

The logo features the word "mediadent" in a dark, lowercase, sans-serif font. It is centered and overlaid on a graphic of numerous thin, curved lines that sweep across the page from left to right, creating a sense of motion and depth.

mediadent

Mediadent user manual V8

Part 1: Mediadent

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2 Welcome page

Intended use:

Mediadent is an imaging software for dental and maxillo-facial professional users only, i.e. licensed dentists, orthodontists, and dental assistants. Mediadent visualizes, processes and saves digital or digitized images acquired with dental imaging devices.

With Mediadent, images can be sent to various archiving and communication systems.

The Mediadent software is to be used on a computer with a Windows operating system in the dentist's practice or the dentist work area (office).

Mediadent proposes various digital image processing tools to improve the quality and diagnostic value of the acquired 2D and 3D images. It allows the user to magnify/reduce images, apply pre-defined filters such as image sharpness and contrast and to perform measurements on the images. The Dental Facial Orthopedics (D.F.O.) module permits the orthodontist and maxillo-facial surgeon to perform automated cephalometric analysis.

Mediadent aims to facilitate image interpretation by providing the user a clear, enhanced view of the dental health of the patient and subsequently support diagnosis, treatment planning and follow-up.

Residual risk:

Corilus would like to draw attention to the following residual risks associated with the use of Mediadent:

1. Software bugs are inherent to any software system, such as Mediadent. Corilus has processes in place to prevent, identify and resolve known bugs timely. Despite these efforts, the risk of an unknown bug in Mediadent, which could potentially lead to information being wrongfully processed or displayed incorrectly, is nonetheless inherently present.
2. Corilus attaches the greatest importance to safeguarding information security and data protection for its products and related services. Nevertheless, cybersecurity is a joint responsibility between Corilus and the users of the software and a security incident always remains a potential risk in a connected environment. As a user of Mediadent, we therefore strongly advise to protect your workstations by keeping your operating system and SDK/drivers up to date and by installing firewall and endpoint protection software (e.g. anti-virus).
3. Mediadent relies on correct use by the user. To support correct use, a minimum requirements list (part of this user manual), training materials and user-documentation on Mediadent are made available and updated on a regular basis by Corilus and its Distributors. Yet, human error in the use of Mediadent cannot be ruled out and could possibly lead to erroneous output.
4. The user remains responsible for the dental imaging hardware's maintenance and configuration. Errors directly associated with a faulty dental imaging hardware might result in a risk in the Mediadent software (e.g. source image comes into Mediadent poorly calibrated). Mediadent can't be held responsible for any malfunction of the devices it interfaces with or any wrong images (e.g. not calibrated correctly) that are sent to Mediadent.
5. Corilus wishes to provide state of the art imaging software and best of class service and support. That is why, we have set up and maintain an effective Quality Management System, based on the ISO-13485 standard. Even though we continuously improve our quality processes, there is always a small chance that an error occurs which potentially impacts the product's performance or safety. In such a case, we ask the user to contact Corilus as soon as possible (via the Distributor, if relevant) so that we can identify the root cause and take the necessary corrective and preventive actions.

All identified risks are reduced as low as possible and none of these residual risks are deemed unacceptable. Undesirable side effects and contraindications for the use of Mediadent have not been identified.

Clinical benefit:

Mediadent offers a wide range of state of the art image enhancement, processing and measurement tools to provide a positive impact on patient management by supporting accurate diagnosis, treatment planning and follow-up.

Special considerations:

The Mediament imaging software is always integrated in a **Patient Management System (PMS)**.

All Patient Management Systems compatible with the use of the OLE interface are deemed compatible if they correctly implement the specifications of the “Embedding Mediament” documentation.

The use of the command line-interface is not officially supported anymore, but that we assist on a best effort basis for backwards compatibility reasons. Please, contact your dealer if you have questions about this type of interface.

You will be able to launch Mediament via the PMS system by clicking on the Mediament icon.

The list of compatible hardware imaging devices can be found on our www.imagelevel.com website. In case you have questions about compatibility, please contact your Dealer Support.

For first time users, we recommend that you follow the 'Getting Started' module to get a good overview of the most common tasks.

Please, read section 13 for more important user information.

What's new in Mediament v8

In this topic you will find an explanation of the new features of Mediament v8. This section will allow you to get a quick overview of what is new so experienced users can get a head start.

What is new in Mediament v8 ('What is new in Mediament' in the on-line documentation)

1. Getting Started

First time users can go to the 'Getting Started' section. Here you will find an overview of common used functions in Mediament.

It's a great starting point...

Getting Started (Section 5)

2. Step by Step

Follow these steps and learn how to acquire and image, manipulate the image, print and save the image.

1. Acquisition of an image (Section 5.2)

2. Working with images (Section 6.2)

3. Saving and Printing ('Saving and Printing' in the on-line documentation)

3. How to

The '**How to**' section will offer a number of tips and tricks on how to use Mediament.

How to (Section 7.1)

4. Quick reference

Click on the topics if you want to get a quick overview of the functionality you will find in the menu or in the icon set.

Overview Icon Set (Section 4.4)

Overview Menu (Section 8.2)








5. Help

In this section you will read how to use the Help and how to get support.

Using Help (on-line documentation)

Getting support (Section 13)

6. Symbols used in this document and on the label

Symbol	Title	Description
	Manufacturer	Indicates to the name and address of the manufacturer.
	Date of manufacture	Indicates the date that the product was manufactured, expressed as four digits for the year ("YYYY") and two digits for the month ("MM"). For software, this represents the production release date.
	Consult instructions for use	Indicates the need for the user to consult the instructions for use. The user manual (instructions for use) is supplied in electronic format. You may consult the user manual via the Help section of the Mediadent software via the Help-menu or by hitting the "F1"-shortcut key. Alternatively, you may also download a PDF copy via www.imagelevel.com or request a printed copy free of charge by contacting our Customer Support. Paper manuals will be delivered at the latest within 7 calendar days.
	CE Marking	The letters 'CE' appear on many products traded on the extended Single Market in the European Economic Area (EEA). They signify that products sold in the EEA have been assessed to meet high safety, health, and environmental protection requirements.
	Medical device	Indicates that the item is a medical device.
	Unique Device identifier	Indicates a carrier that contains Unique Device Identifier ("UDI") information.
	Translation	To identify that the original medical device information has undergone a translation which supplements or replaces the original information

3 User information

3.1 Minimum System Requirements

- OS:
 - Microsoft windows 8.1 or higher
 - Latest info on supported OS versions: <https://support.microsoft.com/nl-be/help/13853/windows-lifecycle-fact-sheet>
- CPU:
 - Dual core processor or higher.
- Main Memory:
 - 4 GB RAM internal memory or more
- Graphics:
 - For 2D imaging:
 - Integrated or dedicated graphics card.
 - Resolution: 1024x768 or higher
 - Memory: 256MB
 - For 3D viewer:
 - Dedicated graphics card
 - Resolution: 1024x768 or UHD or HD
 - Memory: 4GB
 - For CT image capture:
 - This depends on the hardware that is being used.
 - Dedicated graphics card
 - Resolution: 1024x768 or UHD or HD
 - Memory: 4GB
 - Some devices need NVIDIA CUDA support (<https://developer.nvidia.com/cuda-zone>)
- USB ports:
 - 1 free USB1.1 port (or higher) for license key (Single user installation)
 - 1 free USB2.0 port (or higher) for USB capture devices.
- Storage:
 - Type: SSD (Solid State Drive) recommended. (fast)
 - Size: Minimum 512 GB
 - User must have full rights on the program and data directory.
- Network Adapter:
 - Windows driver available for the installed OS.
 - 10/100/1000 Mbps
 - RJ-45 connector
 - Solid network connection.
 - Some x-ray device needs additional dedicated network card.
- Network Data shares:
 - file change notification to correctly refresh the image library and status view.
 - Windows: SMBv2 or higher
 - NAS / Linux: Samba 2.0 or higher (smb.conf | Default: change notify = yes)
 - User must have read/write rights on the data share.
- Software

- PDF for accessing the electronic instructions for use (“User manual”) or the built-in Windows Help Viewer

3.2 Important user information



Warnings and precautions:

- Users of Mediadent should be dental healthcare practitioners qualified to perform and interpret dental imaging.
- Introduction training on the use of Mediadent software is provided by your dealer during the installation process. Users also receive access to the full set of documentation, available via www.imagelevel.com. In case of further questions regarding use, the user is requested to contact the dealer for support or to request a formal training to be scheduled.
- This software is an aid to diagnosis only. You must apply your professional training and judgment before deciding a course of treatment.
- Installations may only occur on environments that fulfill the **minimal system requirements (Section 3.1)**. The user is responsible for the supporting infrastructure (e.g. computer maintenance, network connectivity, electrical power) and its stability.
- The **minimal system requirements (Section 3.1)** inform the user that the use of virtualization is not officially supported. Please, contact your dealer if you have questions about the use of virtualization.
- Radiographic images are not for diagnostic use when viewed on displays or monitors that do not meet **minimum system specifications (Section 3.1)**.
- Any connected devices must be present on the compatibility list (see our www.imagelevel.com for the complete overview) to be officially supported.
- The user remains responsible for verifying the quality of images and the associated meta-data while using Mediadent software and when importing to and exporting from Mediadent.
- It is recommended that you do measurements or drawings only on calibrated images. Doing this on an image with no calibration information requires use of a reference segment of known length.
- Annotations and measurements made in the software are under your own responsibility. A radiographic image is a two dimensional image of a three dimensional object, and measurements may be subject to errors. Measurements are only informative and operations requiring precise positioning on the patient are under your own responsibility.
- Panoramic or OPG images, by their nature, contain distortions due to magnification both vertically and horizontally. Any calibrations on these image types must be seen as rough guides that apply only to the immediate vicinity of the calibration. Inserting objects of pre-determined length such as implant simulators provides approximative information.
- Patient orientation information is not provided for intraoral images, computed radiography (CR) images, cephalometric oblique images or

color images. Orientation of these images depends on user manipulation and patient positioning.

**Serious incidents:**

Please report any incidents relating to Mediadent software without delay to your dealer. Your dealer shall do what is necessary to fulfill their legal and contractual obligations and to help mitigate the incident as soon as possible.

You may also contact your local competent authority for vigilance. For EU, the list of contact details is available via their website.

This table provides an indication of the measurement performance of Mediadent. The variations observed during these measurements may not truly reflect the potential variance of actual dental measurements in clinical practice, which may be more difficult to perform. It is recommended to calibrate the sensor using the standard calibration algorithms to maintain consistency in measurements.

	Mediadent measurement performance		
Gold standard: true object length (in mm)	Mean Measured (in mm)	Standard deviation (in mm)	95% confidence Interval (in mm)
Test object 1: 10.000	10.004	0.018	10.000 +- 0.016
Test object 2: 20.000	20.022	0.029	20.000 +- 0.026

4 What's new in Mediadent v8

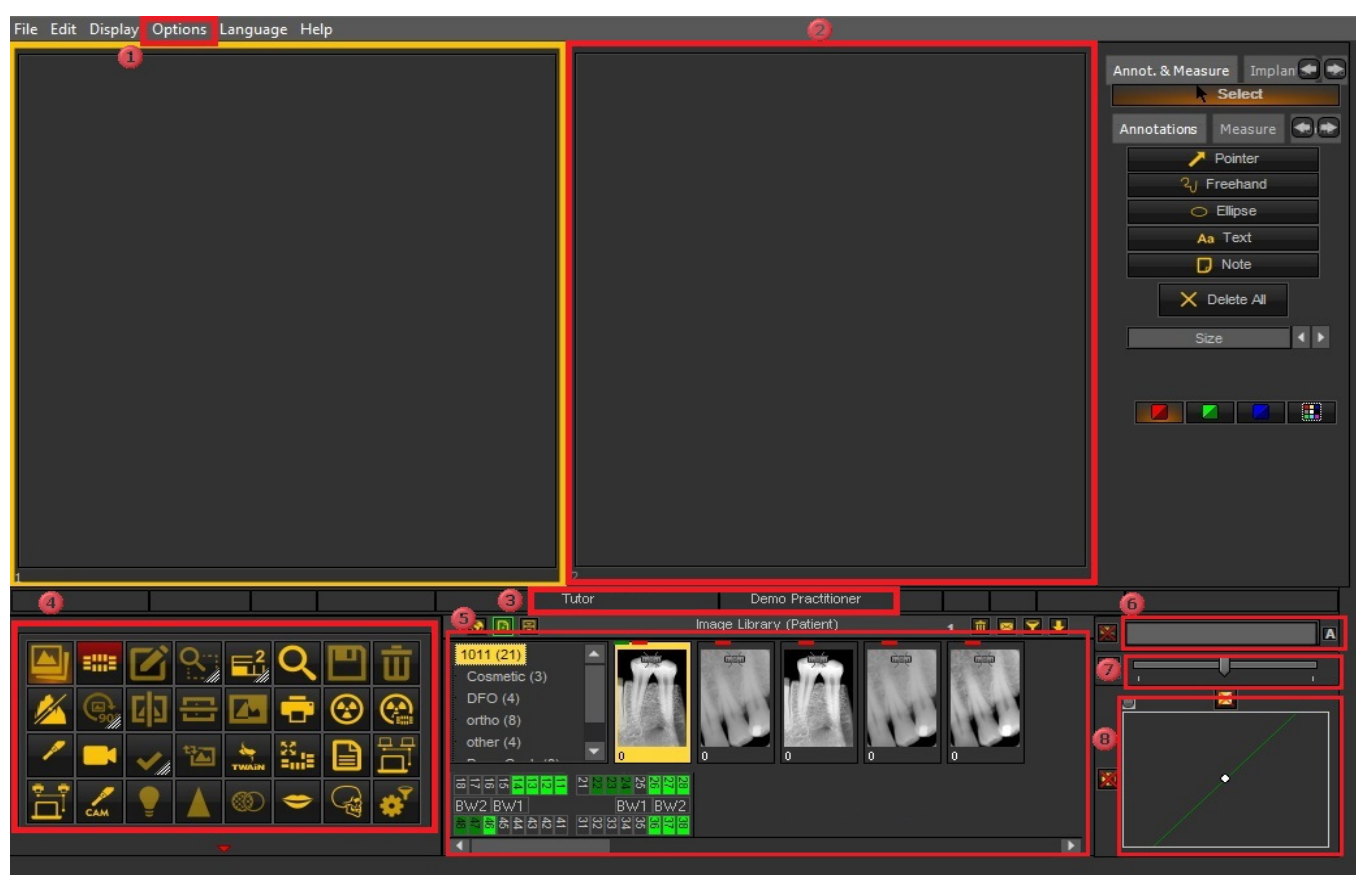
4.1 Overview of the Mediadent screen elements

You will **launch** Mediadent through your **Patient Management System** (PMS). Mediadent will receive its patients information (name, ...) from the Patient Management System.

In this article we will give an **overview of the different Mediadent screen elements** and there function.

It's a good start to getting to know Mediadent better.

Once you have launched Mediadent can get the following screen:



1	These are the different options in the menu. In most of the cases the options are also available through the Icon Set .
2	These boxes on the screen are called Viewports . You can activate a Viewport and load a patients image. For analysis and diagnoses purposes you can have up to 5 Viewports on your screen. This means you can compare up to 5 images of the same patient. Explore the possibilities of the Viewports in the article Working with Viewports (Section 6.1.3) .
3	This is the Status Bar , it will show you the patient's name and practitioners' name.

4	The Icon Set allows you to quickly access certain functionality. Clicking on an icon will get you to the desired functionality.
5	The Imaging library contains all the images from a particular patient. The patient information can be read on the Status bar . You can also see the images of the patient in the Status Mount. See Also Working with the Image library (Section 6.5.4) .
6	The Windowing slider is one of the most powerful features of Mediadent. It allows you to limit the number of gray scales in your image. See Also Working with Windowing (Section 6.2.2) .
7	The Pseudo Color slider allows you to convert the gray scales from the image into pseudo colors. See Also Working with Pseudo Colors (Section 6.2.3) .
8	The Histogram of the image represents the distribution of the pixels. It shows the amount of pixels per gray scale. You will be able to improve the images. See Also Basic manipulation of an image (Section 5.3) .

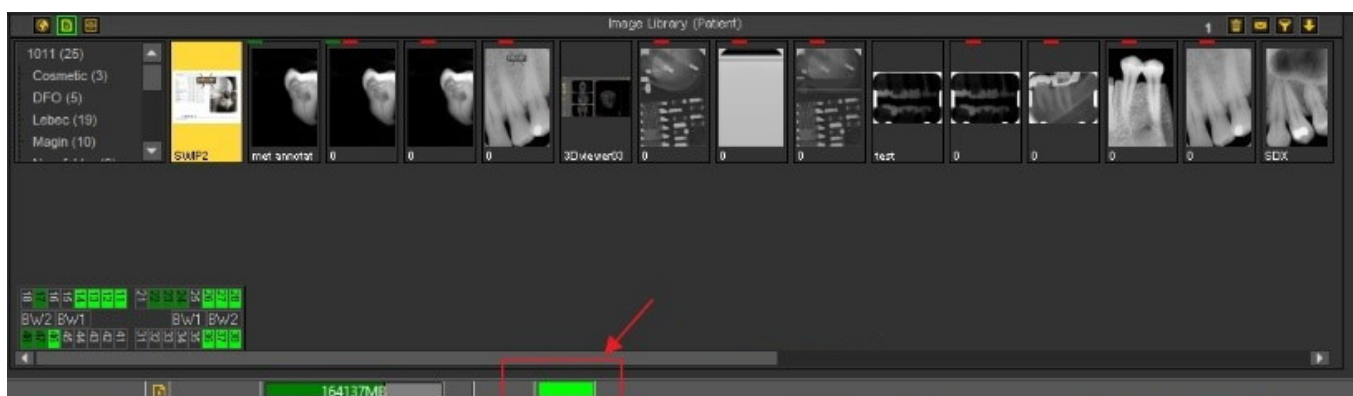
At the **bottom** of the screen you will see a bar :



The bar indicates how much **disk space** is in use. If the bar is **green**, you have enough room to store the images. An **orange** or **red** bar indicates that it is time to look for an extension of your hard disk/server.

The **new notification center** which is integrated in the lower information bar at the bottom of the screen will give you a visual aid and warn you when there are problems.

When everything is fine, the bar is green.

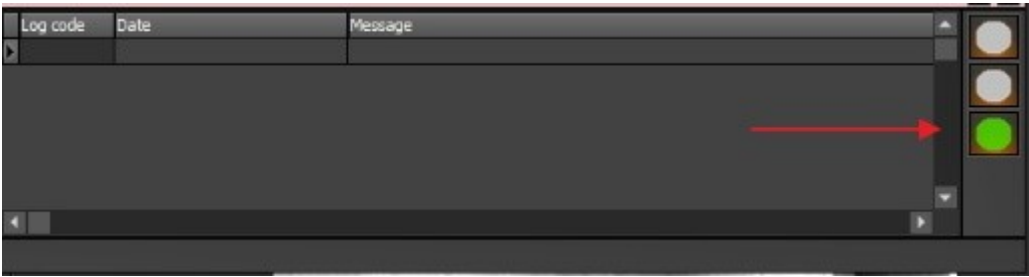


Double click on the bar and this will show if there is a problem.

You will get an overview of the problems, if there are any. A simple traffic light will show you if the issue is critical or not.

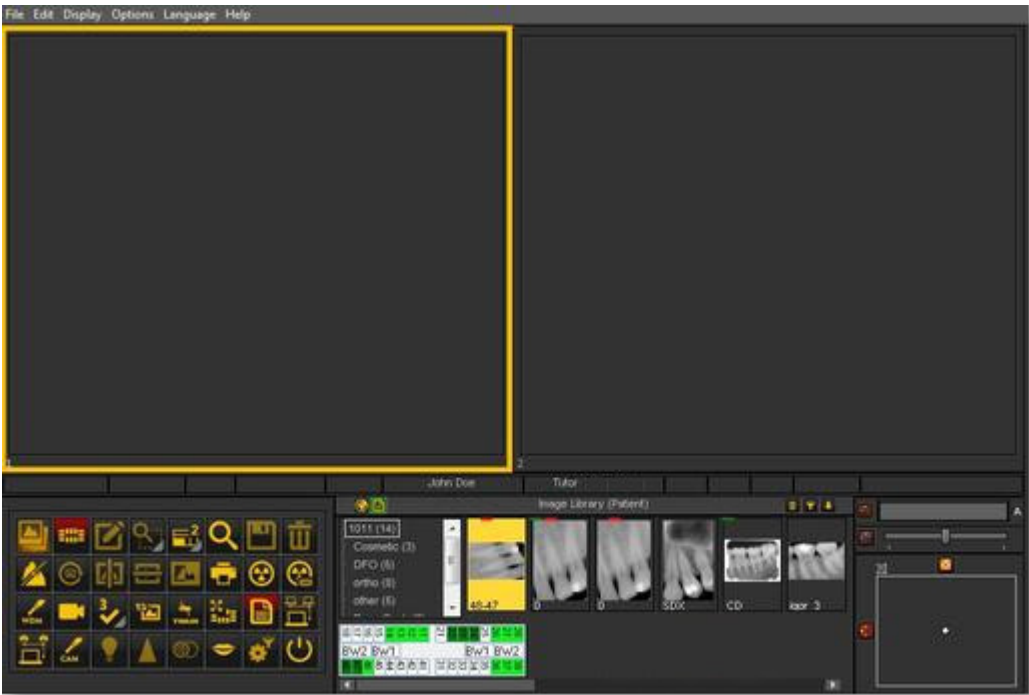
- Green : everything is fine
- Orange : be careful, you should take a look at the issue
- Red : critical error

In the screen, you will get a description of the issues.



4.2 Change the screen layout in Mediadent

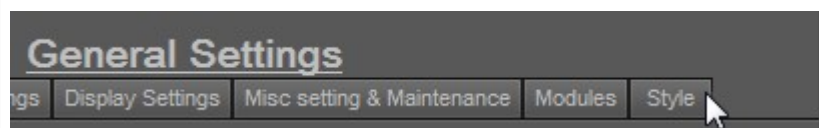
In Mediadent v8 it is very simple to change the **look and feel of the screen**.



Maybe you would like to use the **classic icons** you are used to using in the previous version. The following article will guide you through the steps you need to take so you will get your familiar desktop back.

