



Med View

Med Diag

Service manual
6.1 version

9 Display configuration

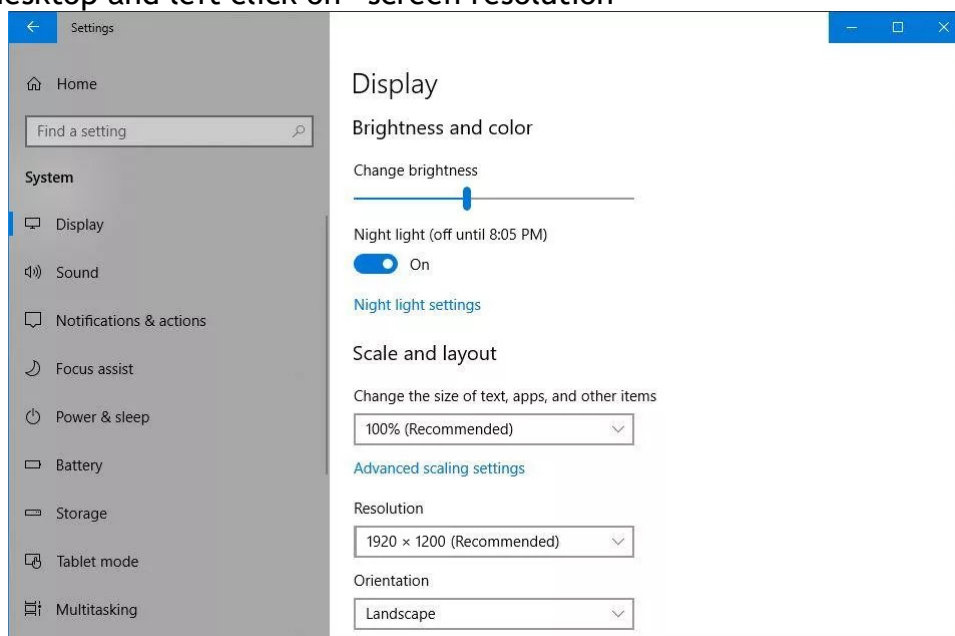
TIP: The monitors are automatically configured during the first deployment. The viewer is set on 1 monitor for MedView, and 2 monitors for MedDiag and MedMammo.

TIP: The monitor configuration for MedDisplay works as the same as for the viewer, except that MedDisplay can be set on only 1 monitor.

9.1 Computer with one monitor



on the desktop and left click on “screen resolution”



The minimum required configuration are:

- screen resolution 1280x1024 pixels
- color quality: Optimal (32 bits).

The advanced button can access to the gamma correction or the color temperature of the graphic board. Make sure you install the latest driver for the graphics card and these software utilities.

9.2 Workstation with 2 monitors

Display properties should look like that:

Display

Select and rearrange displays

Select a display below to change its settings. Some settings are applied to all displays.



For each monitors it is possible to configure the scale and layout:

Scale and layout

Change the size of text, apps, and other items

100% (Recommended) ▼

Advanced scaling settings

Resolution

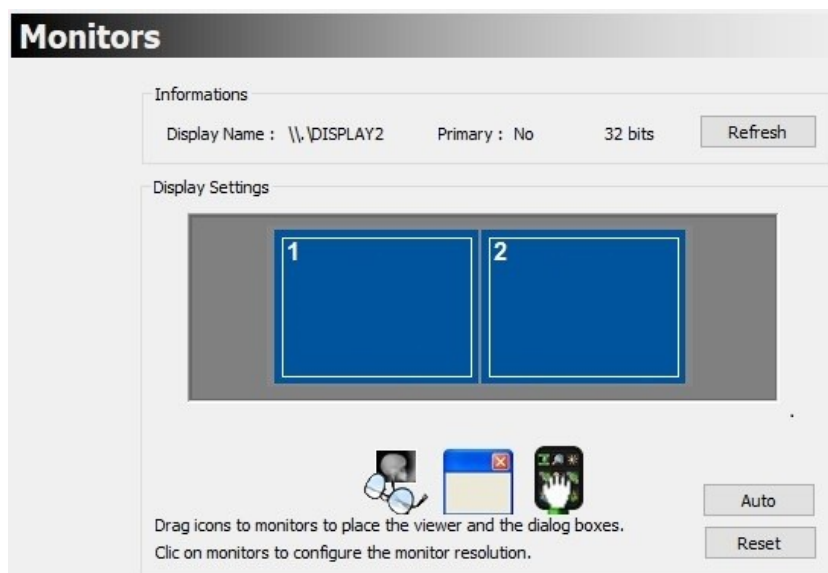
1920 × 1200 (Recommended) ▼

Orientation

Landscape ▼

9.2.1 Start on the secondary monitor

By default the workstation starts on the main monitor. You can change this setup by in the workstation display option. (Options Settings, Maintenance Displays)



The information zone displays the display name, primary screen, and the color depth. Select the other screen and press refresh. Drag and drop the viewer icon or the message dialog on each screen as shown on image below.



This configuration can be useful if you want to set the RIS on the main screen and the workstation on the secondary screen. In most cases RIS/HIS do not manage multi display.

9.2.2 Displaying the study list on a secondary monitor

You can display the viewer on the main screen and the study list on the main display and the study list on the secondary display.

Just drag and drop the study list at the right position. The study list position is automatically saved.

Set in the Options Settings Display: Keep the study list opened.

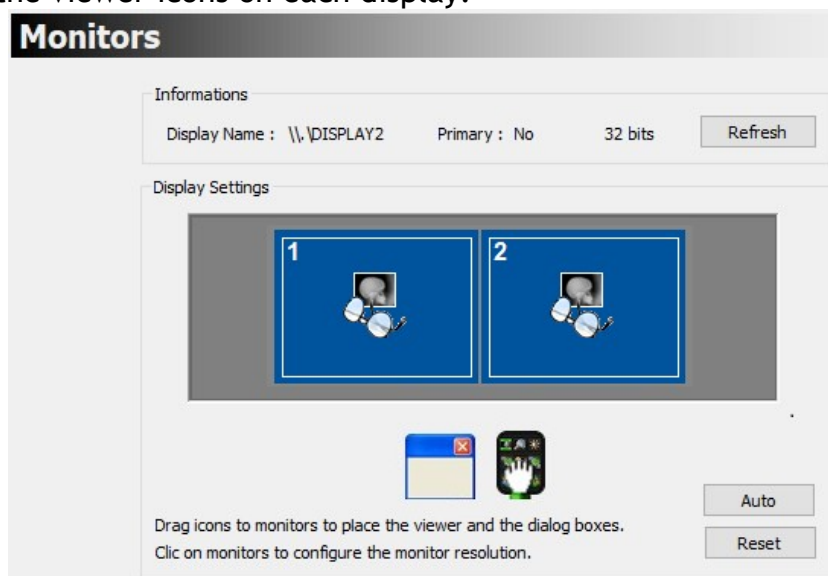
9.2.3 Workstation using 2 monitors for the viewer

WARNING: Both monitors must have the same resolution for example 1600x1200 pixels (2M pixels).

WARNING: Set, if possible the primary monitor for the viewer monitor.

WARNING: Viewing images on both monitors is only possible if the "size of text, applications and other elements" is set to 100%. Refer to the chapter 9.5 Changing « Scale and layout » on Windows 10

Drag and drop the viewer icons on each display:



Restart the workstation to take the configuration into account.

9.3 Workstation with 3 monitors

With this configuration you can have the viewer on 2 monitors and the study list on the third one.

WARNING: Both monitors must have the same resolution for example 1600x1200 pixels (2M pixels).

