

Software for direct printing of radiological medical report with DICOM images for Konica Minolta laser printers

biz:Dicom software has two operation modes:

As an automatic service

Images are printed directly without human intervention. Images can be sent from modalities or from any other DICOM node (PACS, workstation, etc.) which can handle DICOM files using DICOM Storage.

As an independent interface

This means you can view the studies in the queue pending printing and change the print order or priority, delete them or change the print settings.



The core of biz:Dicom software is a DICOM server that receives images from DICOM nodes connected to it. You need to set the AE Title and receive port and enter this data in the sending nodes (modalities, PACS, etc.).

Settings and rules

There are various configuration options plus you can define print rules according to different parameters.

Each rule can be used to define the type of image to which it applies and the output format of the images by applying a number of filters.

Filters

- Delivery mode
- Sending AE Title
- Description (to specify a keyword or fragment to search the description of the DICOM header of the study)

Printing features

- Columns and rows to print per sheet (each image is printed in one of the resulting cells)
- Landscape. Allows you to rotate images 90°
- Inversion. Allows you to print certain types of image on a white background to save toner

- Template. Allows you to select the texts to be overprinted on the images
- Printer. You can select the output printer
- Selecting the paper tray for the front/back and inner pages
- Selecting covers for the front and back for each print rule
- Special booklet sizes for machine folding and stapling
- Option to set the DICOM Level (grey-scale window) for each rule
- Force printing in black and white to reduce costs
- Print priority system to speed up certain types of study
- Optional inclusion of sheet for placing adhesive for CD on the last page
- Preview of documents



Templates

Templates are data structures to be overprinted on radiological images.

You can define an unlimited number of templates based on fixed texts or variable fields to be extracted from the DICOM header of the image.

You can distribute these data in different areas of the image, superimposed on it and print them on each sheet or just the first.

Report

You can print the report in the same process as the images.

Normally images are available before the report. In biz:Dicom there is a configurable option that prevents the study being printed until the report is available.

Usually the report is not in DICOM mode. Consequently HIS / RIS / PACS should keep a copy of it in a shared folder based on the study number (Accession Number) as an identification criterion. This way you can synchronise its printing with the images.

Study completion criteria

Many modalities or PACS are unable to send MPPS at the end of the study, so the completion of the study is carried out by time.

You can define this completion time in the configuration section (default 5 minutes). Thus when the server receives images, it stores them in a temporary folder and when the specified number of minutes has elapsed after receipt of the last image of the study, it prints them as long as the report is available.



Monitoring and print options

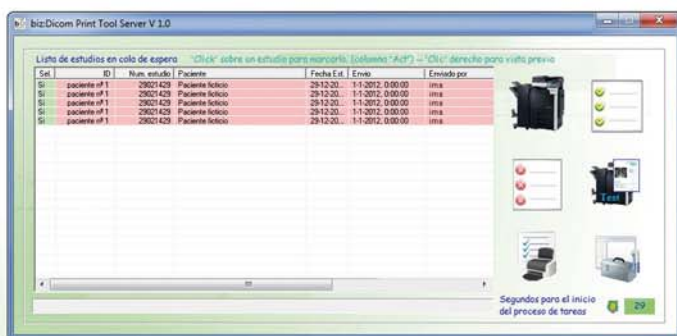
biz:Dicom software makes it possible to monitor the status of printer consumables (toner, paper in each tray, etc.) at all times and also select the tray (which can accommodate paper of different weights) for printing the report and the DICOM images in the study.

Image inversion

Radiological images usually have a black background due to the nature of the radiological films used to date, because in reality they are negatives of them.

You can print with the same appearance on paper, but that means using a lot more toner because you have to cover the paper's white background with black.

The application lets you define print rules with positive radiological imaging, i.e. black on white. This can achieve around 80% toner savings. In all cases it is the user who decides the appearance of their prints.