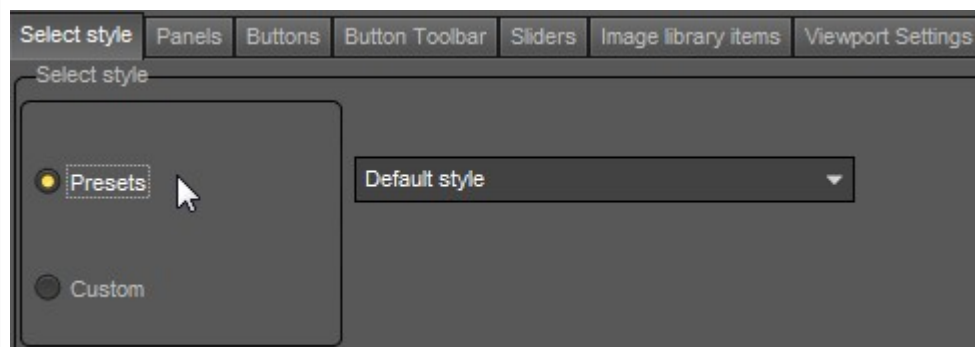
Action	Explanation
<div>In the Mediadent menu, choose Options > Setup</div> <div></div>	<div>You will be presented with the options.</div>

Choose the last tab '**Style**'



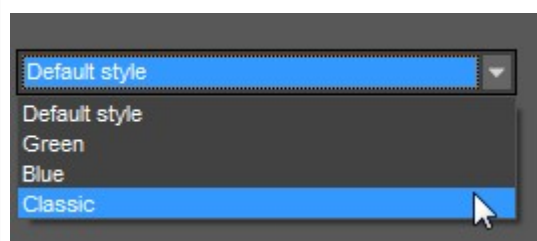
The Style tab in the setup provides you with all the options to change the look and feel of the program.

On the Select style tab, choose '**Presets**'



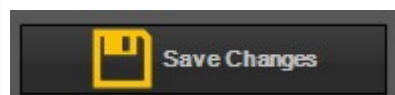
For your convenience we have built a number of presets you can choose from.

In the 'Presets' drop down menu, choose 'Classic'.



The **Classic** preset will give you the classic icons back together with the look and feel of the previous version of the application.

Choose '**Save Changes**'

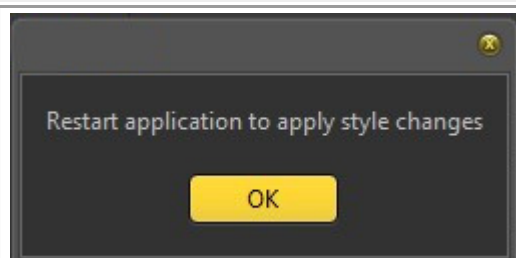


Don't forget to save the changes or the changes will not be applied.

Choose '**Exit**'



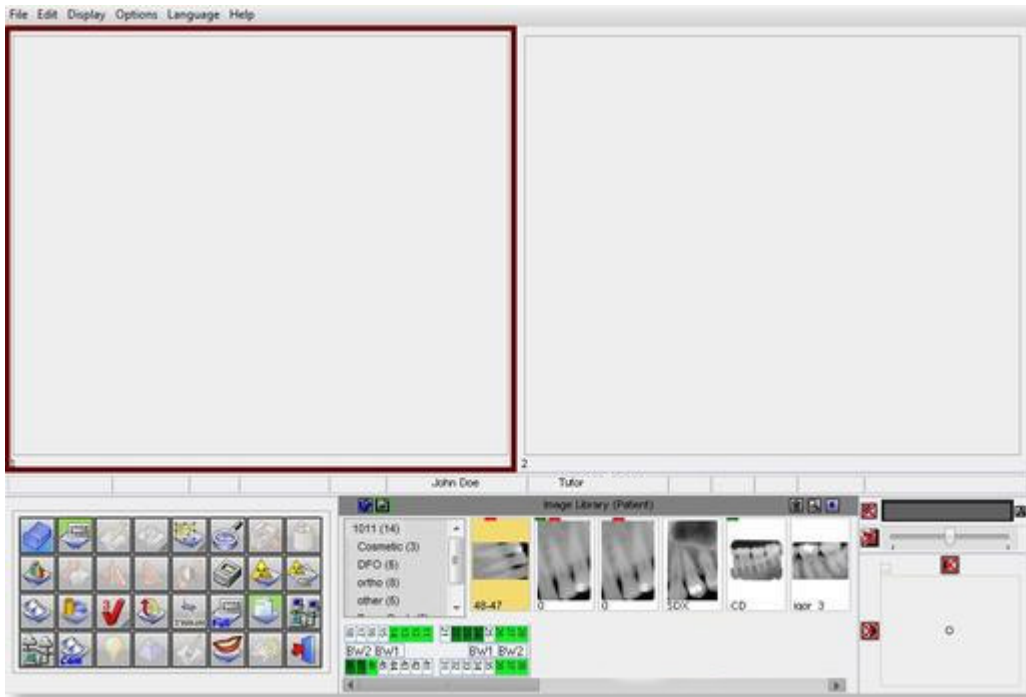
Exit the setup screen.



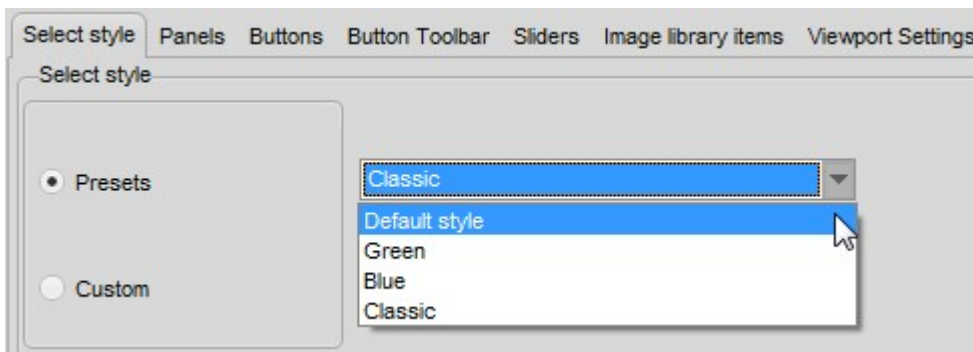
You will need to **relaunch** the program in order to see the new chosen preset.

So exit the application by clicking on the Exit button and relaunch.

After you relaunch the application, you will get the **classic look and feel**.



To go back to the new look and feel. Follow the above steps and select the '**Default**' style.




4.3 Working with the positioning guide

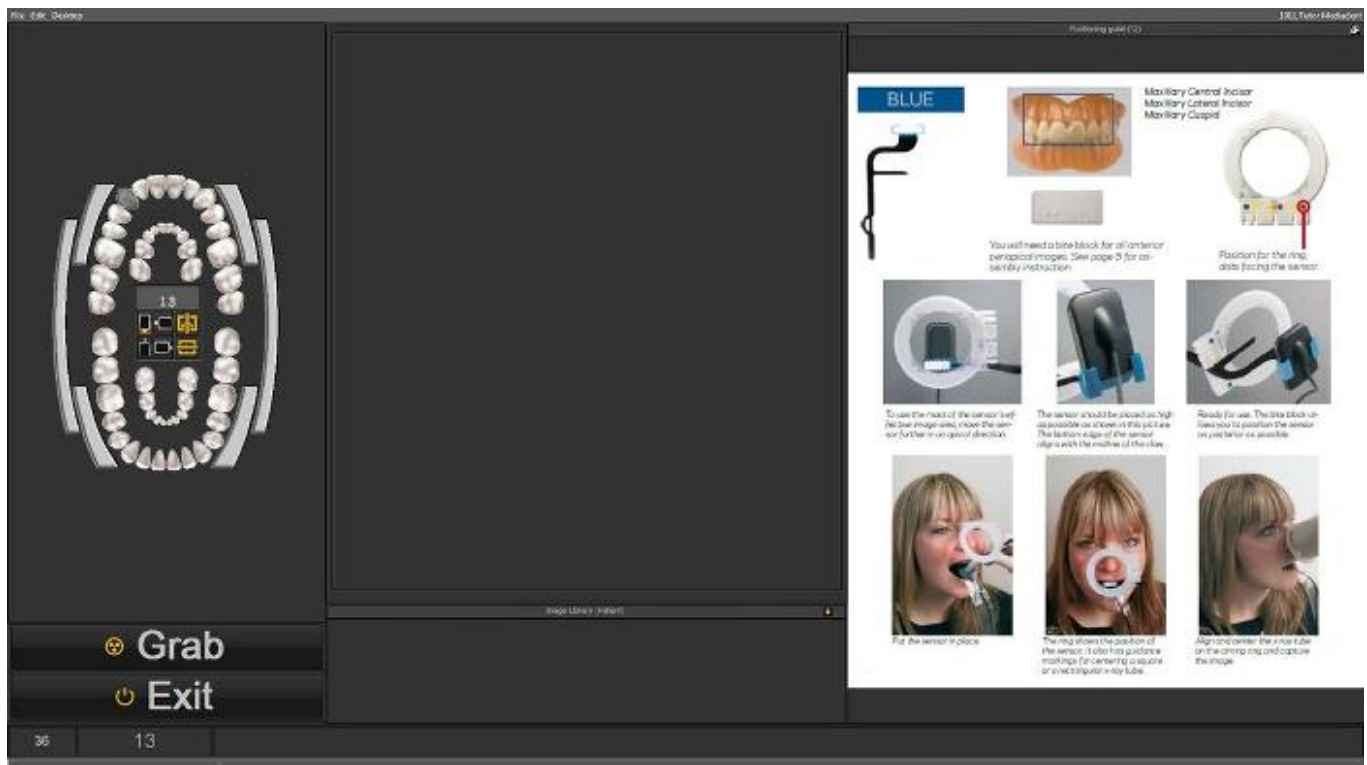
The positioning guide offers you a **visual aid** on how to position the intra-oral sensor.

The new guide is integrated in the teeth scheme so depending on the **teeth selection** you will be presented with a picture on how to **position** the sensor in the mouth of the patient.

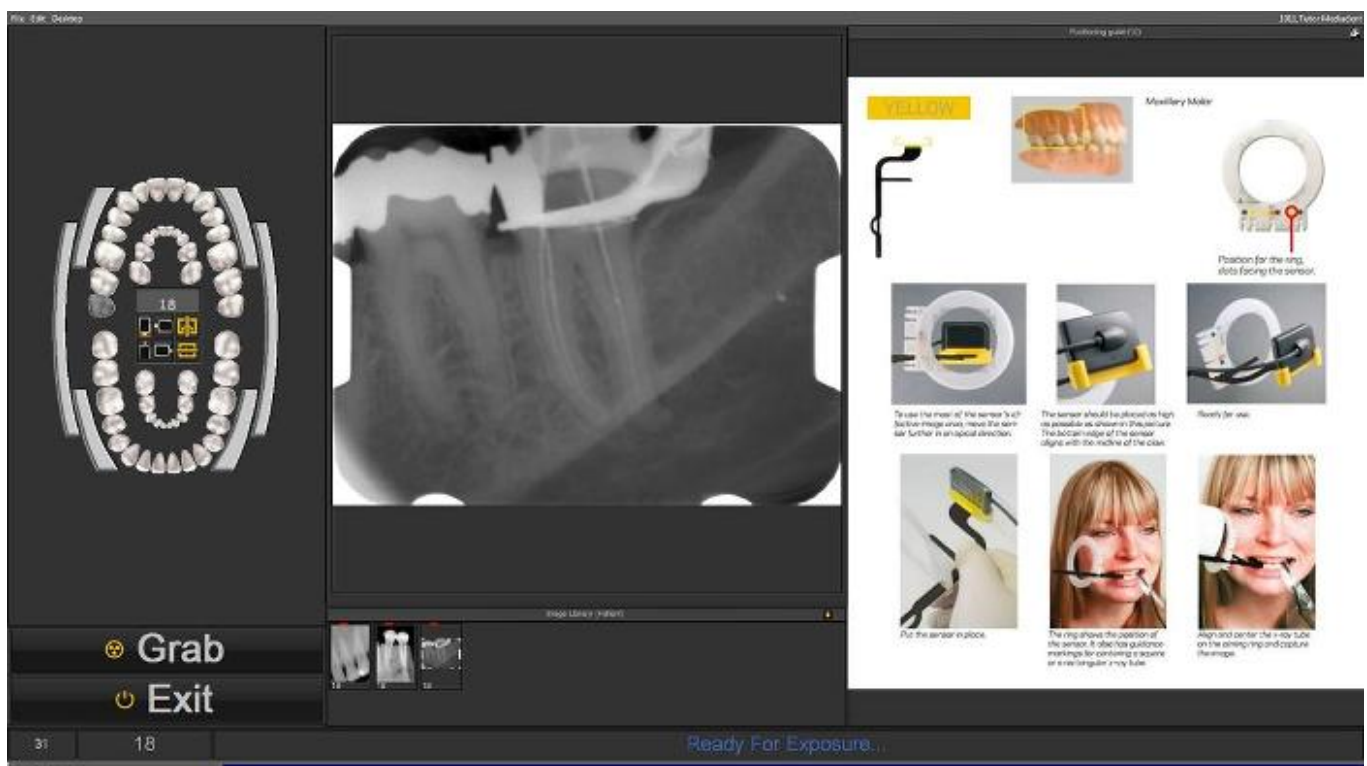
You can also have the possibility to pay a short instruction movie.

 At this moment the positioning guide is still under construction and not yet complete.
Our goal is to have different examples for every tooth selection.

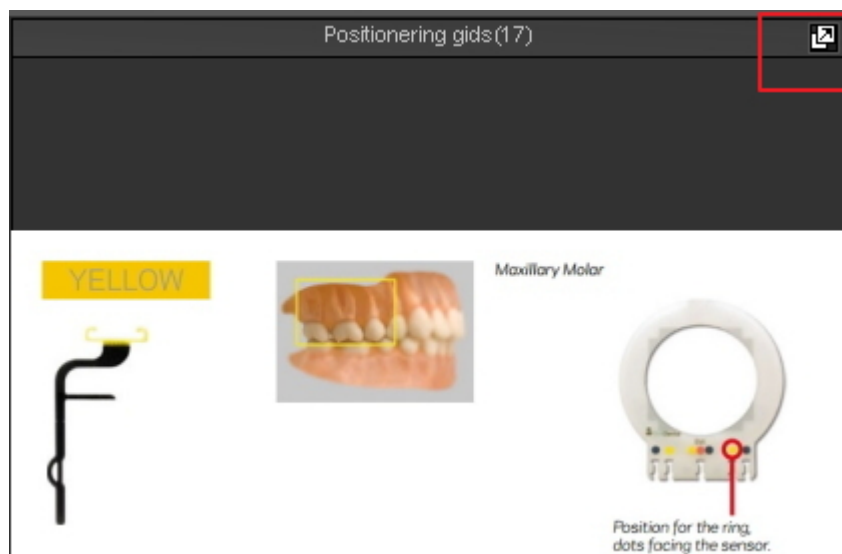
In this example we select **teeth 13** and the positioning guide will show you how to use the holder set and how to position the sensor in the mouth of the patient.



If **tooth 18** is selected another picture will appear showing you the way to position the sensor for this tooth.



You have the possibility to see the positioning guide in full screen mode. Click on the small icon in the right top corner of the positioning guide.



4.4 Overview icons

In this article we will briefly explain the usage of the iconset and give an overview of the different icons and their function.

It will offer a **great overview** of the possibilities of Mediadent.

When an **image is loaded** into a Viewport, you will see the active relevant icons.


































New Mediadent v8 functionality



























The **new filter window** provides you with a visual view on how to enhance the **quality** of you image.









Working with the filter window (Section 4.9)


Icon	Previous icon	Explanation
		<p>Icon to activate the Image Library. The image library contains all the images of the selected patient.</p> <p>Articles concerning the Image Library:</p> <p>Working with the image library (Section 6.5.4)</p> <p>Change the order of the images (on-line documentation)</p> <p>How to search for images (Section 7.3.3)</p>
		<p>Icon to activate the Status Mount.</p> <div style="border: 1px solid black; background-color: #ffffcc; padding: 5px;"> <p> If the icon has a green glow it means that there are a number of Status Mounts defined.</p> </div> <p>Articles concerning the Status Mount:</p> <p>A status mount (Section 12.3)</p> <p>Working with the status mount in acquisition mode (Section 6.4.2)</p>
		<p>Icon to activate the Annotations.</p> <p>Article concerning the Annotations:</p> <p>Working with annotations (Section 6.2.4)</p>
		<p>Icon to choose the shape of the Region of interest.</p> <p>Press and HOLD the left mouse button until the icon expands.</p>  <p>Article concerning the Region of interest:</p> <p>Working with region of interest (Section 6.2.6)</p>
		<p>Icon to choose the number of Viewports.</p> <p>Press and HOLD the left mouse button until the icon expands.</p>  <p>Articles concerning the Viewports:</p> <p>A viewport (Section 12.1)</p> <p>Working with viewports (Section 6.1.3)</p> <p>Manipulating the Viewport (on-line documentation)</p>
		<p>Icon to activate the Zoom Window.</p> <p>Article concerning the Zoom Window:</p> <p>Working with the zoom window (Section 6.2.5)</p>

		<p>Icon to save the image.</p> <p>Articles concerning saving images:</p> <p>Saving an image (Section 5.4)</p> <p>Overview of the specific Extra Info and Keywords (Section 6.5.2)</p>
		<p>Icon to delete the active image.</p> <p>Articles deleting images:</p> <p>How to recover a deleted image (Section 7.4.3)</p> <p>Working with the image library (Section 6.5.4)</p>
		<p>Icon to activate the histogram.</p> <p>Articles concerning the histogram:</p> <p>How does the histogram work? (Section 12.5)</p> <p>Working with windowing (Section 6.2.2)</p>
		<p>Icon to rotate the active image 90°.</p> <p>The second function of the icon is the possibility to 'free hand' rotate the image. Press and hold the left mouse button on the icon and the second version will become available.</p> <p>Freehand rotation ('Rotate freehand' in the on-line documentation)</p>
		<p>Icons to flip the vertical or horizontal.</p>
		<p>Icon to invert the active image.</p>
		<p>Icon to print the images.</p> <p>Articles concerning printing images:</p> <p>Printing images (Section 5.5)</p> <p>Printing the Status Mount (on-line documentation)</p>
		<p>This is one of the most important icons in Mediadent. When clicking on the icon, you will launch the acquisition mode and you will be able to use your acquisition device.</p> <p>Articles concerning acquiring images:</p> <p>Acquiring an image (Section 5.2)</p> <p>Working with the status mount in acquisition mode (Section 6.4.2)</p>

		<p>Icon to make acquisition through the Status Mount.</p> <p>Articles concerning the Status Mount:</p> <p>A status mount (Section 12.3)</p> <p>Working with the status mount in acquisition mode (Section 6.4.2)</p>
		<p>Icon to activate the WDM Video Still Capture module. This module will allow you to use your camera to take pictures.</p> <p>Article concerning the Video Still Capture module:</p> <p>Working with the Video Still Capture module (Section 6.7.1)</p> <p>If you are using an Durr Vistacam the icon will look like this :</p>
		<p>Icon to activate the WDM Streaming Video module.</p> <p>Article concerning the WDM Streaming Video module:</p> <p>Working with the WDM Streaming Video module (on-line documentation)</p>
		<p>Icon to activate one of the optimization profiles. The optimization profiles can enhance the quality of the images.</p> <p>Press and HOLD the left mouse button until the icon expands or click with the right mouse button and the list of optimization profiles will appear.</p> <div data-bbox="566 1093 1045 1854">  </div> <p>Articles concerning the optimization profiles:</p> <p>Working with the optimize feature (Section 6.2.8)</p> <p>The optimize module (Section 11.1)</p>

		Icon to reload the original saved image . The original image can always be retrieved.
		Icon to activate the devices that use the TWAIN interface . Articles concerning the TWAIN module: Working with the TWAIN module (on-line documentation)
		Icon to activate the Full Screen status screen. Articles concerning the Full Screen Status screen: The Full screen Status mount (on-line documentation) HT 17 How to export the Full Screen Status Mount (on-line documentation)
		Icon to launch the Reporter module . The Reporter module is a separate module. If you do not see this icon, it has not been activated. Contact your dealer for more information. <div> If the icon has a green glow it means that there are documents for that patient in the Reporter module.</div> Articles concerning the Reporter module: Working with the Reporter Module (on-line documentation)
		Icon to launch the Dicom network module. Articles concerning the Dicom module: Dicom module (on-line documentation)
		Icon to launch the Dicom print module. Articles concerning the Dicom module: Dicom module (on-line documentation)
		Icon to apply an auto contrast to the image. Articles concerning filters: Working with Filters (Section 6.2.7)
		Icon to apply the sharpen filter to the image. Articles concerning filters: Working with Filters (Section 6.2.7)
		Icon to apply a noise reduction filter to the image. Articles concerning filters: Working with Filters (Section 6.2.7)
		Icon to apply the cosmetic module. Articles concerning the cosmetic module: Cosmetic module (on-line documentation)

		Icon for using the D.F.O. (Dental Facial Orthopedics) analysis tool. It offers the possibility to quickly generate an orthodontic analysis. For more information contact your local distributor.
		Icon to apply filters to your image. Articles concerning filters: Working with Filters (Section 6.2.7)
('HT 12 How to import images' in the on-line documentation)		Directory Import icon. This is an optional icon. By default this icon is not activated. Articles concerning the directory import : HT 12 How to import images (on-line documentation) To add this icon to your icon bar, please read this article : How to customize the iconset (Section 7.2.2)
		Directory Export icon. Like the above, this icon is also not activated by default. Articles concerning the directory export : How to export multiple pictures of a patient (Section 7.6.2) To add this icon to your icon bar, please read this article : How to customize the iconset (Section 7.2.2)
		Icon to exit Mediadent. Mediadent can be configured NOT to close, this will speed up the process of launching Mediadent through a patient management system.
		This is the Dental Eye icon. This additional module that is used together with the Dentaleyepad. This intelligent dental camera follows a work flow so it focuses at the right spot, zooms in and mirrors the images independently. More information about this new camera can be found on this website : Dentaleyepad . This camera is seamlessly integrated into the Mediadent Status. This allows for e.g. automatic tooth/teeth association. Articles concerning the DentalEyepad integration can be found here: How to use the Dentaleyepad camera in Mediadent ('Dentaleyepad' in the on-line documentation)

 You can **hide** unused icons. Read the article **How to customize the iconset (Section 7.2.2)** to learn how to do this.

