes cache strip memory allocation (crashing) with incorrect specification file (crop outside image causing negative width and height dimensions). Now spec file move to error folder.
- keyword to enable/disable spec removal if image not found in PATHIN  
IPM\_REMOVE\_SPEC\_ON\_MISSING\_IMAGE=ON/OFF (default OFF)  
ON: specification file is moved to the error folder if the image source file is not found  
OFF: specification file stays until the image source file becomes available (third part app. will need to purge remaining specification files in case images never arrive...)

**Version 1.1.6 (18.02.2013) [ISS 1.7.8 19/02/13]**

- fixes specification file initialization problem with DOCROP: 0. Sometimes image was still cropped, especially with PROCESSOPT: 5 (side effect).

**Version 1.1.5 (29.01.2013) [ISS 1.7.7 30/01/13]**

- still improves memory management with 64 bits version of IPM Service on PC with RAM >= 60GB and ReCo enabled (was previously working up to 30GB)
- keyword to enable/disable autorange in Quantifier  
IPM\_QUANTIFIER\_AUTORANGE=ON/OFF (default ON, behavior same as before)  
Because the quantifier process is starting first with an histogram autorange
- fixes crashing specification file (generated by Unisys Hermès) containing inconsistent information (for example Scaling factor > 10.0, i.e. > 1000%). If so, spec now moved to Error.
- fixes spec files conversion problem with Mac paths (for Job Manager Mac)

**Version 1.1.4 (20.12.2012) [ISS 1.7.5 20/12/12]**

- improves memory management (crash) with 64 bits version of IPM Service on PC with RAM >= 8GB and ReCo enabled

**Version 1.1.3 (05.12.2012) [ISS 1.7.2 05/12/12]**

- automatic mm->inch unit conversion when reading specification file (on the fly)

- fixes a problem in xmp tag for JPEG format (image was going in ERROR)
- keyword to manage output file extension  
IPM\_OUTPUT\_AUTOMATIC\_EXTENSION=ON/OFF (default ON, behavior same as before)  
When disabled, the input file name remains unchanged in output (same full file name)

**Version 1.1.2 (20.11.2012) [ISS 1.7.1 21/11/12]**

- fixes undefined 8 bits LUT in case of particular JPEG (res=65000 and dim=0.0x0.0...) making ipm crash
- in workflows, if a specification file contains an input path for which the image file doesn't exist, it will now be moved to the Error folder (like for tmp folder) [locally and over a network]
- for previous case, error message modified into: «Image not supported or missing»

**Version 1.1.1 (26.07.2012) [ISS 1.7.0 06/08/12]**

- fixes intempestive load/unload of DLL within service using boost library version 1.48
- fixes a problem with specification files of identical name no more processed ("burnt" spec name)
- keywords to manage ReCo saturation for colors close to gray:  
IPM\_GRAY\_SATURATION\_ACTIVATE=ON/OFF (default ON, i.e. behavior same as before)  
IPM\_GRAY\_SATURATION\_THRESHOLD\_VALUE=(default=8, min=1, max=64)
- fixes problem with XMP packet not correctly written (last 29 bytes of XMP packet missing)
- fixes problem with JPEG files containing 2 JPEG markers (crash)

**Version 1.1.0 (04.04.2012) [ISS 1.6.0 04/04/12]**

- support of XMP tags (read/write) for TIFF and JPEG
- keeping files in "Clients" and "tmp" (JobManager mode) after service restart
- fixes wrong resolution reading in jpeg ("no unit" case with existing "x density" value)

**Version 1.0.9 (09.03.2012)**

- fixes behavior problem with following keywords:  
PROCESS\_ARCHIVE\_OVERWRITE and PROCESS\_ERROR\_OVERWRITE

**Version 1.0.8 (21.02.2012) [ISS 1.5.3 21/02/12]**

- fixes a problem with TIFF (CMYK & RGB) images & alpha channel. Now going directly in ERROR

**Version 1.0.7 (26.01.2012) [64 bits 06.02.2012]**

- fixes a problem with TIFF indexed colors images (div by 0)