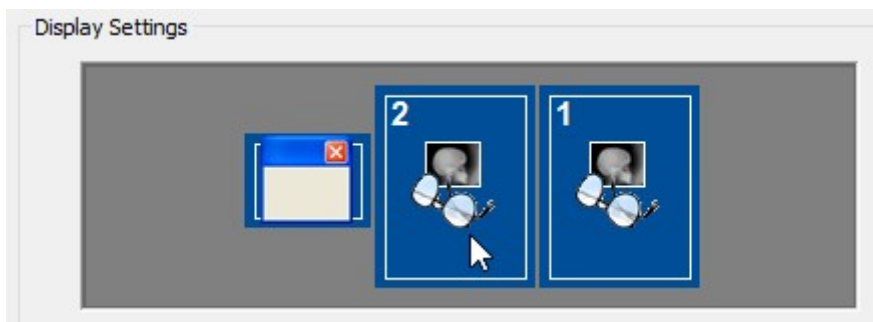
WARNING: Viewing images on both monitors is only possible if the "size of text, applications and other elements" is set to 100%. Refer to the chapter 9.5 Changing « Scale and layout » on Windows 10

9.4 Configuration of each monitor's parameters (validate a monitor)

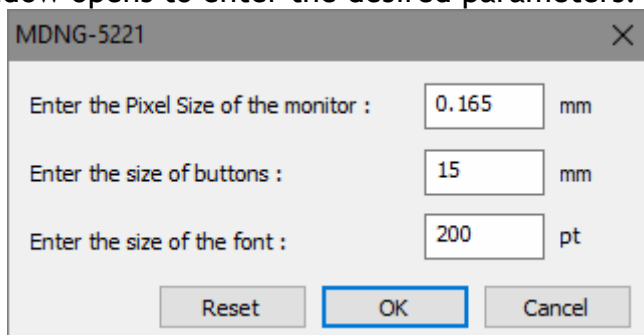
For each monitor, it is possible to configure following parameters:

- the pixel size,
- the buttons size, in millimeters,
- the font size, in point. This font size is for:
 - the contextual menus (accessible with in the application),
 - the drop-down menus (list of series, list of scenarios, list of hanging protocols)

To access the configuration, left click on a monitor representation.



The configuration window opens to enter the desired parameters.



These settings will be applied after a restart of the application.

WARNING: The scale will be displayed on the images (next to the Zoom) only after validating at least 1 monitor that displays the viewer. Validation takes place when the user clicks on "OK".

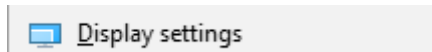
TIP: On MEDMAMMO viewer, the default button size is 15mm, and the default font size is 200 points.

9.5 Changing « Scale and layout » on Windows 10

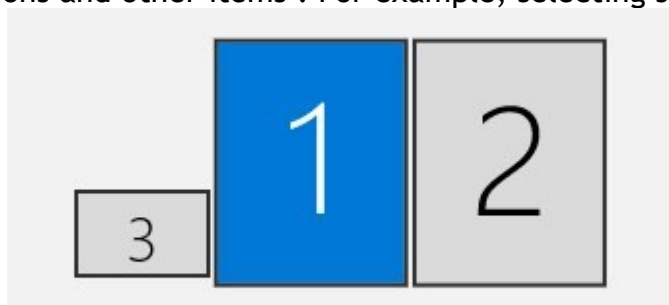
In order to set the main viewer on 2 monitors, these need to have the "scale and layout" positioned at 100%.

To check and change this value, proceed as follows:

- Exit the MEDECOM software if it is open.
- Directly on the desktop, do one  on the wallpaper (or desktop), then click on "Display Settings".



- Select each screen where you want to position the viewer to check "the size of text, applications and other items". For example, selecting screen 1 below



- The size corresponding to this screen is then displayed just below. For example:

Scale and layout

Change the size of text, apps, and other items

150% (Recommended) ▼

- If this value is not "100%", change it using the drop-down menu.

Scale and layout

Change the size of text, apps, and other items

100% ▼

- Repeat for each screen where to position the viewer.

21 DICOM Server Configuration(STORE-SCP)

21.1 Definition

MEDDcmSrv is the software used to receive DICOM images from different modalities. The DICOM Server is running a DICOM STORE-SCP service.

MEDDcmSrv is working as a service. MEDConfig is the configuration software, when running, an icon is displayed in Windows systray bar:



To know which image are accepted you have to refer to the DICOM conformance statement of the product.

21.2 Limitations

There is no limitations on the IP address, neither on the AET for the image reception from the modalities.

No specific configuration is needed to receive DICOM files when a modality send DICOM files on the server. When adding a new modality on the network, there is nothing to do on the server configuration.