4.5 New tools to create and modify a desktop in Mediadent v8

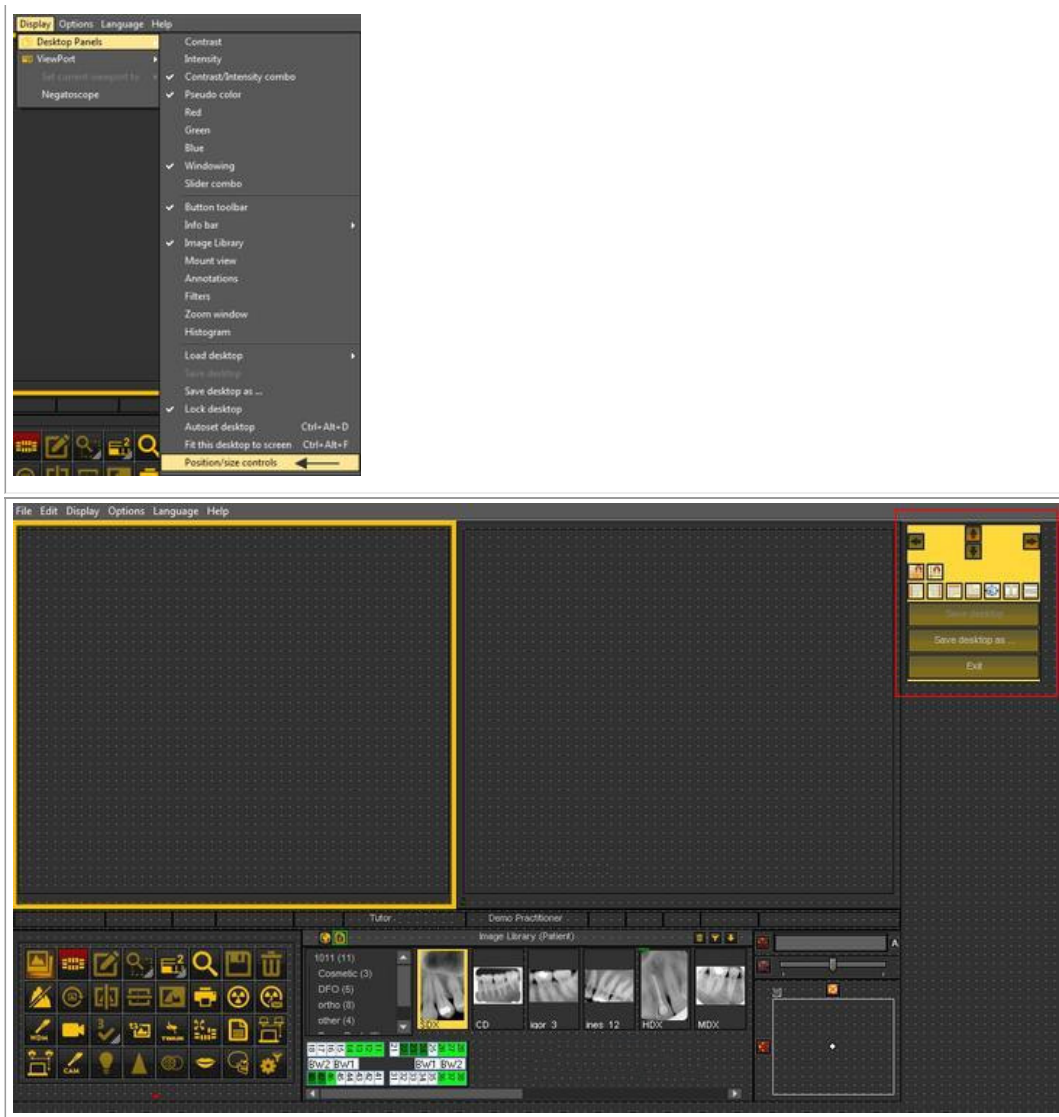
In this latest versions a lot has been added to improve the creation of desktops in the program.

To understand what a desktop is, read this article first : **A desktop (Section 12.2)**

In this section, we will explain the additional tools you have to modify the desktop.

1. Activate the desktop panel options

In the menu, choose **Display > Desktop Panels > Position/size controls**



2. Overview of the toolbox icons and examples



Icon	Explanation
	These are the controls that determine the position of the toolbox. The options are left, right, top and bottom. It is also possible to drag and drop the toolbox manually.
	Snap to grid : when the icon has a red glow the screen elements will snap to the grid. This can be de-activated by clicking on the icon.
	Align to grid : this will allow you to align the screen elements to the grid.
	Alignment of the screen elements.


Align left, align right, align top and align bottom.

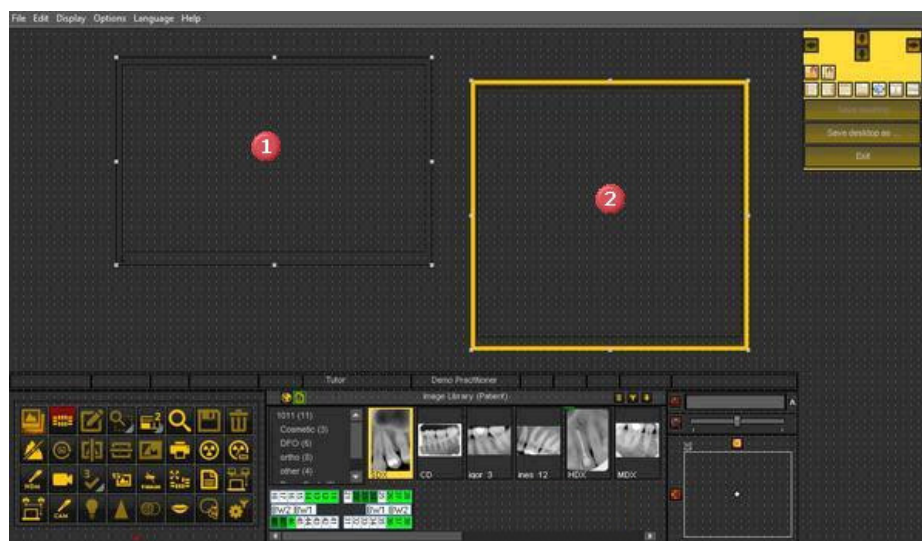
The alignment is done against the first selected box.

Example : alignment top

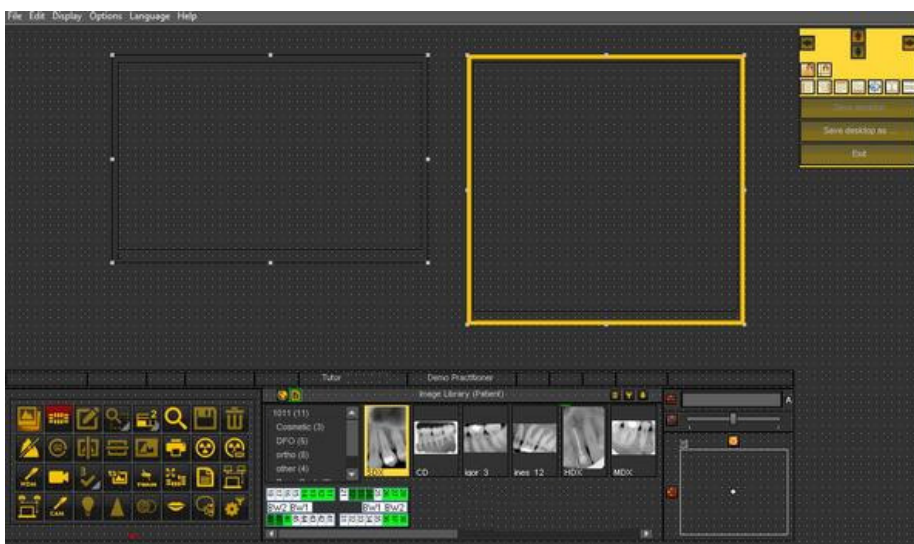
Select first box 1

Select the second box with Ctrl and click on the second box 2

Click on icon align top 




Result :

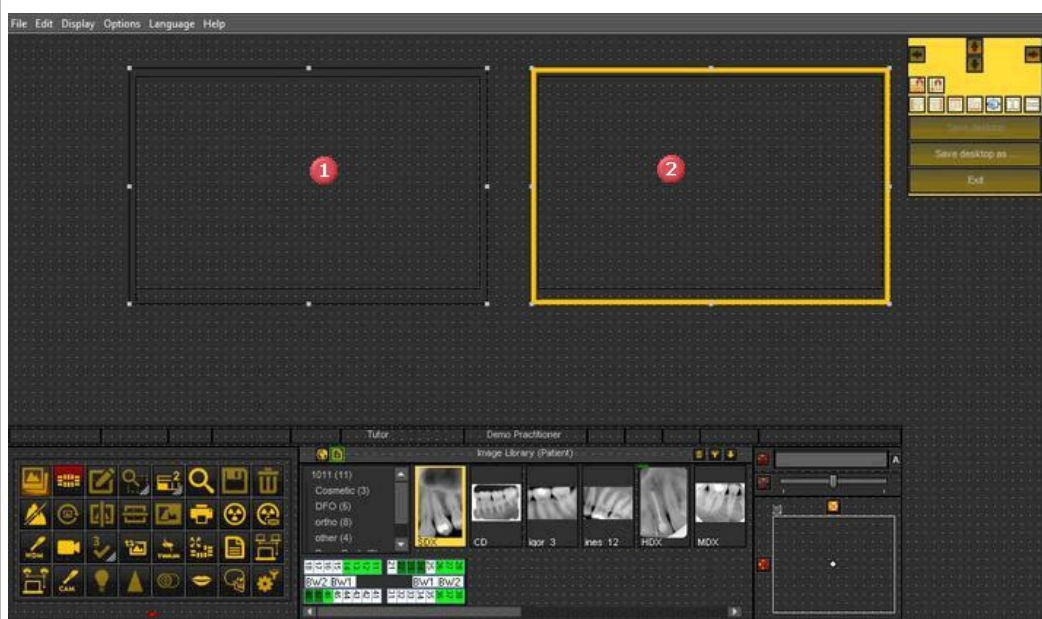


Alignment next to each other or on top of each other.

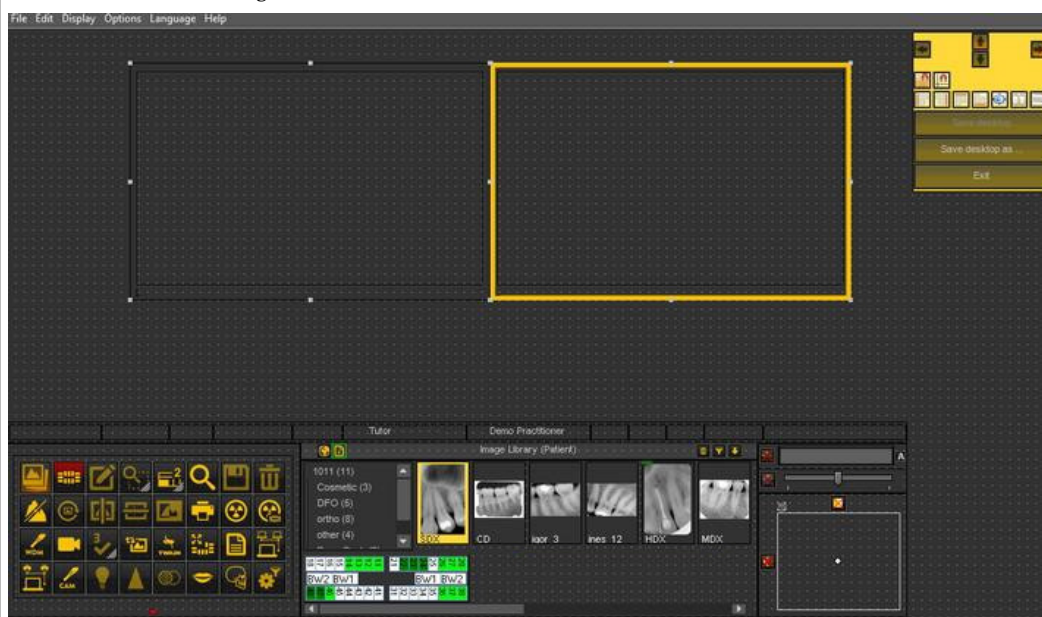
Example : alignment next to each other.

Select first box and select second box by pressing and holding the **Ctrl** button.

Click on the icon  to position the 2 windows next to each other.



Result : the 2 boxes are aligned next to each other.



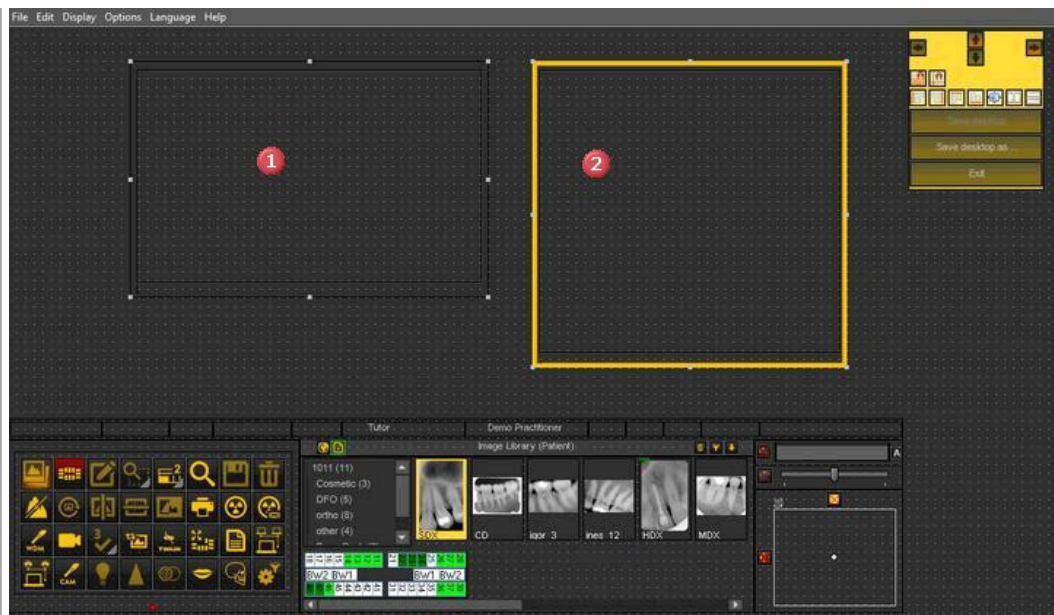
Same size


This option will allow you to create screen elements with the same size.

The first selected box will determine the size of the other selected box.

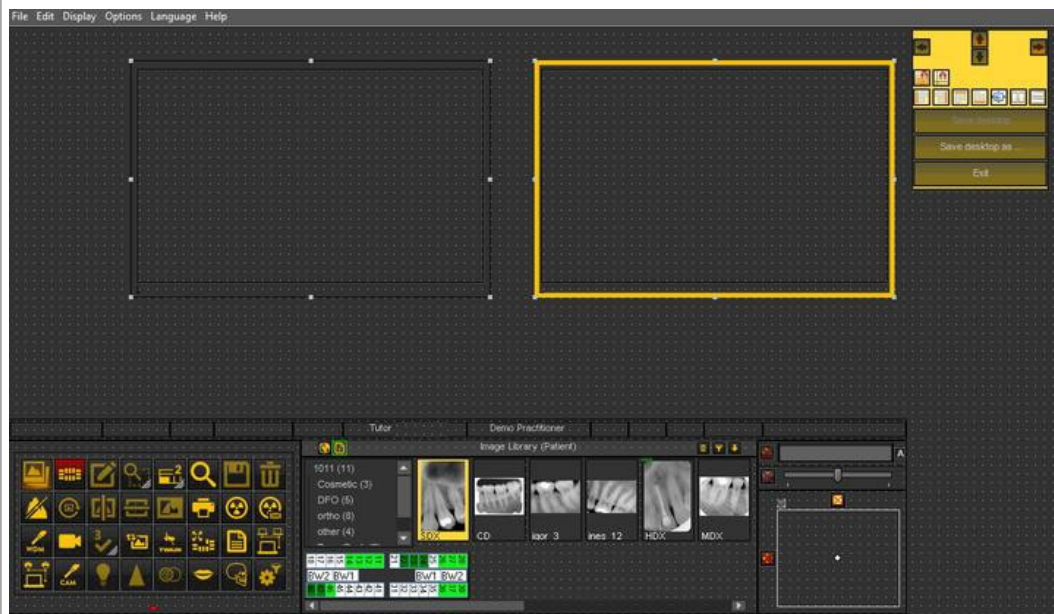
Select the first box that has the desired size.

Select the second box by pressing and holding the Ctrl key.



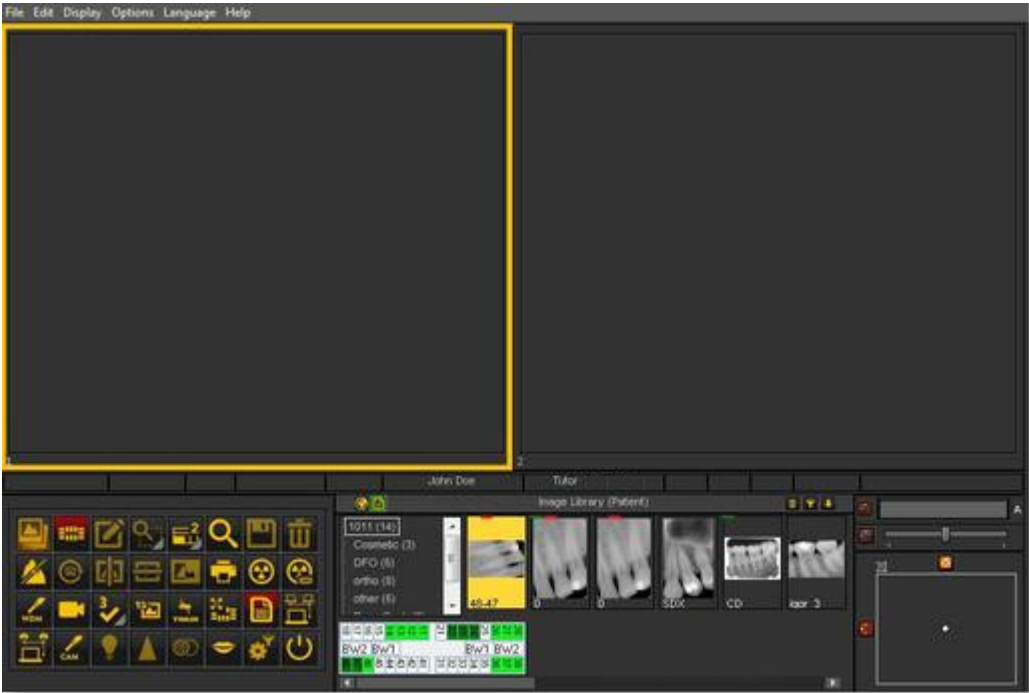
Click on the icon 

Result : The second box has the same size and the first box.



4.6 How to use the previous look and feel

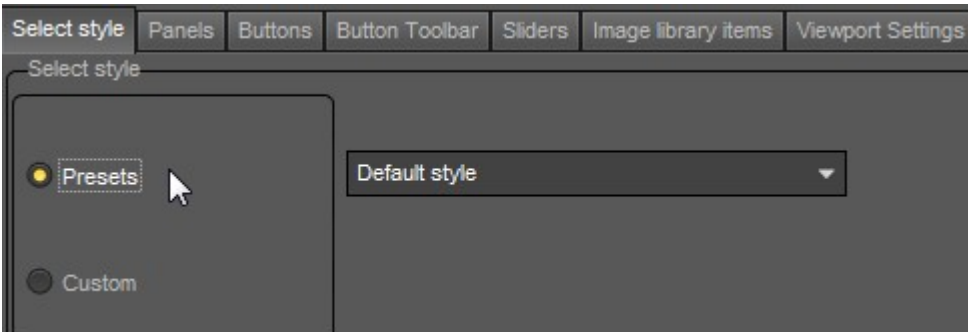
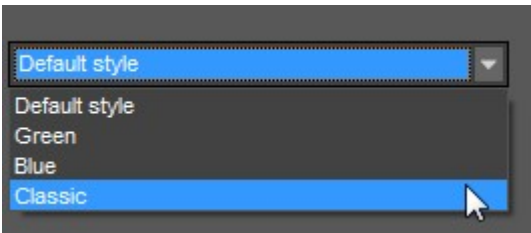
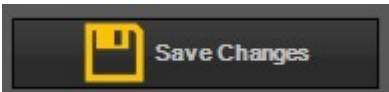
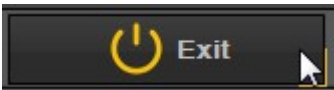
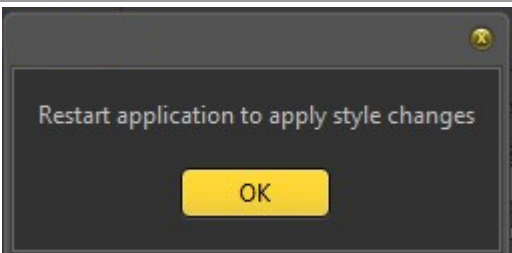
In Mediadent v8 it is very simple to change the **look and feel of the screen**.