**Version 1.0.7 beta (17.01.2012)**

- keyword to allow CDC4x process (post ReCo, pre Quantifier)  
IPM\_CDC4X\_ACTIVATE=ON/OFF

**Version 1.0.6 (22.11.2011) [64 bits 23.11.2011] [ISS 1.5.1 23/11/11]**

- now processing specification file with "PROCESSOPT: 0" value (not only 1 to 7)  
In this case the overwrite/rename function was not working

**Version 1.0.5 beta (10-16.11.2011 to 21-22.11.2011) P [ISS 1.5.0 21/11/11]**

- adding automatically DOCROP and DEL\_SRC\_IMAGE keywords (internally) for "old" specification files (default values: 1 and 0). Adding missing CR after "PROFILE: " if so
- fixes DEL\_SRC\_IMAGE behavior (was always deleting the file for 3rd party specification files)
- registry keywords to allow relative paths management in specification files  
in HKLM\Software\binuscan\bService\binuscan IPM Service & string values:

IPM\_SPEC\_ABSOLUTE\_PATH\_IN and IPM\_SPEC\_ABSOLUTE\_PATH\_OUT

### Example

if a specification file contains:

PATHIN: milenium\myImage.jpg

and the relative path is located here:

C:\Program Files\milenium

you will then have to specify:

IPM\_SPEC\_ABSOLUTE\_PATH\_IN=C:\Program Files\

Warning: the path for those two keywords must always end with a backslash (!)

If one (or both) keyword is empty, then the behavior is disabled (works as before, i.e. absolute paths).

Relative path mechanism is also only applied if PATHIN and/or PATHOUT do contain relative paths (i.e. path not beginning by "\\\" or a "letter" + ":").

### **Version 1.0.5 beta (???.09.2011) H [ISS 1.4.0 04/11/11]**

- keyword to allow overwrite of output files  
PROCESS\_ARCHIVE\_OVERWRITE=ON/OFF  
PROCESS\_ERROR\_OVERWRITE=ON/OFF
- fixes quantifier bad reading parameter  
IPM\_QUANTIFIER\_STRENGTH worked only with integer values (0 or 1), now with float
- fixes problem with B&W ReCo modules which didn't worked with JobManager  
4 keywords to manage B&W and RGB separately (modules & internal ReCo ICC profiles)  
IPM\_SPEC\_GRAY\_RECO\_MODULE=<path to specific B&W module>  
IPM\_SPEC\_RGB\_RECO\_MODULE=<path to specific RGB module>  
IPM\_SPEC\_GRAY\_RECO\_PROFILE=<path to specific B&W ICC profile>  
IPM\_SPEC\_RGB\_RECO\_PROFILE=<path to specific RGB ICC profile>
- improvement of convpath.txt generation  
new keyword to decide if detected sharings need to be added as share names (for JobManager Mac, i.e. default) or as UNC paths (JobManager PC)  
IPM\_SPEC\_UNC\_IN\_CONVPATH=ON/OFF  
new keyword to enable (default) manual modifications in convpath.txt (read only mode no more necessary)  
IPM\_SPEC\_UPDATE\_CONVPATH=ON/OFF
- fixes JobManager specification files which were not processed (multiple specification files case, synchronisation problem during deletion of the list of files to process)
- fixes JobManager specification files which were not processed locally. IPM & JobManager on same machine (tested with InDesign CS5): images specified in spec files were not processed and the result file is incomplete (processed filename is empty). Because local paths in specification files were modified according to convpath.txt content.

### **Version 1.0.4 (09.08.2011) [ISS 1.2.0 09/08/11]**

- **Visual C++ update, vcredist2010SP1\_x86 and vcredist2010SP1\_x64 version 10.0.40219.1 required** (or msvcp100.dll & msvcr100.dll version 10.0.40219.1)
- keyword to enable/disable recursivity in workflows

FOLDER\_RECURSIVITY=ON/OFF (default=ON)

can be used globally or for each input folder

- keywords to delete or not empty folders

FOLDER\_REMOVE\_EMPTY\_FOLDERS=ON/OFF (default=OFF)

if keyword is set to ON, it is still possible to prevent specific folders from deletion (even if empty)

FOLDER\_PROTECTED\_FOLDER\_PREFIX\_CHARS=<string>

"string" may contain a list of characters individually used to begin a folder name being protected

### Example

if

FOLDER\_PROTECTED\_FOLDER\_PREFIX\_CHARS=&#@

then

folders named @TODO, &TODO and #TODO will be protected. If a folder contains a protected subfolder, then it will automatically become protected as it will never be empty.