21.3 Images location on the hard drive

DICOM images are stored in a specific directory called CACHE which following directory style:

CACHE\MODALITY\YEAR\MONTH\DAY\SERIEUID\MODALITY.SOPUID.dcm

Example:

- a CR radiology DICOM image
- SOPUID = 1.2.3.4.5.6.7.8
- serieUID = 1.2.3.4.5.6.7
- study date = 01 January 2010
- the cache path is: C:\CACHE

The image will be stored this way:

C:\CACHE\CR\2010\01\01\1.2.3.4.5.6.7\CR.1.2.3.4.5.6.7.8.dcm

Files are stored in a temporary directory, then transferred to the cache after validation of data integrity (UID Dicom, conflicts with existing image, etc.).

Warning: DICOM images can not be copied directly in the cache directory. Use the import tools from the workstation or the server tools to do this action properly.

21.4 Checking images integrity

To maintain database integrity images are check before being inserted.

22 Films spooler configuration (PRINT-SCU)

Warning: The DICOM Print Spooler is an option, contact your reseller to know if your product has this option.

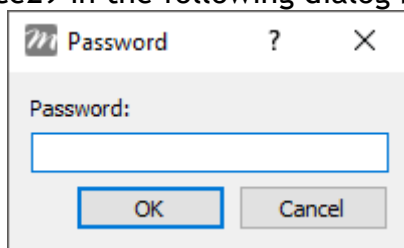
22.1 Definition

MEDSpooler is the PRINT-SCU service software in charge of sending the films to the laser. It works in background mode. When the service is started an icon is visible in Windows systray bar:



22.2 Configuration

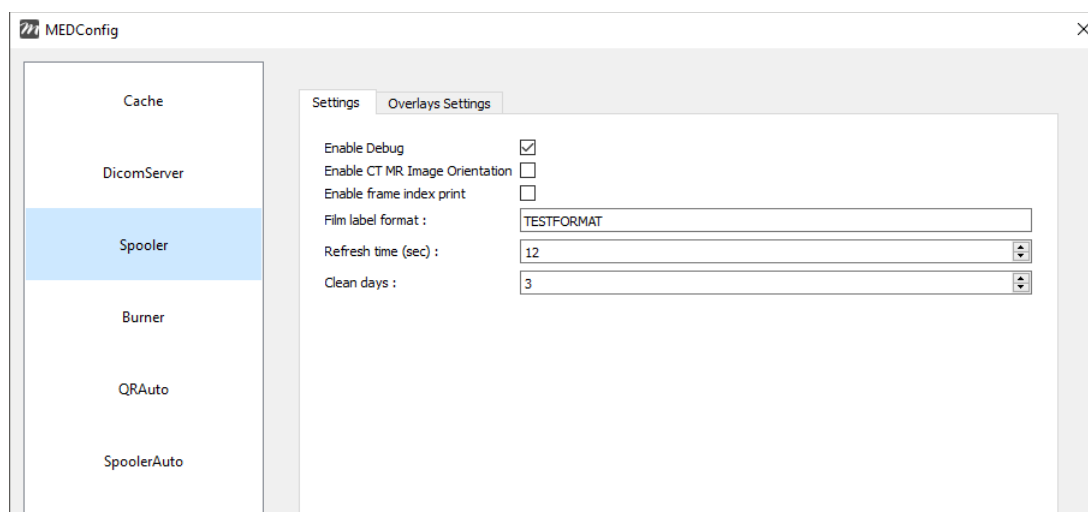
- Right click  on the systray icon
- Left click  on "Settings"
- Type the password: moce29 in the following dialog box



- Click  on OK

22.3 Parameters (tab Settings)

Spooler properties are manageable in the following window:



- **Enable debug:** activate debug logs. 2 files are created one for the Spooler and one for the communication: MedSpooler.txt et DcmPrn-log.txt. Keep logs activated only when needed, files can get big heavy

- **Enable CT/MR Image Orientation:** Print the orientations (F\H\L\R\A\P) on the edge of the images
- **Enable frame index print:** Add the number of the frame printed as overlay for multi-frames images.
- **Film label format:** some printers use this information to retrieve patient information (cf 22.4 How to modify the "Film label format").
- **Refresh Time:** Delay in seconds between each check by the spooler. It checks if there is a film to be printed.
- **Clean Days:** Number of days, the printed films are stored in the job queue