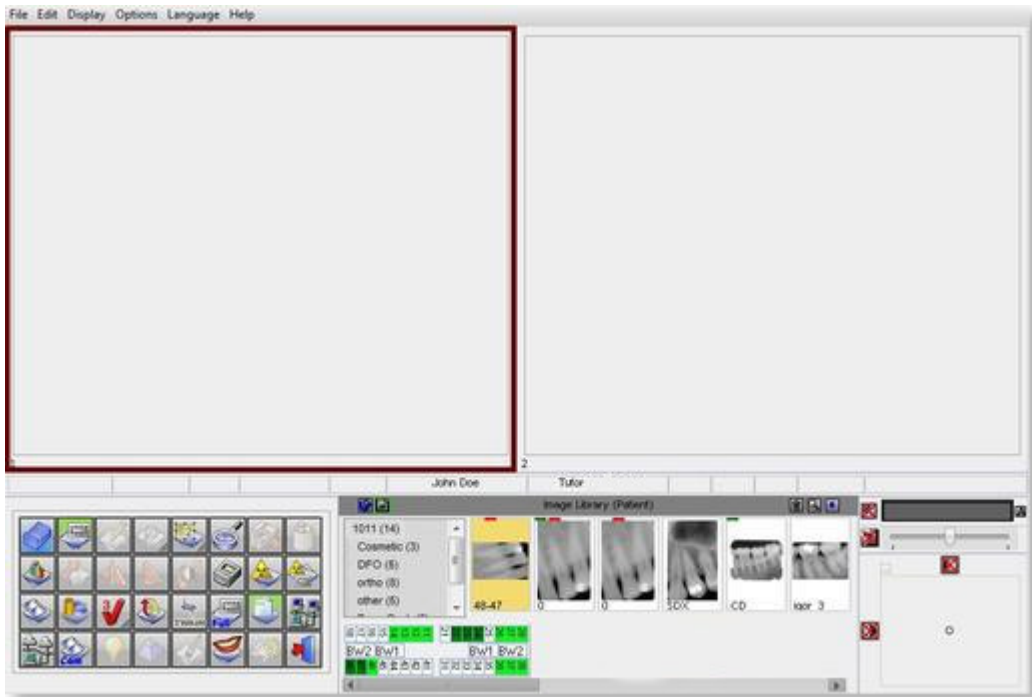
Maybe you would like to use the **classic icons** you are used to using in the previous version.

The following article will guide you through the steps you need to take so you will get your familiar desktop back.

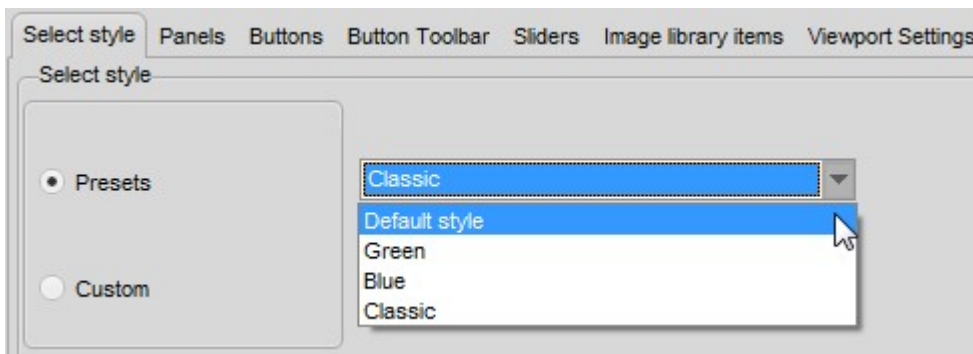
Action	Explanation
<p>In the Mediadent menu, choose Options > Setup</p> 	<p>You will be presented with the options.</p>
<p>Choose the last tab 'Style'</p> 	<p>The Style tab in de setup provides you with all the options to change the look and feel of the program.</p>
<p>On the Select style tab, choose 'Presets'</p>	<p>For your convenience</p>

	<p>we have build a number of presets you can choose from.</p>
<p>In the 'Presets' drop down menu, choose 'Classic'.</p> 	<p>The Classic preset will give you the classic icons back together with the look and feel of the previous version of the application.</p>
<p>Choose 'Save Changes'</p> 	<p>Don't forget to save the changes or the changes will not be applied.</p>
<p>Choose 'Exit'</p> 	<p>Exit the setup screen.</p>
	<p>You will need to relaunch the program in order to see the new chosen preset.</p> <p>So exit the application by clicking on the Exit button and relaunch.</p>

After you relaunch the application, you will get the **classic look and feel**.



To go back to the new look and feel. Follow the above steps and select the '**Default**' style.



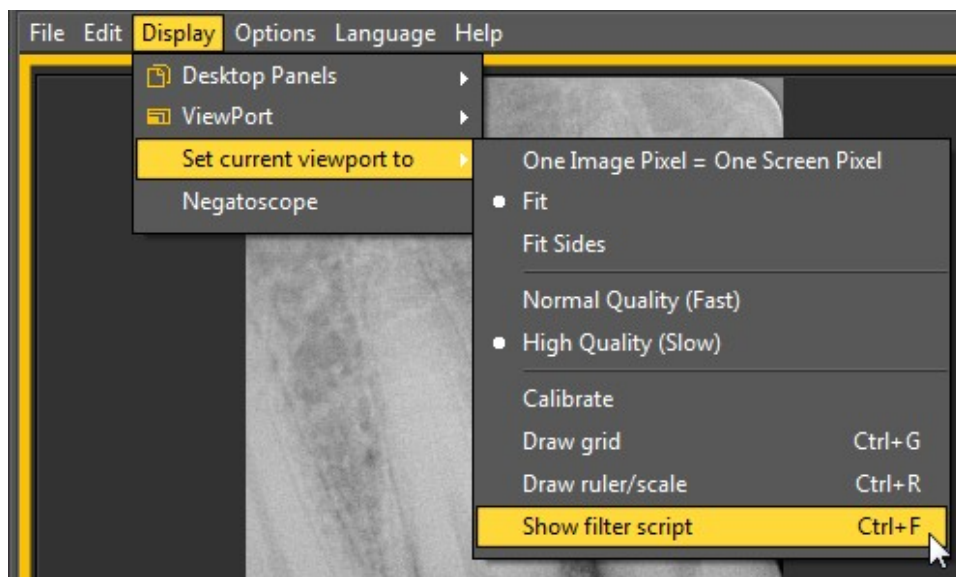
4.7 How to use the filter script

The filter script is a **feature of Mediadent v8**. This option will allow you to see the filters that are used on the selected image. For improved image quality sometimes **filters** are applied to an image. The filter script monitor will help you to **manage** the different filters. You will be able to **quickly apply** different filters on the fly and change the order.

It is an important option for trial and error purposes when working with filters because it allows you to quickly **activate** or **de-activate** particular filters. You immediately see the result of the applied filters.

In this version of the program, the filter script is saved in a separate file from the image and is applied every time the image is loaded. This offers greater flexibility in the usage of filters.

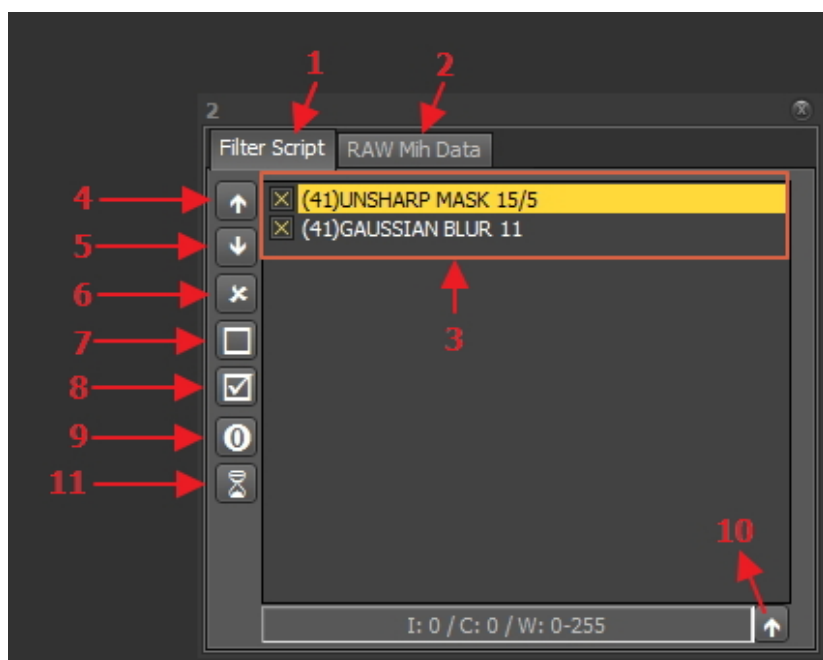
To **activate** the filter script, load an image in the Viewport and choose
Display > Set current viewport to > Show filter script



or

Ctrl F

After activating the option, you will be presented with the following screen :



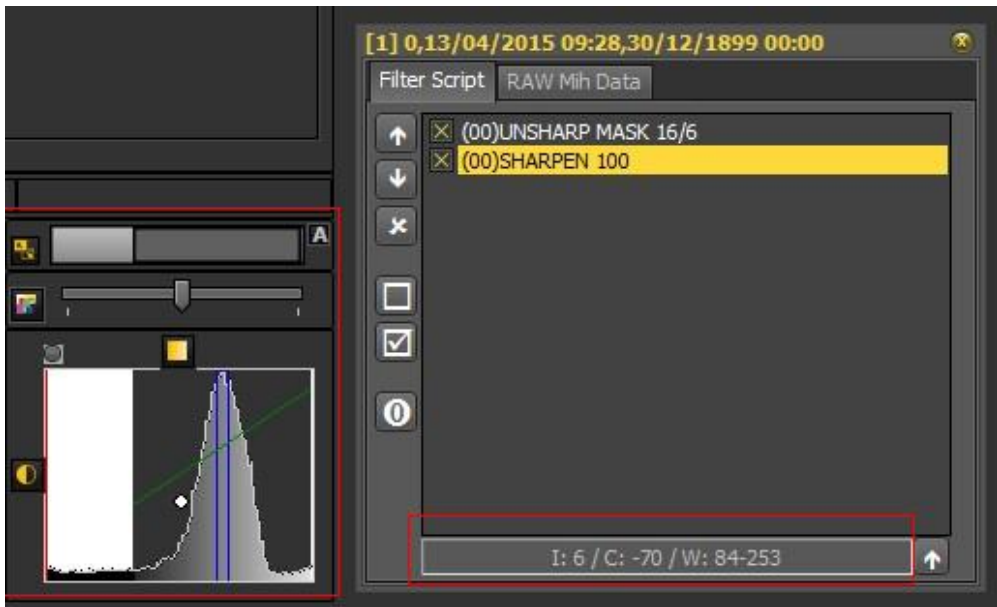
Nr	Explanation
1	<u>Filter script</u> : this tab will show you the applied filters. You will be able to manage the filters, change the order in which the filters will be applied, remove the filter from the script, activate or de-activate the filters.
2	<u>RAW Mih data</u> : an image in Mediadent consists of 3 files (.dic, .bmp and .mih). The .mih file contains the metadata of the image like applied filters, name of patient On this tab you will see the applied filters to the image. This option is an expert option.
3	This is the list of the filters applied to the image. Detailed information on the filter codes can be found in the topic 'Filter codes'.

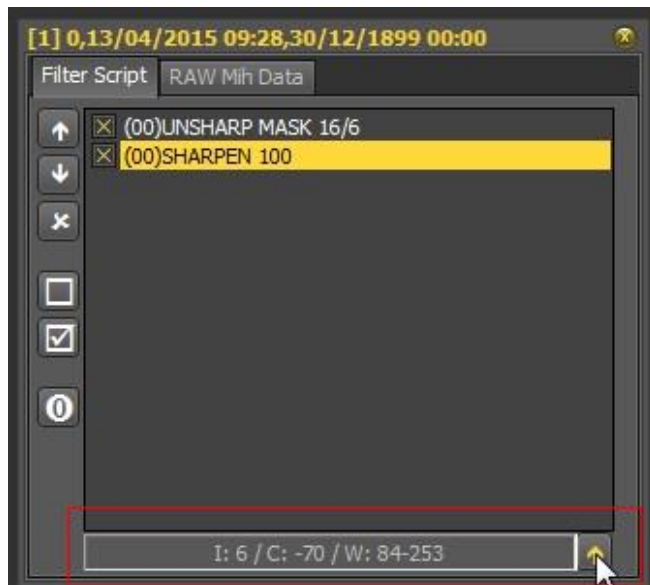
4	Changing the order of the filters applied can have an important influence on the image quality. With this icon you can move the selected filter up.
5	With this icon, you can move the selected filter down.
6	This icons removes the selected filter from the filter script.
7	When you are trying out different filters it is easy to de-activate a filter with this icon.
8	You can activate a particular filter with this icon.
9	This icon will show the original script for the image. Some images come with a filter script, with this option you can see the original filter script.
10	Apply real-time values to filter script : this option allows you to definitely apply the changes made to the contrast, intensity and windowing.
11	This icon activates the window that show the number of filters available to apply to the images.

More information about the **different filters** that can be used, please read the article **Working with Filters (Section 6.2.7)**

In the histogram of the image, the **contrast, intensity and windowing** options are only applied on the display of the image (See article **Working with windowing (Section 6.2.2)**). To apply these modifications to the filter script you need to use the option '**Apply real-time values to filter script**'.

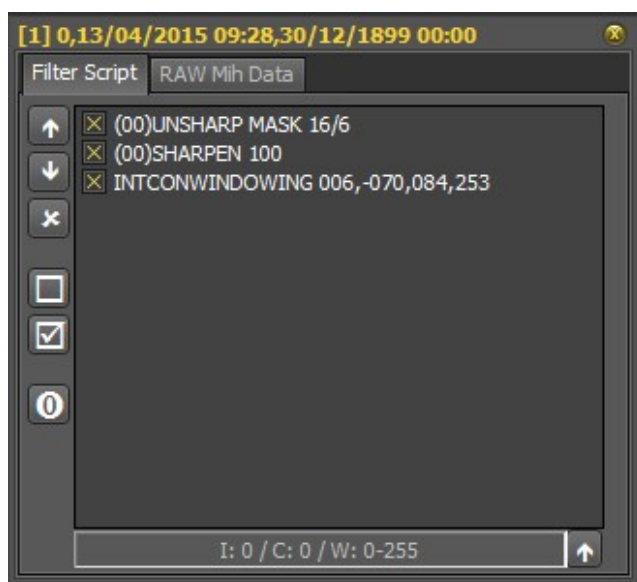
In this example we will modify the contrast, intensity and we will apply the windowing.

Action	Explanation
<p>1. Make the changes to contrast, intensity and windowing</p> 	<p>You see that we have modified the intensity : 6, contrast -70 and windowing w:84-253.</p> <p>To learn more on how to manipulate the images, read the articles :</p> <p>Working with images (Section 5.3)</p> <p>Working with windowing (Section 6.2.2)</p>
<p>2. Choose to apply real-time values to filter script.</p>	<p>If you have happy with</p>



the modification made to the contrast, intensity and windowing, you can **apply** this to the filter script.

3. **Result** : the changes are added to the filter script



You see the line **INTCONWINDOWING 006,-070,084,253** is added to the script.

The filter script is an important tool and creates visibility on the applied filters. It will help professionals improve quality image.


Since the filter script is a separate file, it is now easy to Undo and Redo different filters.

Filter Codes

The filter codes are a way of indicating where the filter line is coming from. The filter could have been applied manually or coming from the device itself. In the Optimize module you can also add filters.

List of
filter
codes

(00)

This code indicate that the filter was manually added through the filter icon.  More detailed information of the possibilities read this **Working with Filters (Section 6.2.7)**

(42)

This is an internal filter added by the options of the X-ray device.

(41)

This filter was configured in the Optimize module and applied to the image.

(65)

This is the filter added via the Optimize icon



4.8 The 3D Viewer

The 3DViewer is an **optional** add-on that can be used in the newest Mediament v8.

It is an integrated viewer and allows you to view 3D images directly from the Mediament image library. Intuitive 3D image visualization, facilitated by Mediament, supports diagnosis and treatment planning. It provides a cost effective way of viewing your 3D images from within the familiar program.

Contact your distributor for more information about the optional 3DViewer module.

The 3D viewer is capable of generating **multiplanar** (MPR), volume (3D) and **X-ray reconstructions** and contains the essential tools for careful and in-depth medical image viewing, i.e. annotations and measurement tools.

You will be able to magnify or reduce an image and **rotate** the 3D image around its center for better viewing.

The **stack overview** will allow you to navigate through images or different slices in a reconstruction.

Next to the **Internal 3D viewer** you will be able to use several other viewers within Mediament.

To activate the 3D viewer module, **double click** on 3D image in the Image library.

The 3DViewer selector is presented :



Make your choice of 3DViewer.

As you can see we also support 3rd party viewers.

Integration of 3rd party viewers is available :

- AsahiVision
- Ez3D
- Ez3D-I
- EzImplant
- 3D Planner (Villa)
- CS 3D Imaging (Carestream)

So if one of these viewers is installed, they can be launched from Mediament.

This chapter will describe the Internal 3DViewer.

We support a range of 3D devices, go to the website and check if your 3D device is supported.

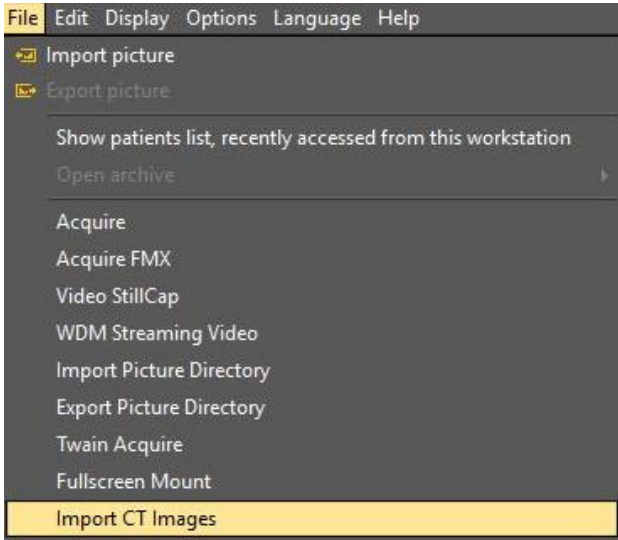
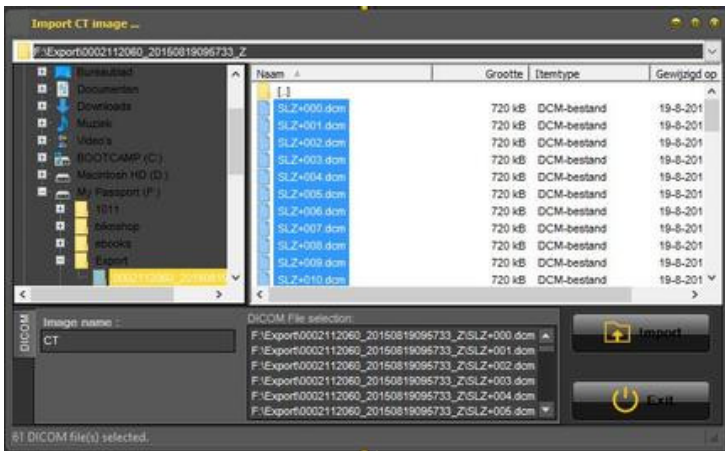

If your device is not in the list, then you will have to import the 3D images (slices) before you can use them in the viewer

software.

Follow these steps to import the 3D image :

1. Import a 3D image

To import a 3D image follow these steps

Action	Explanation
<p>Choose File > Import CT Images from the menu</p> 	<p>You will first have to import the CT Images before you can analyse them in the application.</p>
<p>Select the files that make up the 3D image and click on the Import button.</p> 	<p>A 3D image is made of several files. Every file is a slice that is used to build up the 3D image.</p>
<p>The image is integrated in Mediadent and ready to be viewed with the 3D Viewer.</p> <p>Double click on the image and the 3DViewer will launch.</p> 	<p>Once the slices are imported, the 3D viewer can reconstruct the 3D image.</p>

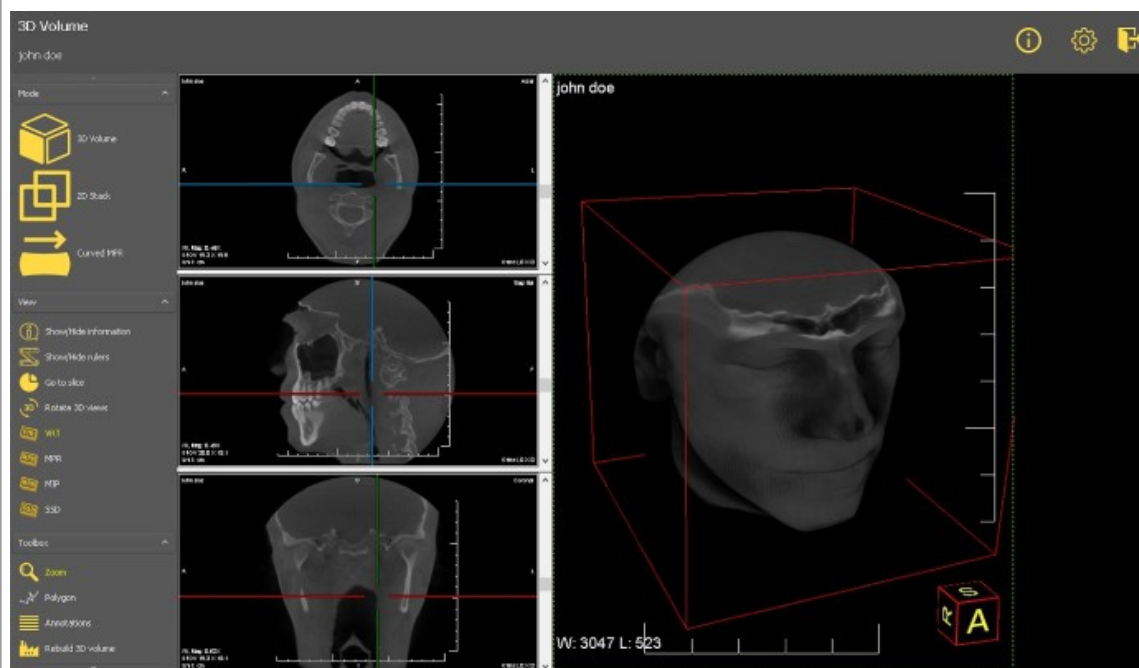
Double click on the CT image and the 3DViewer Selector screen will open with the 3D image active.
This chapter will explain the different views.