- monitoring of network INput folders was unexpectedly stopping (but IPM still works for other folders). After restarting the service, problem occurs again after a while. Too many simultaneous network requests caused a ERROR\_TOO\_MANY\_CMDS error in ReadDirectoryChangesW. Problem now managed with a tempo and by postponing function calling.

- Specification files sent from JobManager (PC) were not processed. Now supporting UNC paths in convpath.txt.

### **Version 1.0.3 (13.07.2011) [ISS 1.1.0 20/07/11]**

- ***vcredist version 10.0.30319.415 required***

(or msvcp100.dll & msucr100.dll version 10.0.30319.415)

- fixes archiving problem

if a file with same name already existed in Archive, then it stayed in Todo

Now input file is renamed with index value added "-n" and finally moved in Archive

- fixes macro evaluation problem for following keywords

INCLUDE\_FILE and REGISTRY\_KEY

- Service unexpectedly stopped/crashed with multiple network input folders. After restarting the service, problem occurs again after a while. Parsing of network folders now correctly managed.

- Support of input folders priority management. Images were simply processed by date order (FIFO). Keyword (FOLDER\_PRIORITY) allows to specify a prioriy for the input folders. Priority value is between 0 (lowest) and 65536 (highest). A 0 priority folder will be processed when all folders with a higher priority will be empty. A 65536 priority folder will be processed prior to others until it will be empty. In between those two values, the service will share the processing according to the priority level. Thus, a folder with a 100 priority will be taken in account 10 times more often than a 10 priority folder.

Here are available pre-defined constants:

\$\_PRIORITY\_NONE)=0

\$\_PRIORITY\_VERY\_LOW)=1

\$\_PRIORITY\_LOW)=5

\$\_PRIORITY\_MEDIUM)=10

\$( \_PRIORITY\_HIGH)=100

\$( \_PRIORITY\_VERY\_HIGH)=1000

\$( \_PRIORITY\_HIGHEST)=65535

\$( \_PRIORITY\_ABSOLUTE)=65536

- Keyword for output folders recursivity (with same structure as input folders recursivity)  
PROCESS\_DESTINATION\_RECURSIVITY=ON/OFF  
Enabled by default, i.e. Behavior of the service changes from this version.

#### **Version 1.0.2 (08.06.2011)**

- network folders' access improvement (also for paths in JobManager specification files)  
Threads accessing to remote folders are now using "NETWORK SERVICE" session instead of the "LOCAL SYSTEM" session

#### **Version 1.0.1 (31.05.2011) 1<sup>st</sup> 64bits version [ISS 1.0.3 31/05/11]**

- *vc\_redist\_x64 version 10.0.30319.1 required*
- fixes a problem during built of ICC profiles' list (service stopped on some machines)
- quantity of processing units (threads) based on machine's quantity of cores  
if hyperthreading is enabled (i.e. logical cores) then this value is divided by 2
- fixes a thread synchronisation problem preventing some hot folders from being watched
- fixes parameters' initialisation problem in input folders

#### **Version 1.0.0 (18.05.2011) 32bits version only [ISS 1.0.2 25/05/11]**

- *vc\_redist\_x86 version 10.0.30319.1 required*
- fixes problem with corrupted IRB (service crashed)
- now also working with Windows XP  
CryptProtectMemory function not supported (crypt32.dll not found). Under XP, function replaced now by RtlEncryptMemory
- automatic update of Job Profiles list in curparam.txt after each add/delete/rename
- support of old-style IPM WS Job Profiles and new-style IPM Svc as workflow parameters' files

#### **ISS=IPM Service System (minimum version required for matching service)**