22.4 How to modify the "Film label format"

Here is the list of keywords that will be replaced by the value corresponding to the printed element:

DBID_PATIENTSNAME	Patient name
DBID_PATIENTSID	Patient ID
DBID_PATIENTSDOB	Patient date of birth
DBID_PATIENTSSEX	Patient sex
DBID_PATIENTSHEIGHT	Patient height
DBID_PATIENTSWEIGHT	Patient weight
DBID_STUDYID	Study ID
DBID_STUDYUID	Study UID
DBID_STUDYDATE	Study date
DBID_STUDYTIME	Study time
DBID_STUDYDESC	Study description
DBID_ACCESSIONNUMBER	Accession number
DBID_INSTITRESIDENCE	Institute name
DBID_REQUESTINGSERVICE	Service
DBID_SERIEUID	Serie UID
DBID_SERIENUMBER	Serie number
DBID_SERIEDESC	Serie description
DBID_MODALITY	Modality
DBID_INSTITUTIONNAME	Institution name
DBID_PERFORMINGPHYS	Performing physician name
DBID_PATIENTPOSITION	Patient position

DBID_OPERATORNAME	Operator's name
DBID_REFERRINGPHYSNAME	Referring physician name
DBID_BODYPARTEXAMINED	Body part examined
DBID_STATIONNAME	Station name

If several keywords are put in the field "Film label format", they will all be replaced.

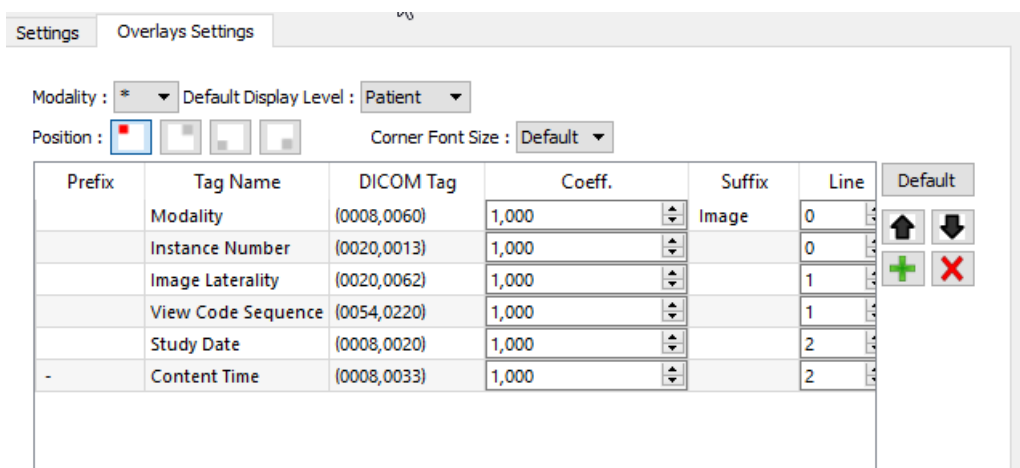
Default value: DBID_PATIENTSNAME

Example with 2 keywords: DBID_PATIENTSID DBID_ACCESSIONNUMBER

The values corresponding to these keywords will be set in the DICOM tag "Film Session Label" (2000, 0050).

22.5 Settings of the overlays used in printing

Overlays for printing are configured in the tab « Overlays settings ». Refer to the chapter "13 Overlays configuration" in the Service Manual for more information.



Settings Overlays Settings

Modality : * Default Display Level : Patient

Position :  Corner Font Size : Default

Prefix	Tag Name	DICOM Tag	Coeff.	Suffix	Line	Default
	Modality	(0008,0060)	1,000	Image	0	 
	Instance Number	(0020,0013)	1,000		0	 
	Image Laterality	(0020,0062)	1,000		1	
	View Code Sequence	(0054,0220)	1,000		1	
	Study Date	(0008,0020)	1,000		2	
-	Content Time	(0008,0033)	1,000		2	