2. Different views

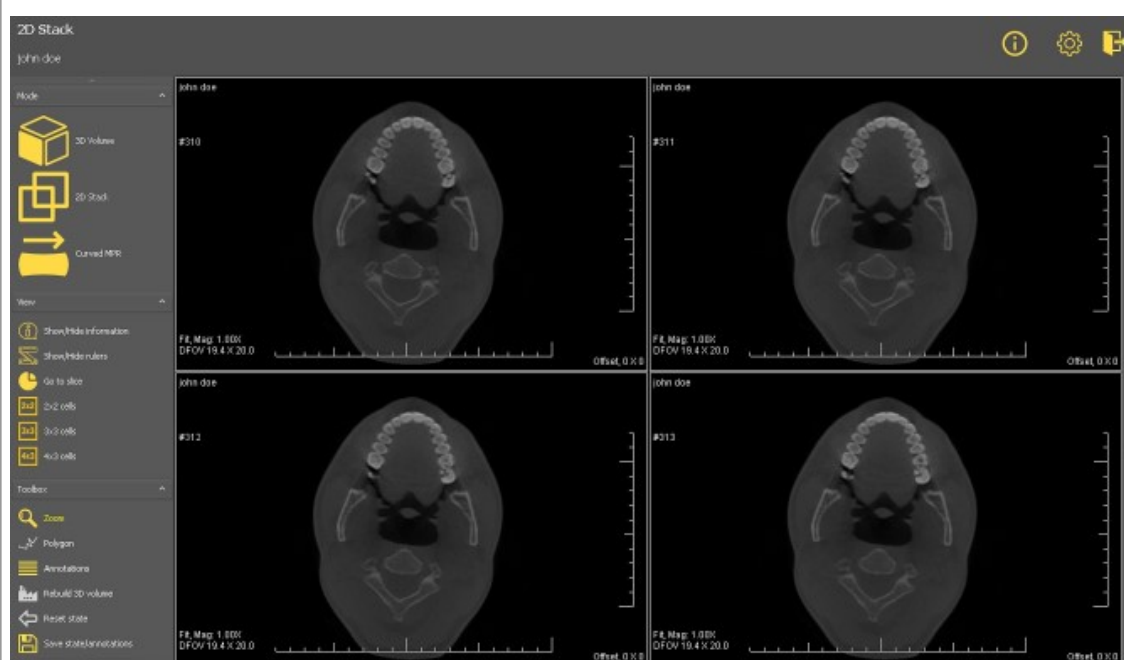
Overview of the 3DViewer screen.

You have 3 different views :

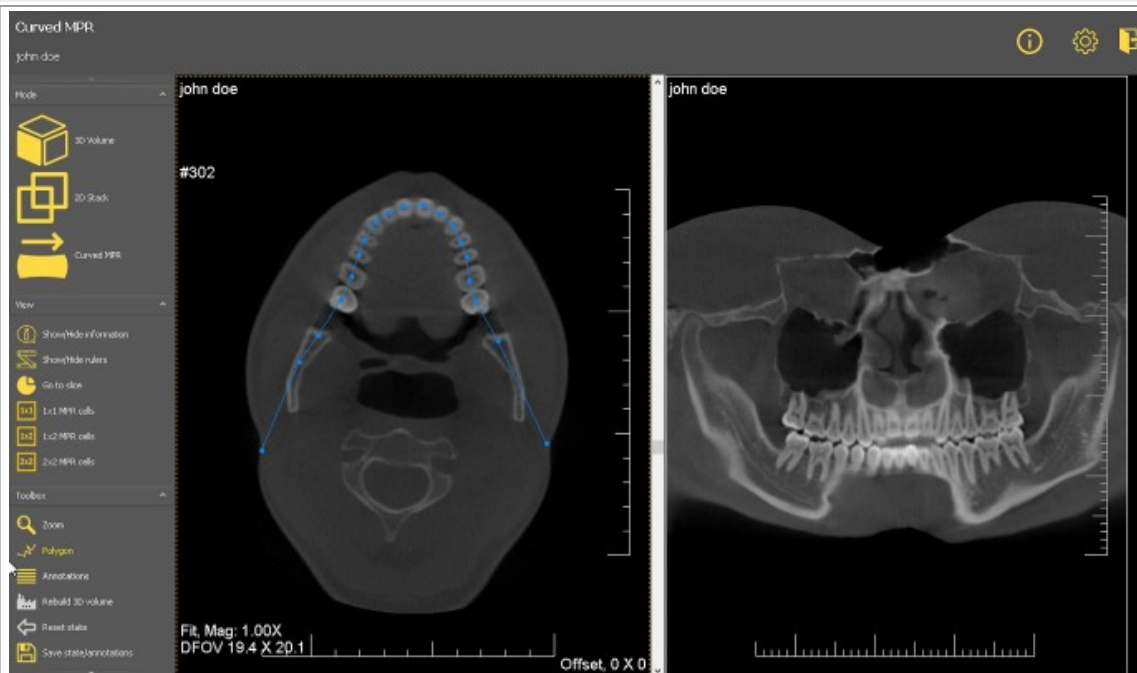
3D Volume view : This view allows you to combine the volume view (right window) with 3 views (axial, sagittal and coronal).
You can rotate the image in the volume view.



2D Stack view : This view allows you to see the slices from which the 3D image is build.
You can scroll through the different slices and analyse the image slice by slice.



Curved MPR : Based on the polygon, you will be able to reconstruct a panoramic image. You will be able to draw multiple polygons and view them in the different windows.



3D Volume view

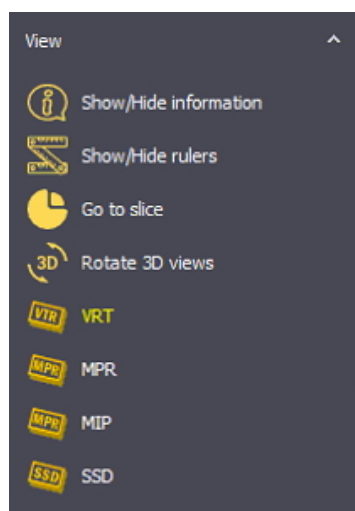
3D images can be viewed in the 3D volume view.


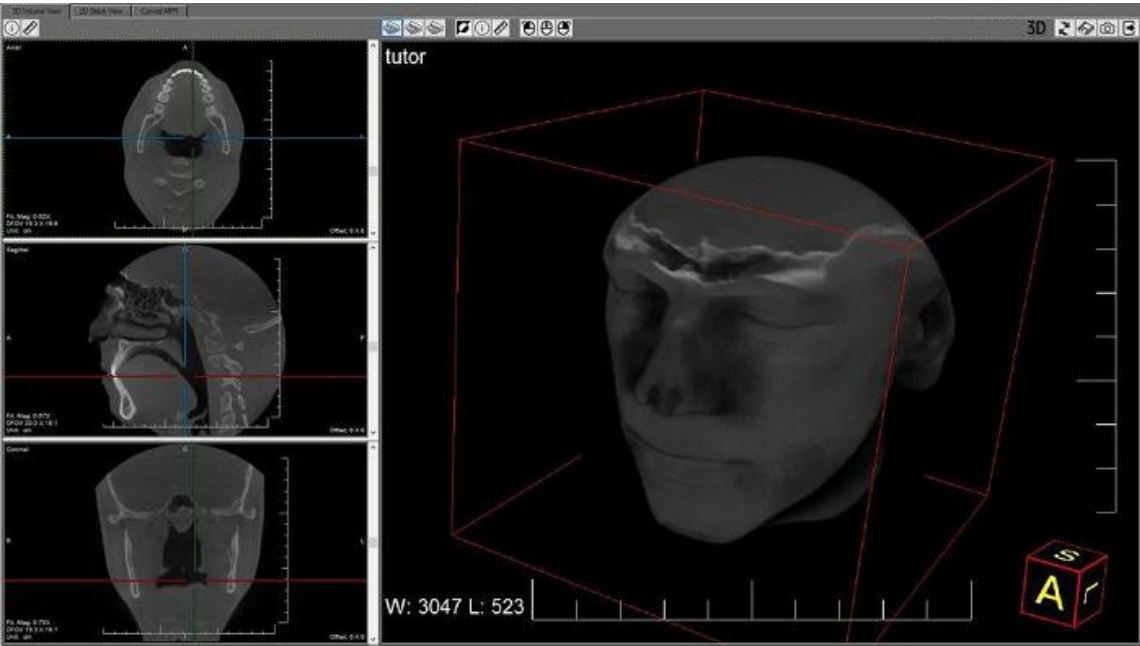
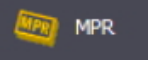
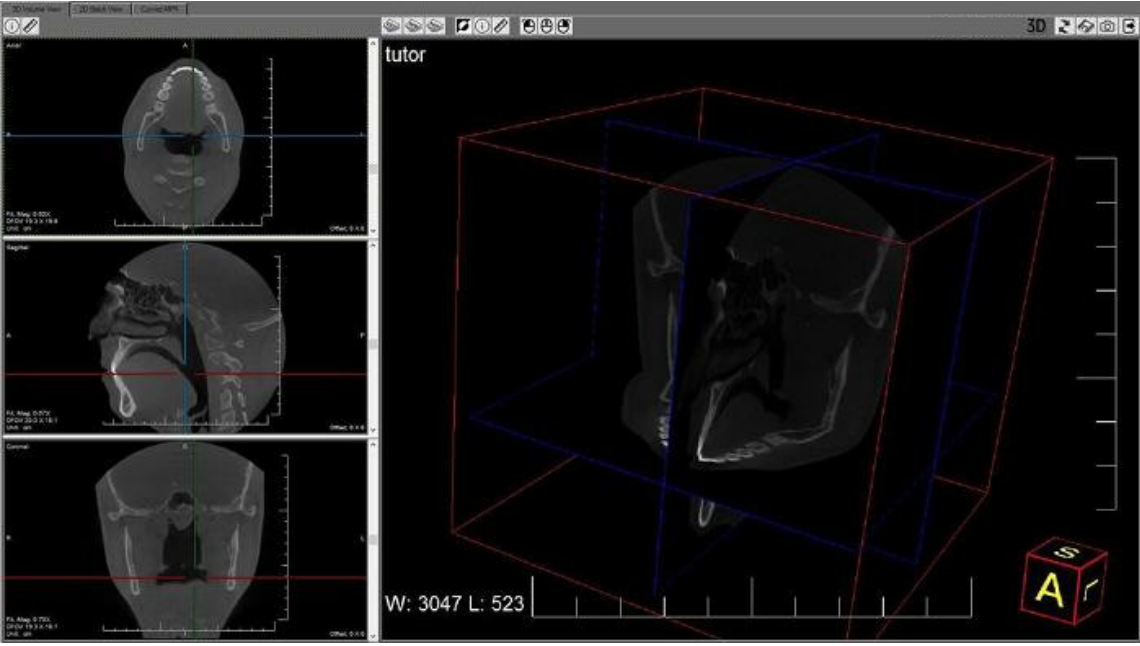
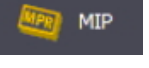
Manipulations to the image :

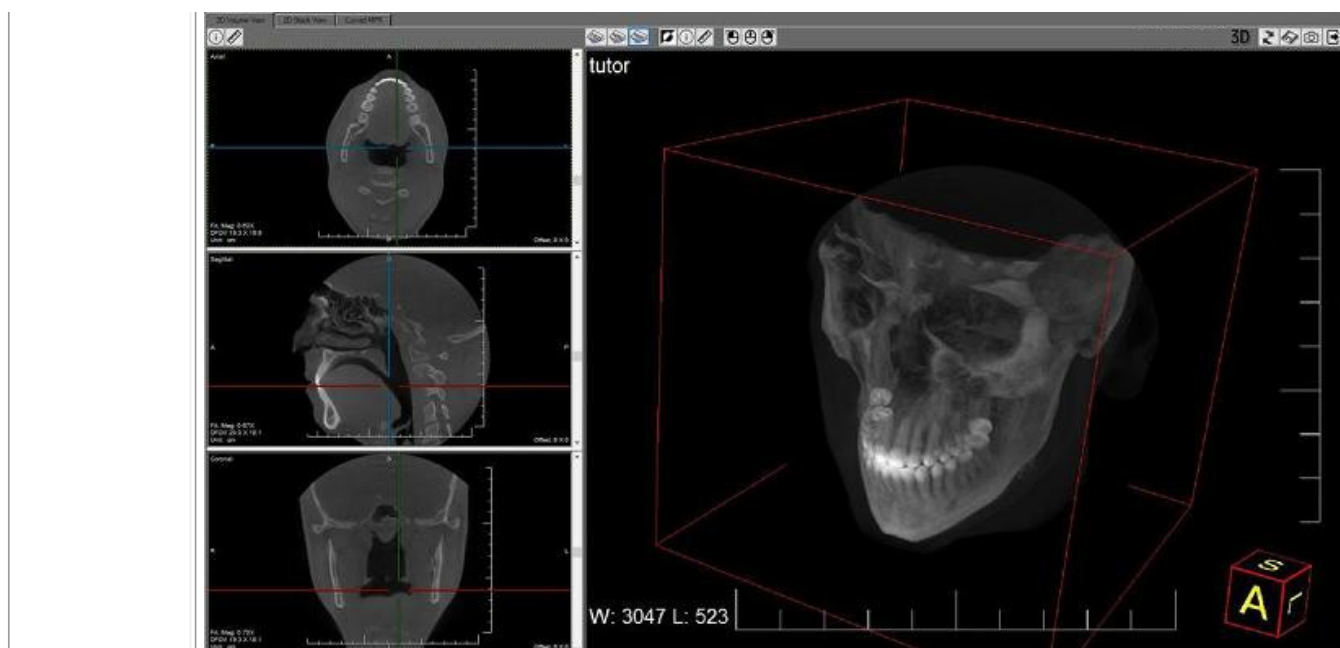
In the right hand side view you can rotate the image just by **pressing and holding** the left mouse button while turning the image in the correct position.

On the left hand side of the screen you have 3 different windows (axial, sagittal and coronal), you can scroll through the images by using the sliders.

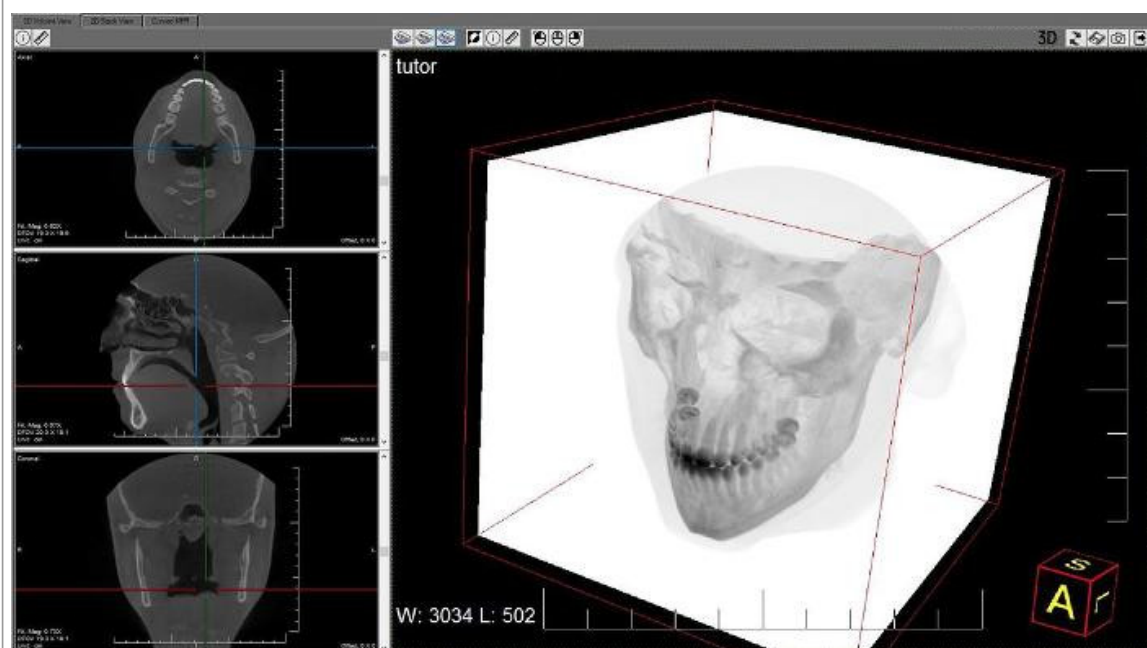
In the 3D viewer, you can view the image in different modes :



Icon	Image
	<p></p> <p>This is the view that will show the soft tissue in the main window and the axial, sagittal and coronal views on the left hand side. You have the possibility to rotate the image in the main window.</p> 
	<p></p> <p>This view will allow you to choose the way in which the slices are cut.</p> 
	<p></p> <p>This view will show the bone structure in the main view.</p>

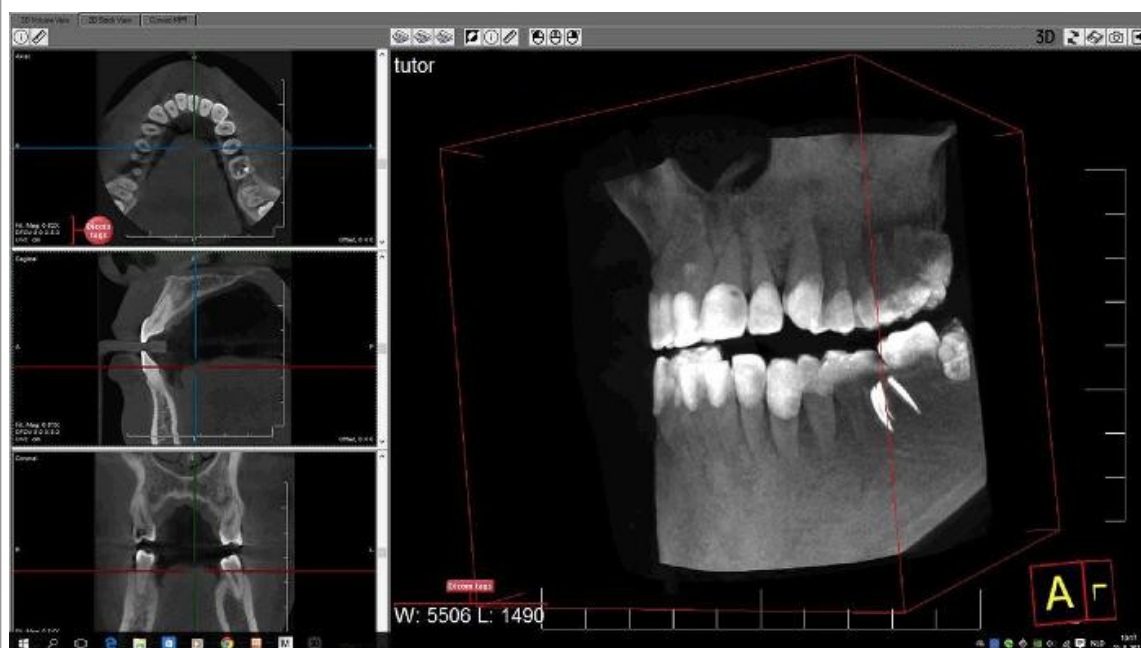


Invert the image in the main view.





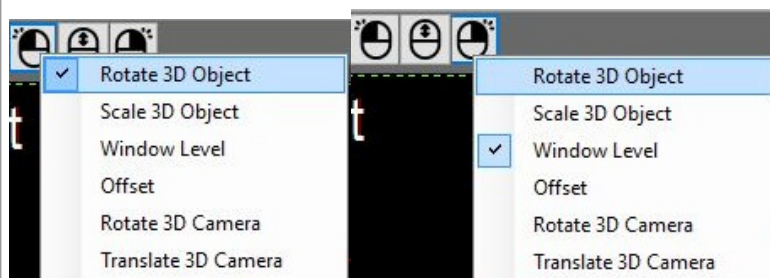
Displays the **Dicom tags** on the images.



This icon will display the **ruler** on the site of the images. You can activate or de-activate by clicking on the icon.



These icons allow you to change the behavior of the **left and right mouse** button.



Rotate 3D Object
Scale 3D Object
Window Level
Offset
Rotate 3D Camera
Translate 3D Camera



With this icon you can **revert** to the original analysis. This means that after making rotation, changes to the views etc you will be able to revert to the situation as if the image was launched the first time.



This icon will allow you to **save** the current state. This means that once this state is saved, the file will open in the saved state.



Very interesting functionality, with this icon you can save a **screenshot** of the current state to the **patient's image library**.

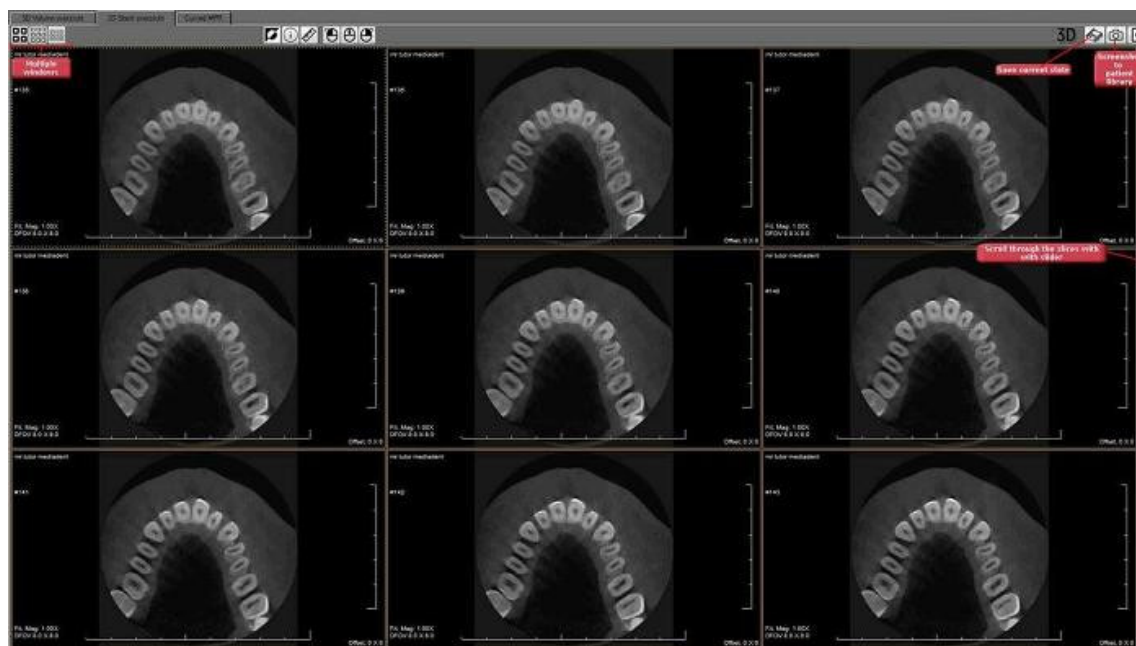


With this icon you will **exit** the 3DViewer.