Copier specifications		
Copying process	Electrostatic laser copy; Tandem; indirect	Electrostatic laser copy; Tandem; indirect
Toner system	Simitri® HD polymerised toner	Simitri HD® polymerised toner
Copy/print speed A4 mono/colour (cpm)	22	45
Copy/print speed A3 mono/colour (cpm)	14	22
Autoduplex speed A4 mono/colour (cpm)	22	45
1st copy/print time mono (seg.)	7,5	4,6
1st copy/print time colour (seg.)	11	5,5
Warm-up time	Approx. 20 seg.	Approx. 25 seg.
Copy resolution (dpi)	600 x 600 ppp	600 x 600 ppp
Gradation	256	256
Multi-copy		1 - 9,999
Original format	A5 - A3	A5 - A3
Zoom	25-400% in 0.1% steps; Autozooming	25-400% in 0.1% steps; Autozooming
Printer specifications		
Print resolution (dpi)	1.200 x 1.200 dpi	1.200 x 1.200 dpi
Controller CPU	PowerPC MPC8536 @ 800 MHz	PowerPC MP8536 @ 1,2 GHz
Page description language	PCL 6c (PCL 5c + XL3.0), PostScript 3 (CPSI 3016), XPS	PCL 6c (PCL 5c + XL3.0), PostScript 3 (CPSI 3017), XPS
Operating systems	Windows 2000, XP, XP64, VISTA 32, VISTA 64, 7, Server 2000, Server 2003, Server 2003x64, Server 2008, Server 2008x64, Server 2008 R2, Macintosh 9.x 10.x, Unix, Linux, Citrix.	Windows 2000, XP, XP64, VISTA 32, VISTA 64, 7, Server 2000, Server 2003, Server 2003x64, Server 2008, Server 2008x64, Server 2008 R2, Macintosh 9.x 10.x, Unix, Linux, Citrix.
Printer fonts	80x PCL Latin, 137x PostScript 3 Emulation Latin	80x PCL Latin, 137x PostScript 3 Emulation Latin
Print functions	Direct print of PCL, PS, TIFF, XPS, PDF, Encrypted PDF files	Direct print of PCL, PS, TIFF, XPS, PDF, Encrypted PDF files
Scanner specifications		
Scan Speed mono/colour (ipm)	Up to 160/160 ipm	Up to 160 ipm
Scan resolution	Max.: 600 x 600 dpi	Max.: 600 x 600 ppp
File formats	JPEG; TIFF; PDF; Compact PDF; Encrypted PDF; Searchable PDF (optional); XPS; Compact XPS; PPTX	JPEG; TIFF; PDF; Compact PDF; Encrypted PDF; Searchable PDF (optional); XPS; Compact XPS; PPTX
System specifications		
System memory (MB)	2.048 MB	4.096 MB
System hard disc (GB)	250 GB	250 GB
Interface	10-Base-T/100-Base-T/1,000-Base-T Ethernet; USB 2.0	10-Base-T/100-Base-T/1,000-Base-T Ethernet; USB 2.0
Network protocols	TCP/IP (IPv4 / IPv6); IPX/SPX; NetBEUI; AppleTalk (EtherTalk); SMB; LPD; IPP; SNMP; HTTP	TCP/IP (IPv4 / IPv6); IPX/SPX; NetBEUI; AppleTalk (EtherTalk); SMB; LPD; IPP; SNMP; HTTP
Automatic document feeder	Up to 100 originals; A6-A3; 35-163 gsm. R-ADF, Dualscan ADF	Hasta 100 originales; A6-A3; 35-163 gr. R-ADF, Dualscan ADF
Printable paper size	A6-A3, customised paper sizes	A6-A3, customised paper sizes
Printable paper weight (gsm)	52-300 gsm	52-300 gsm
Paper input capacity (sheets)	Max. 3.650 sheets	Max. 6.650 sheets
Paper trays standard	Tray 1: 500 sheets, A5-A3, 52-256 gsm Tray 2: 500 sheets, A5-SRA3, 52-256 gsm Universal tray (1)(2): 1x 500 sheets, A5-A3, 52-256 gsm Manual: 150 sheets, A6-SRA3, custom sizes, banner, 60-300 gsm	Tray 1: 500 sheets, A5-A3, 52-256 gsm Tray 2: 500 sheets, A5-SRA3, 52-256 gsm Tray 3 + 4 + 5: 2.500 sheets; A4-A3+; 52-256 gsm (optional) Manual Bypass: 150 sheets, A6-SRA3, 60-300 gsm
Automatic duplexing	A5-A3+; 52-256 gsm	A5-A3+; 52-256 gsm
Output capacity (w. finisher)	Max.: 3.200 sheets	Max.: 3.200 sheets
Output capacity (w/o finisher)	Max.: 250 sheets	Max.: 250 sheets
Stapling	Max.: 50 sheets or 48 sheets + 2 cover sheets (up to 209 gsm)	Max.: 50 sheets or 48 sheets + 2 cover sheets (up to 209 gsm)
Stapling output capacity	Max.: 1.000 sheets	Max. 1.000 sheets
Booklet	Max.: 20 sheets or 19 sheets + 1 cover sheet (up to 209 gsm)	Max.: 20 sheets or 19 sheets + 1 cover sheet (up to 209 gsm)
Booklet output capacity	Max.: 100 sheets	Max. 100 sheets
Copy/print volume (monthly)	25.000 sheets	65.000 sheets
Toner lifetime (Black)	27.000	27.500
Toner lifetime (CMY)	25.000	26.000
Imaging unit lifetime (Black)	70.000/600.000 (Drum/Developer)	130.000/600.000 (Drum/Developer)
Imaging unit lifetime (CMY)	55.000/600.000 (Drum/Developer)	95.000/600.000 (Drum/Developer)
Power consumption	Less than 1,58 KW	Less than 2.0 KW
System dimensions (W x D x H, mm)	615 x 685 x 779 mm	615 x 685 x 921 mm
System weight	Approx. 85 Kg.	Approx. 101 Kg.

Authorized distributor:



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