2D Stack view


The **2D stack view** is a simple view that allows you to go through the different slices.

Just use the handles on the right hand side to scroll.



If you want you can see **4, 9 or 12 slices** on your screen.

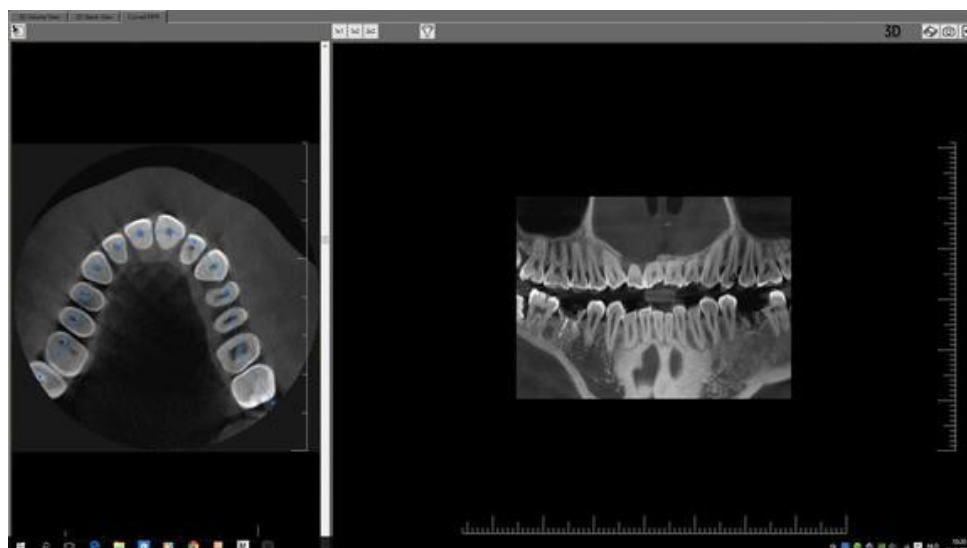


Again you have the options to save the status and to make a **screenshot**  that can be saved in the patient's library. See previous section (3D Viewer) for details information on the different buttons.

Curved MPR

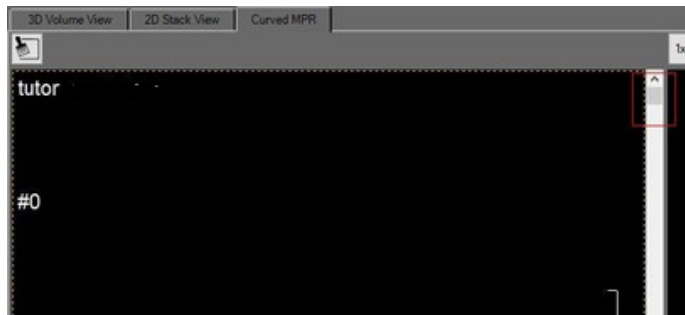
This view allows you to reconstruct a **panoramic image** based on the **polygon** that is drawn on a slice.

You may even reconstruct multiple images based on the polygons that are drawn on the slice in the left screen.

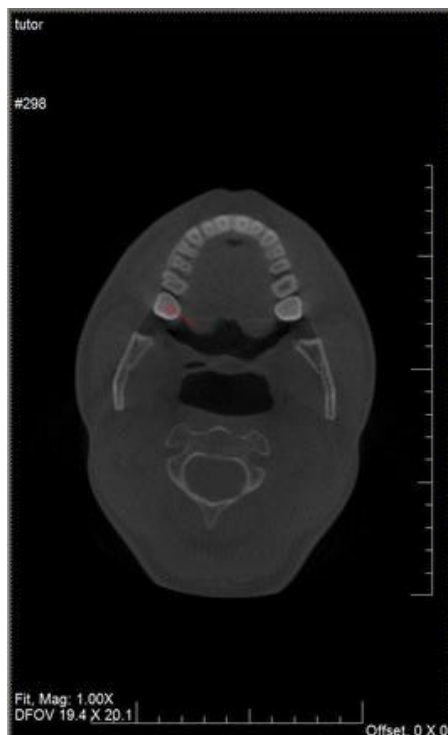


Before starting, **load** the image in the 3D viewer and select the tab **Curved MPR**.

Move the slider down in order to see the correct slice you want to use as a basis for the panoramic image.

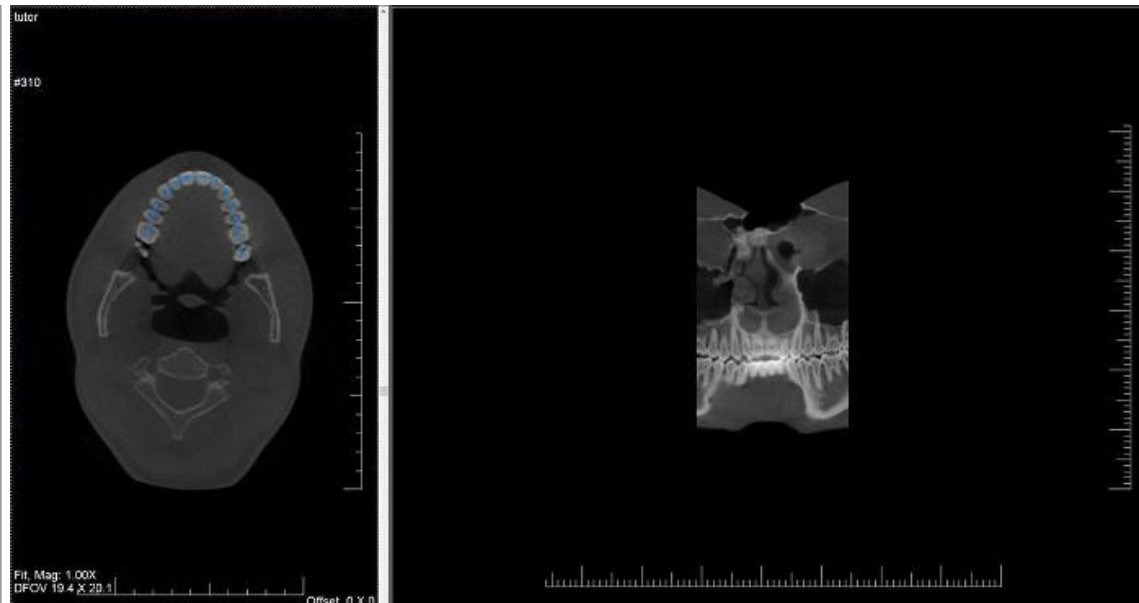


To start the reconstruction, click on **first point** of the polygon



Click further to position the other points of the polygon.

To end, **double click** on the last point. The panoramic image is automatically reconstructed.



This button will remove all the polygons that were drawn on the image.

You have the possibility to examine **multiple polygons**.

Choose the number of polygons you want to examine.

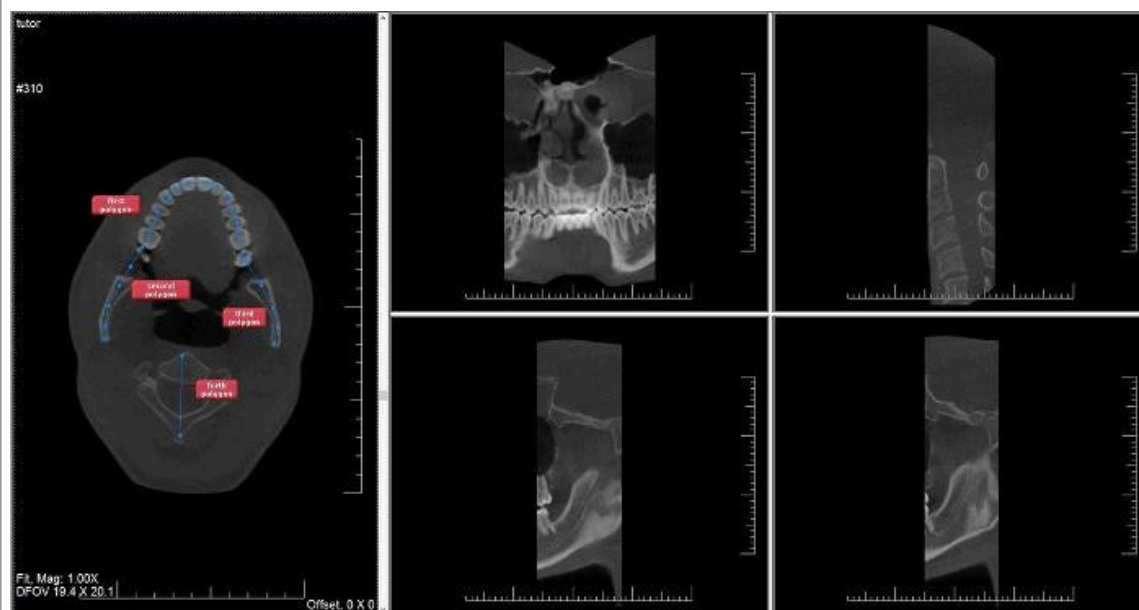


- 1 polygon

- 2 polygons

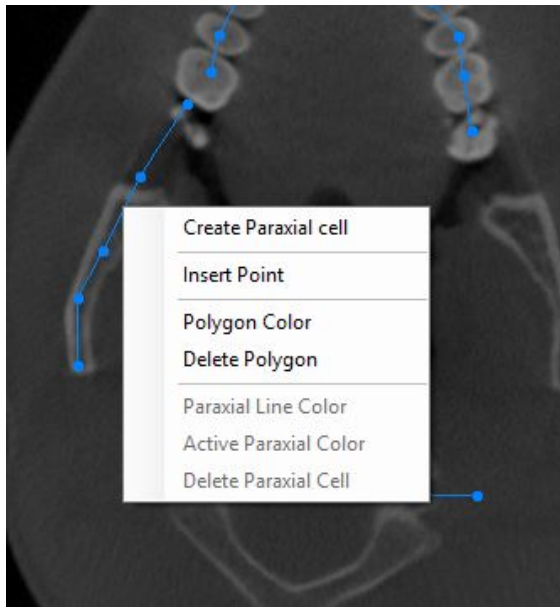
- 4 polygons

In the following screenshot you see the 2X2 selection where you can see the reconstruction of 4 polygons.

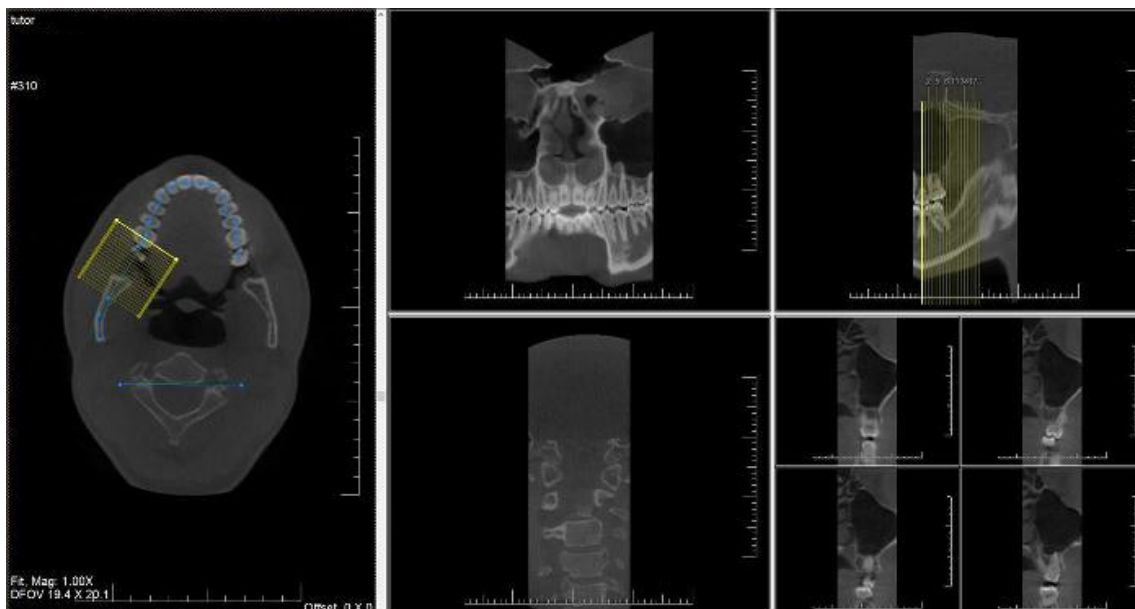


One of the interesting possibilities is to **create a paraxial cell**.

After you have drawn the polygon, click with the **right mouse button** and the following menu will appear.



Choose '**Create Paraxial cell**' and this will be drawn on the image.



4.9 Working with the filter window

Real-time filters in Mediadent may instantly provide an improved image quality and may facilitate diagnosis, treatment planning and follow-up.

The filter window will give you a visual overview of the different filters applied to your image. It is a great visual aid to help you choose the best image quality for you.

Once you have chosen, you can apply it to the image.

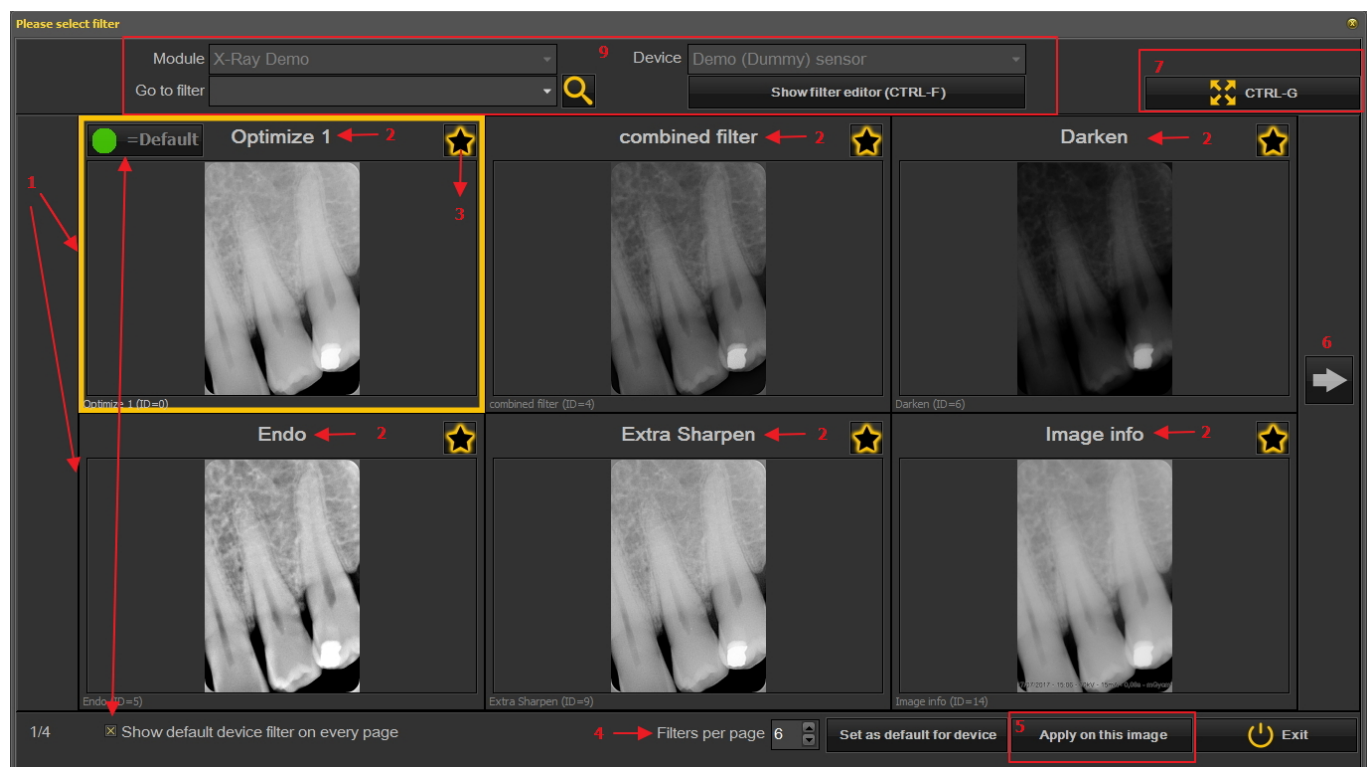
For future usage, you can also set this quality (filters) as the default.

The filter window is accessible to you during the **acquisition** of an image or afterwards, just by clicking on the **icon**.




1. Overview of the Filter window screen


Here you will find the different functions of the windows screen




Nr. Explanation

- 1 In this example you see 6 filters applied to your image
- 2 The name of the different filters applied : Optimize 1, Optimize 2, Endo ... These filters are defined in the setup 'Optimize'. See the article **The optimize module (Section 11.1)**

3 

By clicking on the  icon, you select the filters you want always want to see on the first screen. This is practical when you have a large number of filters, you can select your favorite

filters. Once selected, you will see this icon 

- 4 The number of filters shown on 1 screen can be configured. In this example 6 filters are proposed. You can have from 2 to 10 filters on your screen.
- 5 Once you have selected a filter that gives you the best image quality, you can apply this filter to the image.
- 6 Click on the arrow and show the next series of filters.
- 7 Click on the icon and you will see the selected image full screen. Click on the icon again and return to the original screen.
- 8 Show default device filter on every page. This can be switched on or off.
- 9 Additional information about the image. What is the device the image is taken with (module and device). Go to the image with the selected filter. Show the filter editor = the filter script will be shown (See **How to use the filter script (Section 4.7)**)

2. Using the Filter window screen in acquisition

These are the steps you can follow to use the windows screen in acquisition mode

Icon



Explanation

Prepare the X-ray device so an image can be taken. Click on the acquisition icon.





Grab an image



The Filter window icon is available. Once selected, the Filter window will open with an overview of the multiple filters.

Choose the desired filter and apply it to the image.

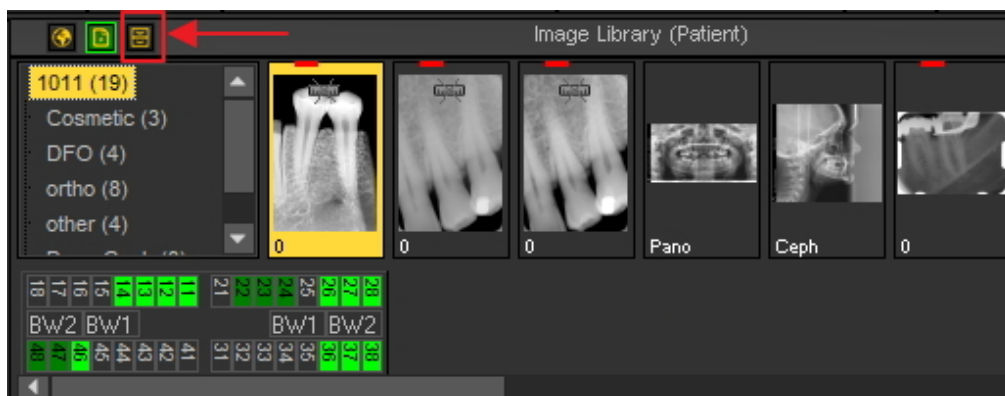
 The filter window can be activated on any selected image. Just load the image in the viewport and select the filter window icon. 

4.10 How to archive images in Mediadent

Based on end user feedback, we have added an **archiving tool** to the image library. This will give you the opportunity to **organize** the image library of the patient better.

Old images can be send to the archive folder of your choice. This folder is always available for the image library folder.

In this topic you will see how to **setup** the archive folder and **how to use the archive folder** from the patient's image library.



1. How to setup the archive folder

In the setup of Mediadent you will determine **where the location** is of the archive folder.

In this chapter we will explain how to setup an archive folder and how to **remove an archive folder**.

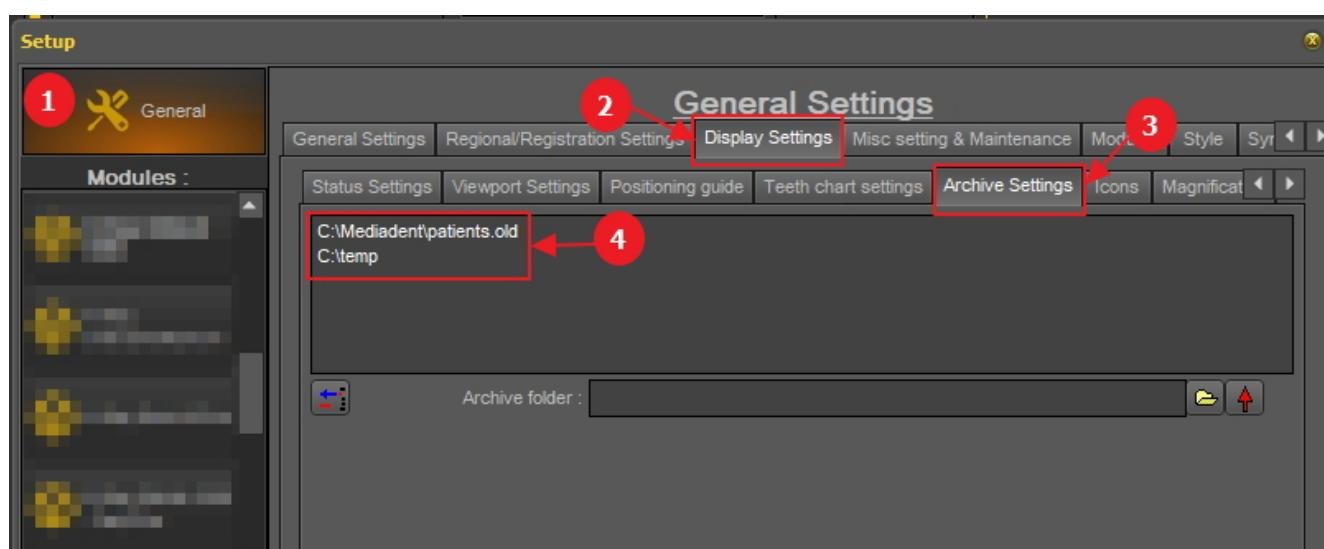
1. Setup the archive folder

Follow the steps to determine the location of the archive folder :

1. Choose **Options > Setup**

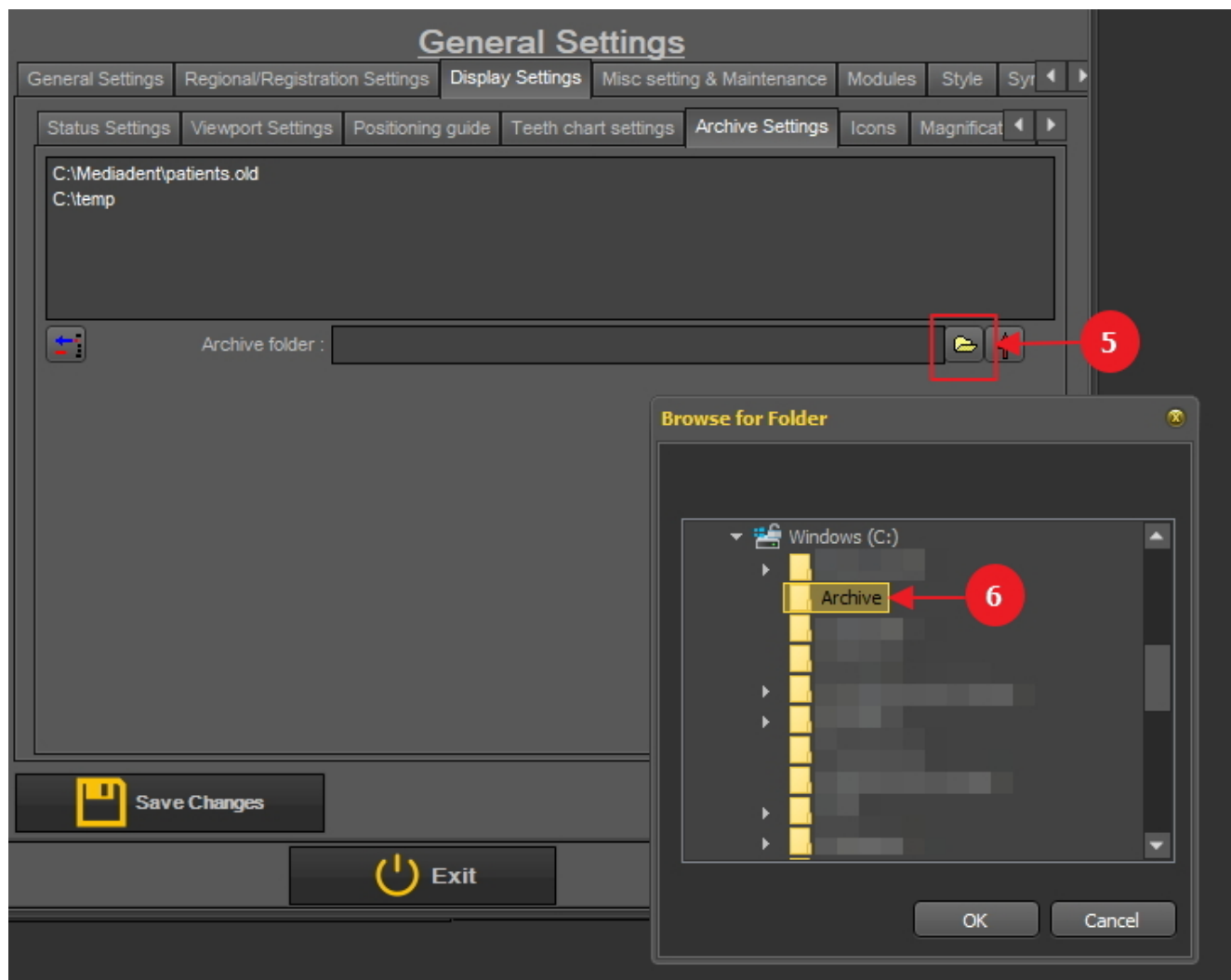
In **General Settings** ¹, choose the tab **Display settings** ²

In Display Settings choose tab **Archive Settings** ³

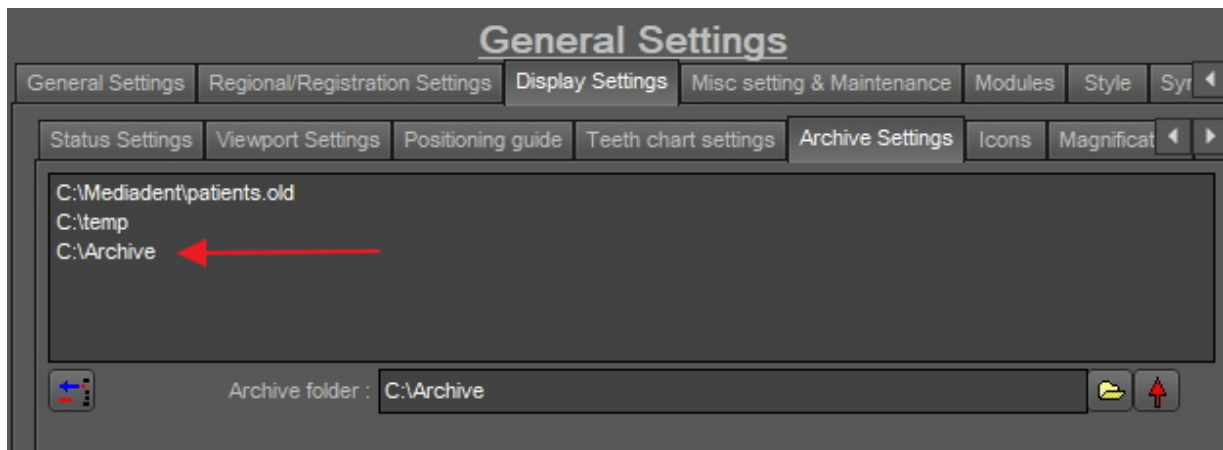



Determine the **location** ⁴ of your archive. You can choose multi locations.

2. To choose the location click on the **folder icon** ⁵, the file explorer will open and you can choose the archive folder ⁶.



3. The folder is added to the list of archive folders.



 Do not forget to '**Save Changes**' before exiting the setup.

2. Remove an archive folder

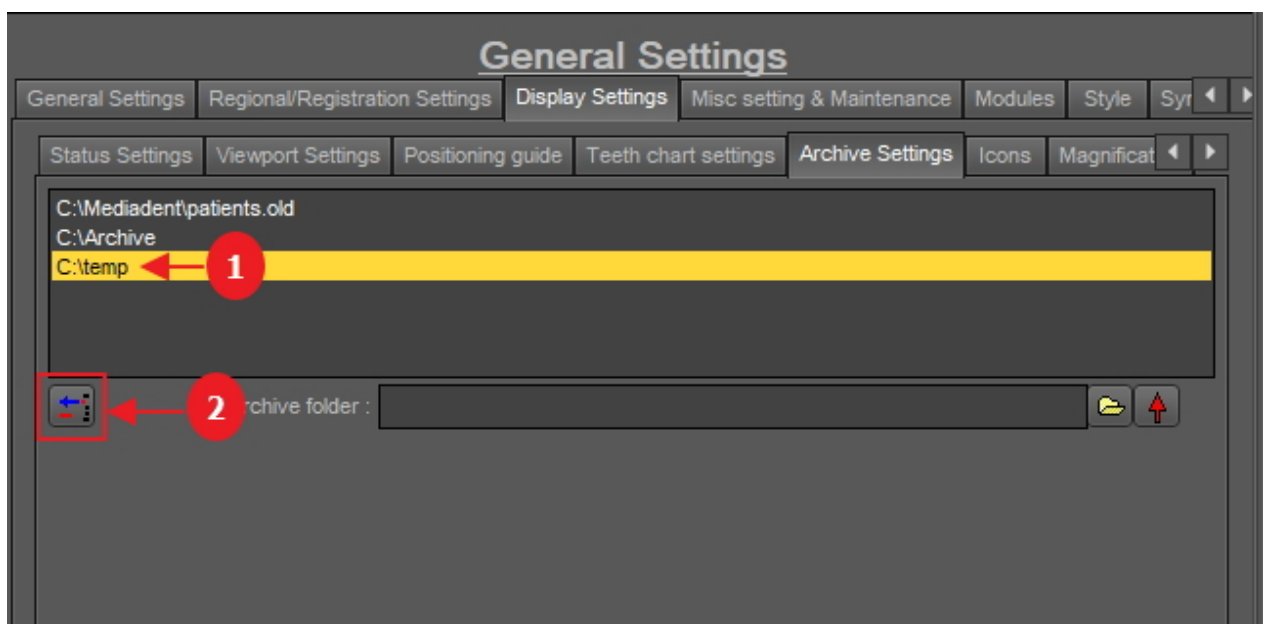
You may always remove an archive folder. This does not mean that the images that are stored in the archive folder will be deleted. It is just a way to remove the folder from the list of available locations.

So the images will still be available at this location, but the location will no longer be available for the end user to choose from.


1. Choose *Options > Setup*

In **General Settings** , choose the tab **Display settings**

In Display Settings choose tab **Archive Settings**



2. Select the folder you want to remove from the list of available archive locations ¹. In this example we choose 'c:\temp'.
3. Click on the icon ² to remove the entry from the list.

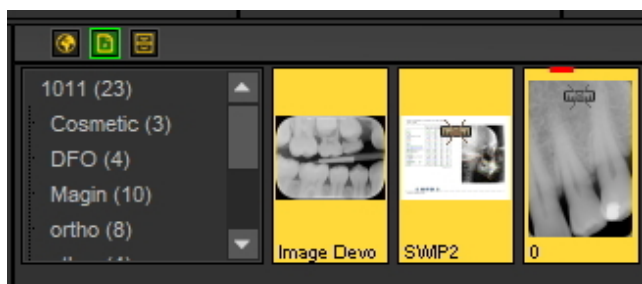
 Do not forget to '**Save Changes**' before exiting the setup.

2. How to send an image to the archive folder

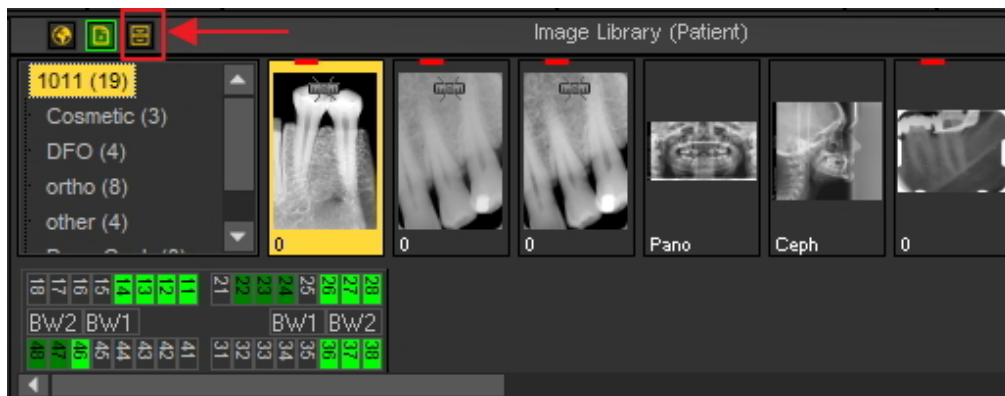
Sending an image to the archive folder is very easy!


Select 1 or more images.

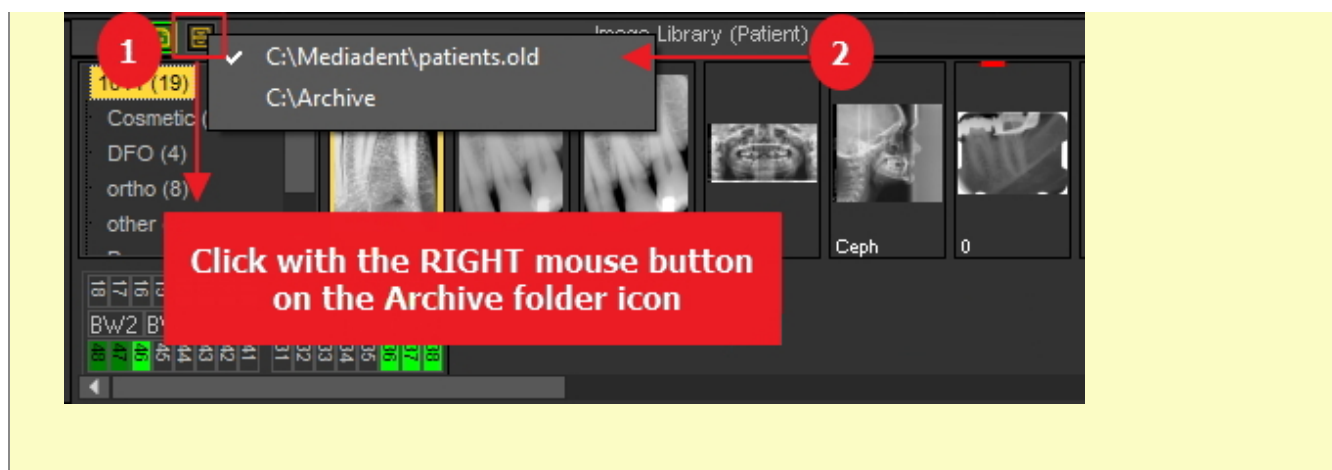
To select multiple images, click on the first image and press the **shift key**. With the shift key pressed, select additional images.



Once you have selected the image(s) you want to archive, you can click on the **archive icon**.



 If you have created a list of locations where the images can be archived : click with the right mouse button ¹ on the archive icon and select the locations ² of your choice.



5 Getting Started

Before you start using the software it's important to understand the different **screen elements** and the way you can **navigate** through the different options.

After you are acquainted with the screen elements you can follow the steps to **acquire** an image.

The basic **manipulations** of an image can be helpful if you need to analyze the image for diagnostic purposes.

There are several ways to **share** your images with colleagues or other systems.

Step by Step guidance

1. **Overview screen elements (Section 4.1)**
2. **Acquiring an image (Section 5.2)**
3. **Basic manipulations of an image (Section 5.3)**
4. **Saving the image (Section 5.4)**
5. **Printing the image (Section 5.5)**
6. **Sending the image by e-mail (Section 7.6.1)**

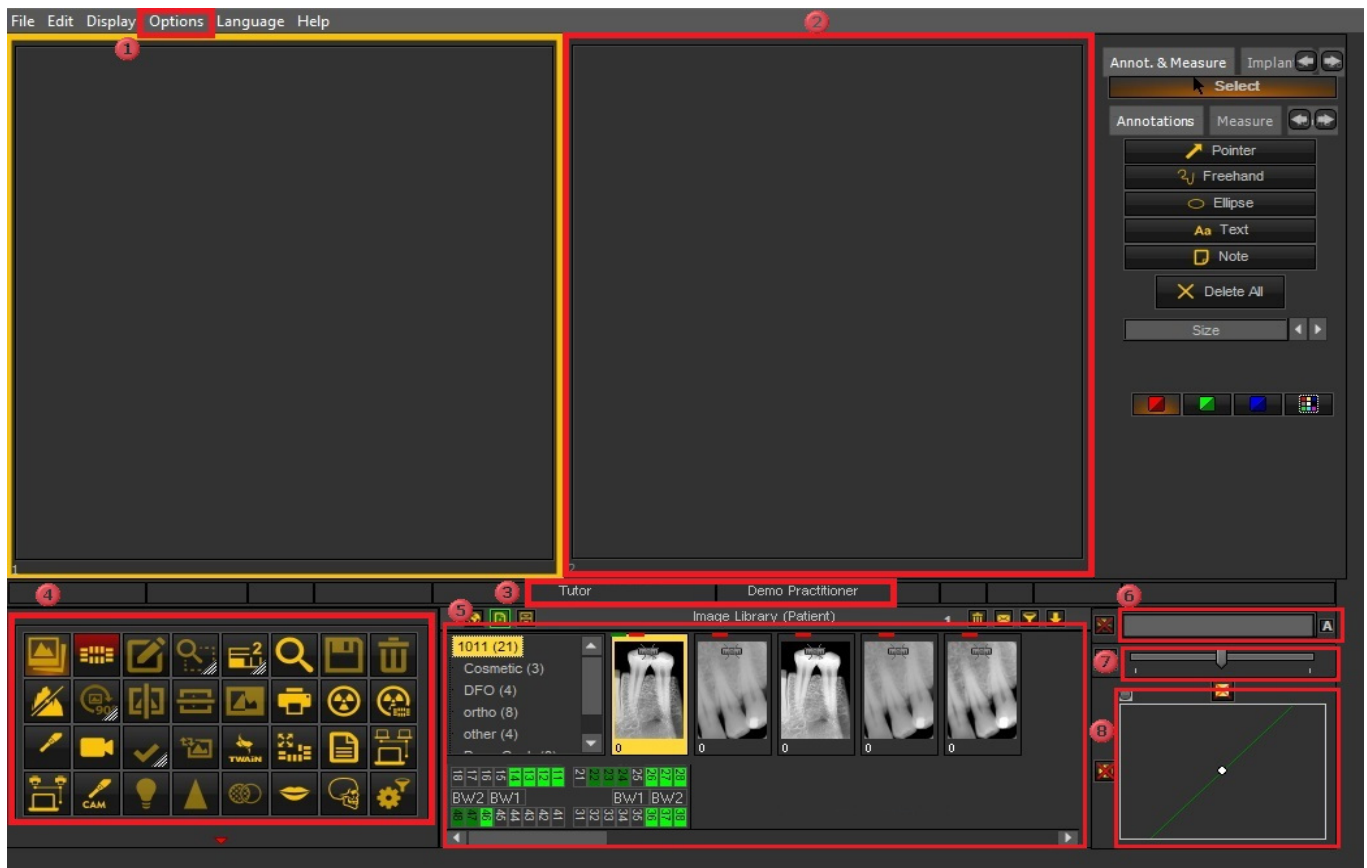
5.1 Overview of the Mediadent screen elements

You will **launch** Mediadent through your **Patient Management System** (PMS). Mediadent will receive its patients information (name, ...) from the Patient Management System.

In this article we will give an **overview of the different Mediadent screen elements** and there function.

It's a good start to getting to know Mediadent better.

Once you have launched Mediadent can get the following screen:



1	These are the different options in the menu. In most of the cases the options are also available through the Icon Set .
2	These boxes on the screen are called Viewports . You can activate a Viewport and load a patients image. For analysis and diagnoses purposes you can have up to 5 Viewports on your screen. This means you can compare up to 5 images of the same patient. Explore the possibilities of the Viewports in the article Working with Viewports (Section 6.1.3) .
3	This is the Status Bar , it will show you the patient's name and practitioners' name.
4	The Icon Set allows you to quickly access certain functionality. Clicking on an icon will get you to the desired functionality.
5	The Imaging library contains all the images from a particular patient. The patient information can be read on the Status bar . You can also see the images of the patient in the Status Mount. See Also Working with the Image library (Section 6.5.4) .
6	The Windowing slider is one of the most powerful features of Mediadent. It allows you to limit the number of gray scales in your image. See Also Working with Windowing (Section 6.2.2) .
7	The Pseudo Color slider allows you to convert the gray scales from the image into pseudo colors. See Also Working with Pseudo Colors (Section 6.2.3) .
8	The Histogram of the image represents the distribution of the pixels. It shows the amount of pixels per gray scale. You will be able to improve the images. See Also Basic manipulation of an image (Section 5.3) .

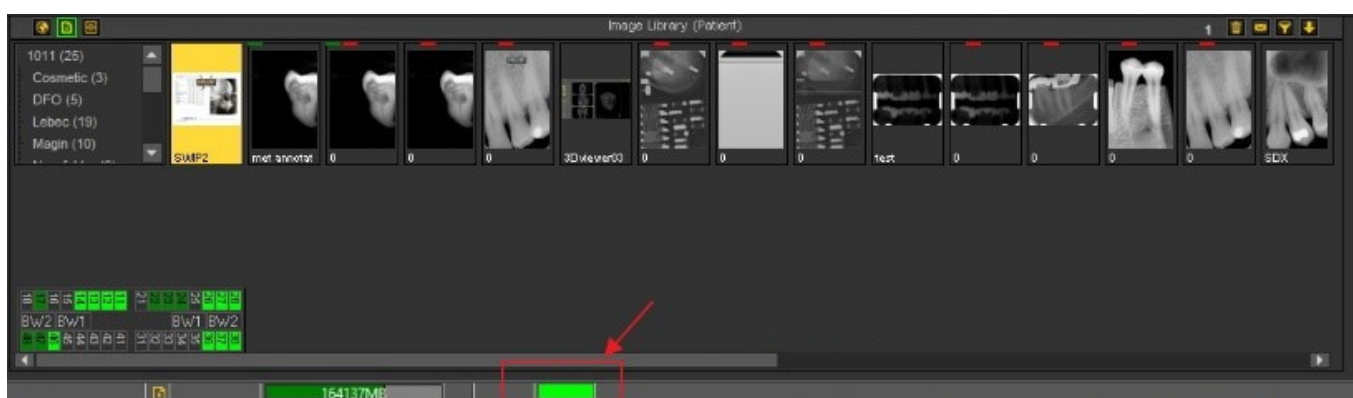
At the **bottom** of the screen you will see a bar :



The bar indicates how much **disk space** is in use. If the bar is **green**, you have enough room to store the images. An **orange** or **red** bar indicates that it is time to look for an extension of your hard disk/server.

The **new notification center** which is integrated in the lower information bar at the bottom of the screen will give you a visual aid and warn you when there are problems.

When everything is fine, the bar is green.

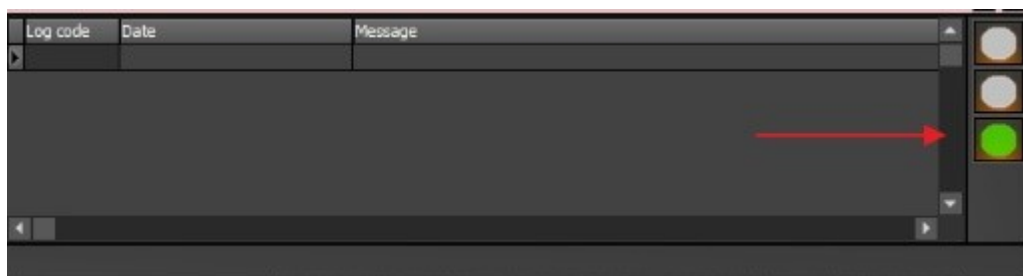


Double click on the bar and this will show if there is a problem.

You will get an overview of the problems, if there are any. A simple traffic light will show you if the issue is critical or not.

- Green : everything is fine
- Orange : be careful, you should take a look at the issue
- Red : critical error

In the screen, you will get a description of the issues.



5.2 Acquiring an image

One of the unique capabilities of Mediadent is that it supports most of the world leading **X-Ray devices** and video devices. To get an **overview** of the supported devices, go to our web site www.imagelevel.com.



It is important to understand that the **acquisition screen** may **differ** depending on the device that is used. Often a device specific acquisition screen is launched, follow the instructions offered by the supplier.

In the **screen shots** we will use an '**X-Ray Demo sensor**' as an example. You can also use the X-Ray Demo sensor to practice. This section will explain the steps to acquire an image:

1. Check the active device

Before you can take an image you need to **check** if the correct device is selected. Once this is selected, you will be able to take a picture with that device.

⚠ You don't have to check it every time you want to take an acquisition. Once the correct device is selected it will stay active.

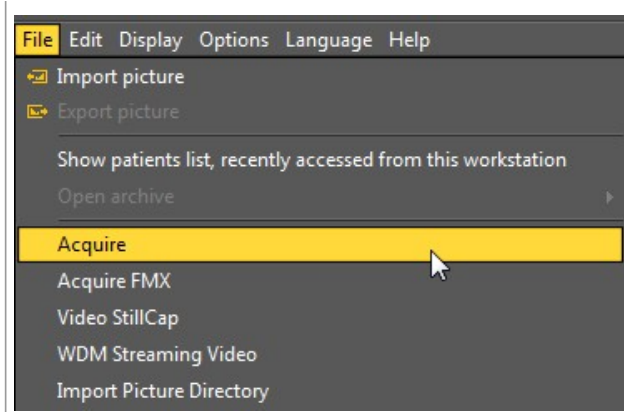

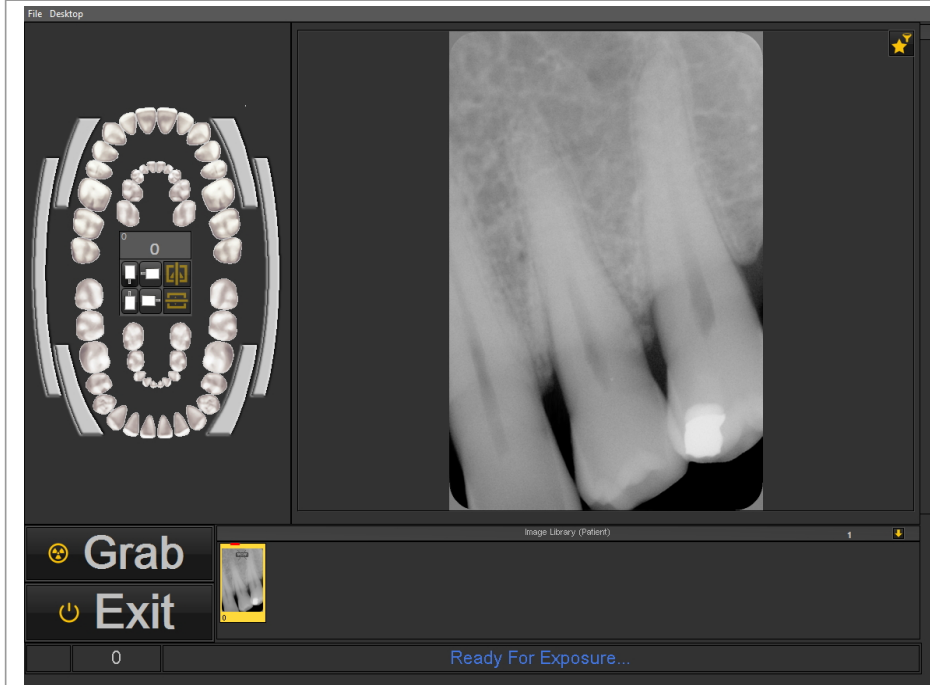
Action	Explanation
In the Mediadent Menu, choose Options > X-Ray Acquisition	<p>Within the Options > X-Ray Acquisition list you will find the supported devices in Mediadent.</p> <p>⚠ Please make sure to select your acquisition device.</p> <p>It is possible you only see a limited list of devices. This depends on the Modules that have been installed.</p> <p>In the Mediadent Setup section you will learn more about the Modules that can be activated.</p>

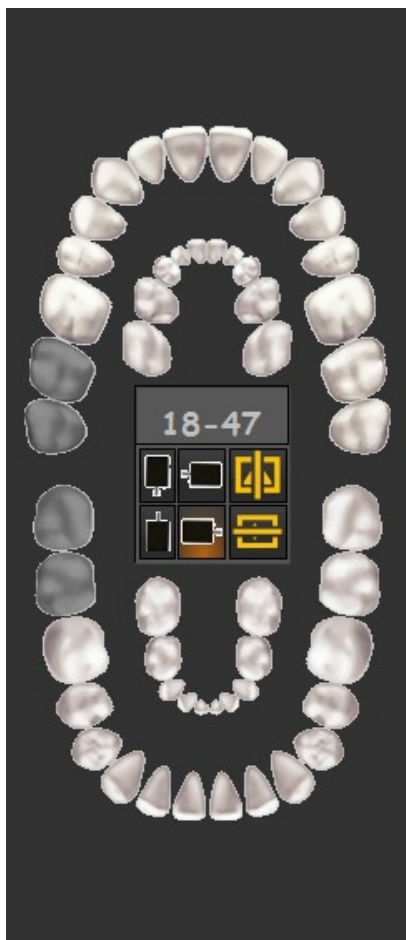
💡 If you have more than 1 device to take images. You can create a **macro** that will allow you to automatically select one of the devices.

See Also [How to create a macro](#).

2. Acquire an image

Action	Explanation
1. In the Mediadent Menu choose File>Acquire	You can choose to use the Menu of Mediadent.

<div><p>-or-</p></div> <p>In the Iconset click on the icon</p>	<p>In the standard Mediadent Desktop you will see the Iconset in the bottom left corner.</p>
<div></div>	<p>The teeth scheme (Status) is presented.</p> <p>You can now select the tooth/teeth you want to take an image of.</p> <div><p>This screen can be different. It depends on the acquisition device you use. In this example we use the X-Ray Demo Sensor.</p><p>It will also depend on the Desktop that has been selected. Read more about the Desktop in Mediadent in the following article A desktop.</p></div> <p>If the positioning guide is activated you will information on how to position your sensor.</p> <p>More information about the positioning guide (Section 4.3) here.</p>
<p>2. Select the teeth or tooth you want to make an acquisition for.</p> <p>You also have the possibility to a select a Bitewing.</p>	<p>You also have the possibility to a select Bitewing.</p>



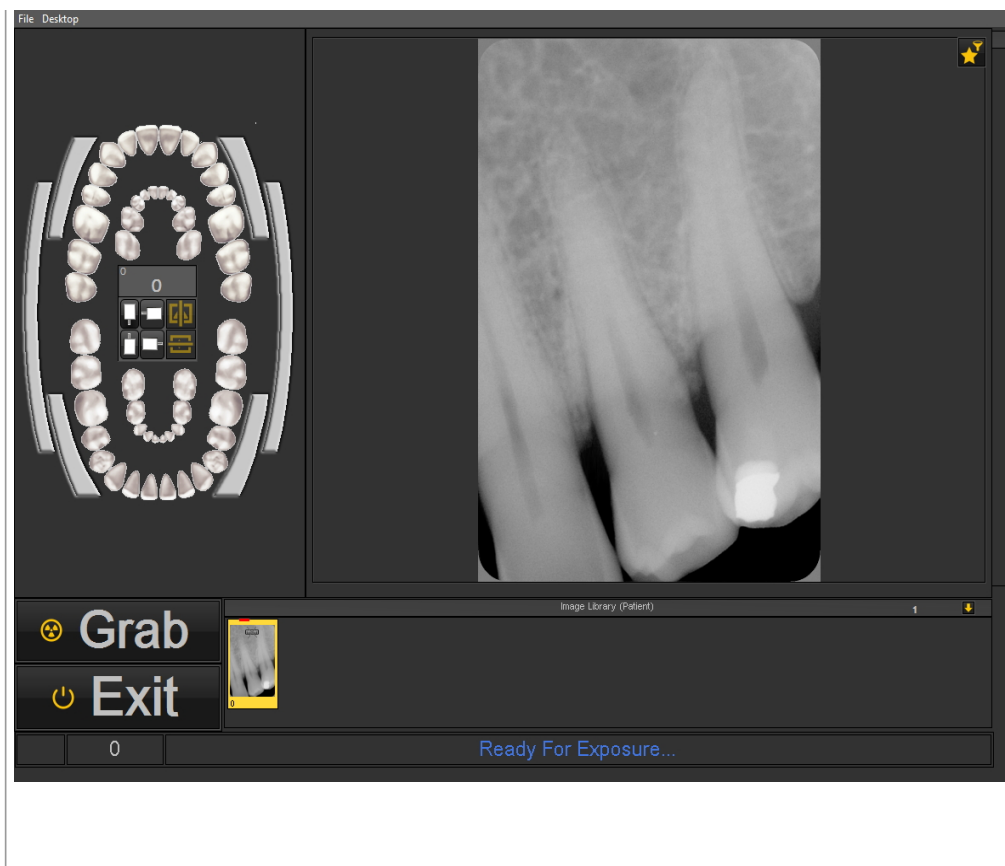

To learn the different possibilities of the teeth scheme, read the article [Working with the teeth scheme](#).

Once you have selected the correct tooth/teeth or Bitewing you are ready to take the picture.

⚠ Don't forget to position the **patient** or the **object** you want to take an image of before clicking the Grab button.

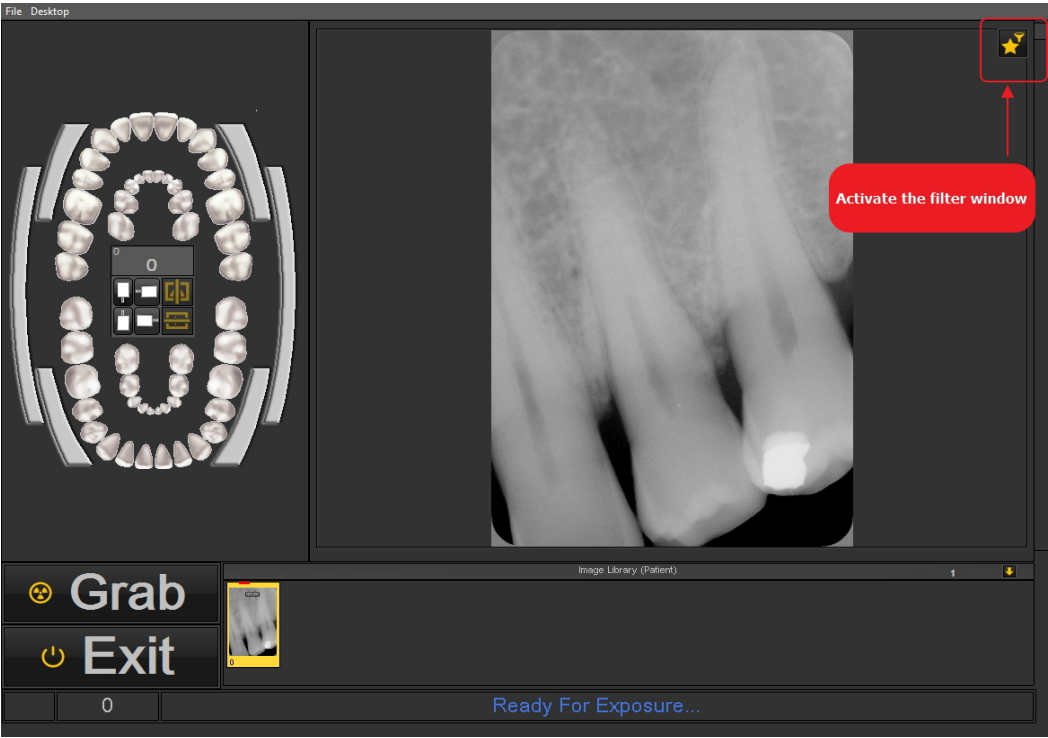
3. You can **Grab** the image by clicking on the Grab button in the image acquisition screen.



	<p>The image will appear in the Viewport and in the Image library.</p>
<p>4. When finished click the Exit button.</p> 	<p>When you click on the Exit button you will be prompted to save the images.</p>

After taking an image, you also have the possibility to activate the filter window. This will allow you to choose the **perfect filter** for your needs.

Click on the **filter window icon** in the acquisition screen.



Read this article to learn how to use the filter window : **Working with the filter window (Section 4.9)**

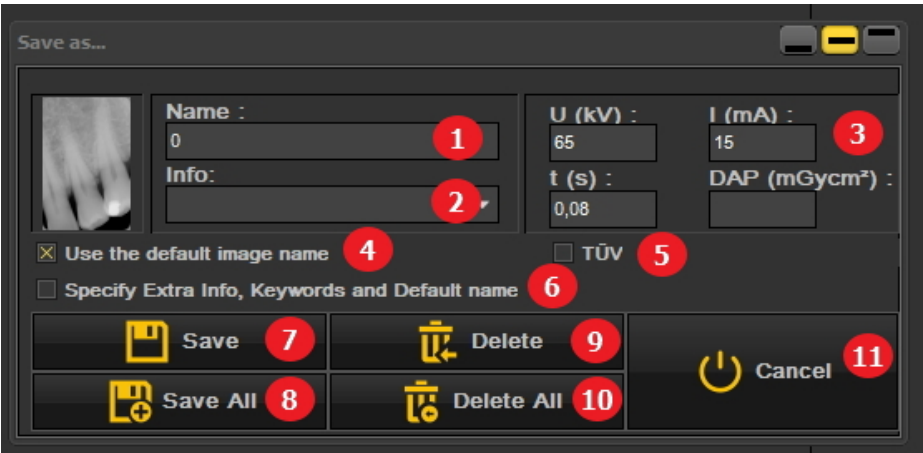
3. Save an image

When you have made an **acquisition** and you quit the acquisition screen you will be presented with a dialog box to **save the images**.












In this dialog box you also get the possibility to add **additional information** for later reference.

You can add:


- Name of the image
- Info : extra information about the image
- Settings : U (kV), I(mA), t(s), DAP
- TÜV : This is optional and can be configured not to appear in the Save as ... dialog box. **Contact us for more information (Section 13).**
- To organize your images specify extra information and keywords.




1	Name of the image.
---	--------------------

	Extra information for later reference.
	Measures : pure for your information, this will not have an impact on the image or device.
	Use the default image name : when checked, the default name will be used. See the article Specify default image name (Section 6.5.6) for more information.
	Setting TÜV : When this is ticked your image will be locked and can no longer be changed/saved. In some countries you have to make reference images that may not be changed afterwards.
	You can add extra info and keywords to your image for later reference. See Also Working with the Image Library (Section 6.5.4) and Specify Extra Info & Keywords (Section 6.5.2) . Also see the article on how to set the default name of an image : Specify default image name (Section 6.5.6) .
	Save and Save All  the pictures to the Image library.
	Delete and Delete All  the pictures in the Image library.
	Quit the screen
	Choose to change the position of the dialogue box = bottom, middle or top of the screen.

To save an image you give the image a name and fill in the extra information fields click on the **Save** button.

 It is however very practical to work with the **Status Mount**. This will allow you to save time because the name of the images will be automatically filled (tooth/teeth number) based on the association made in the Status Mount. Learn more about how to work with the Status Mount in the topic : **Working with the Status Mount. (Section 6.4.1)**

 It is possible that your acquisition process has been automated.

In some practices there is more than 1 acquisition device, for example a device for panoramic and cephalometric images and another device for intra-oral images.

In Mediadent it is possible to automate the acquisition process and to use **function keys** or **icons** in the Icon set to trigger the correct device for a particular picture.

An description of **how to automate the acquisition process** can be found in the topic **How to create a macro (Section 7.7.1)**.

5.3 Working with images

Mediadent offers a wide range of **tools** to **manipulate** your images so they can help you with your diagnoses.

Often the raw image is of a poor quality, maybe images are too light or too dark.

It can also be practical to zoom into a particular area of the image for detailed analysis.

This article will explain the **basic manipulations of images**.

But first things first, **load an image into a Viewport** and find out what the possibilities are!

1. Manipulation of the image by using the mouse

<u>Action</u>	<u>Result</u>
<u>LEFT mouse button</u>	<ul style="list-style-type: none"> - Go to full screen mode - Change the brightness and contrast of the image.
<u>1. Full Screen View of an image</u>	

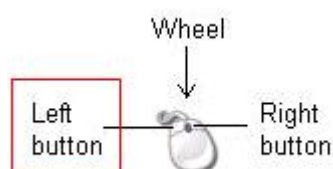
By **double clicking** with your **left mouse button** on the image, you will see the image full screen.

To go back, just **double click** again and you will return to the Mediadent screen.

For detailed analysis you can view the image full screen.

2. Change contrast and brightness

Press and hold the **LEFT** mouse button and move the cursor on the image : up and down, left to right.



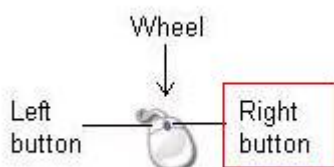
If your picture has a bad quality you can quickly change the contrast and/or brightness.

RIGHT mouse button

- Activate the **magnification frame**
- Change the **magnification** within the magnification frame

3. Magnify a part of the image

Press and hold the **RIGHT mouse button** to use the **magnification frame**. You can **move** the cursor while pressing and holding the right mouse button so you can go to a particular area you want to analyse in more detail.



For detailed analysis of a certain problem area you can activate the **magnification frame**.

The magnification frame will appear if you **press and hold the right mouse button**.

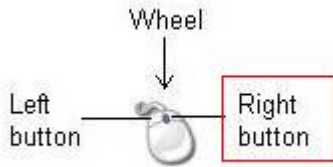
4. Change the magnification within the magnification frame

Press and hold the **RIGHT mouse button** to use the

Sometimes the magnification in the

magnification frame.

While **pressing and holding the RIGHT mouse button** you can turn the **wheel the mouse** up and down.



magnification frame is not enough. You can zoom in or out in the magnification frame. This will allow you to do a detailed analysis of the patient's problem.

If you want to change the magnification within the magnification frame, you can turn the **wheel** of the mouse up and down while **pressing and holding the RIGHT** mouse button.

2. Manipulating images by using the Windowing

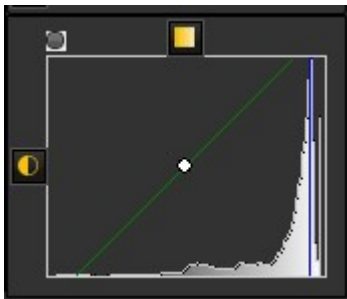
The **Windows function** is a very powerful feature in Mediadent.

- It will allow you to **improve** the quality of your image with 1 mouse click (automatic windowing, described in the article).
- It will allow you to **modify** the images that are of a **lesser quality**, too bright or too dark.

The **Windowing feature** will allow you to **filter** out the gray scales that are not relevant .

The **histogram** shows the retribution of the gray scales of an image.

For example: If an image is **too bright** you will see that the histogram shows spikes on the right hand side of the chart.



This screenshot shows spikes on the right hand side, indicating that the image is too bright.

When activating the Windowing feature, the **gray scales** on the left hand side of the histogram are not relevant and can be discarded.

In this **example** the image is very bright as a result of too little exposure time.



To get a better picture quality, we will use the **Windowing** ruler.



The **Windowing ruler** and the **histogram** work together.

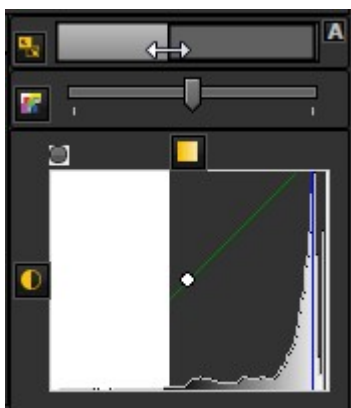


In this section you we will cover the following topics :

1. Use the Windows slider

In this example we will slide the Windowing ruler to the **right**, because the histogram indicates that there are relevant gray scales.

To slide **PRESS** and **HOLD** the **left mouse button** while dragging the slider to the **right**.

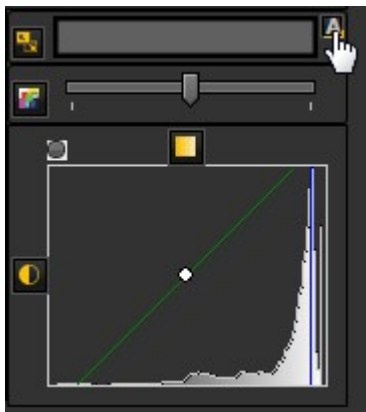


You will see the image changing on the fly.

2. Use the automatic Windowing

We have made it even easier for you with the **automatic Windowing feature**.

Press the **icon** on the right hand side of the Windows ruler and Mediadent will **automatically filter** out the most relevant gray scales.



3. Reset the image

You can **reset** your changes by clicking on the small icon on the left hand side of the Windowing ruler.



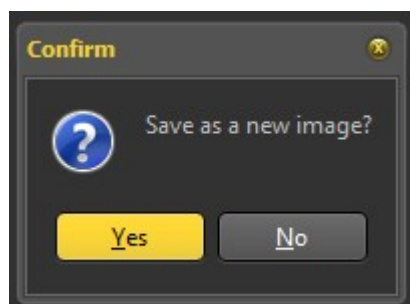
You will see the image revert to the original state.

4. Save the modified image

Once you have modified the image via the Windowing feature, you can **Save the image**.

1. Click on the **Save icon**



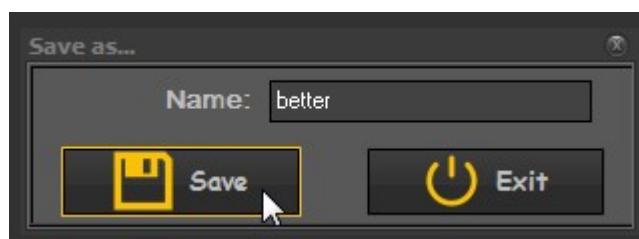
2. **Save** as a New Image

Choose **YES** if you want to keep the original version of the image.

Choose **NO** if you want to replace the original version.

We will choose to save the image as a new image. This means a new file will be created.

3. Give a name to the file

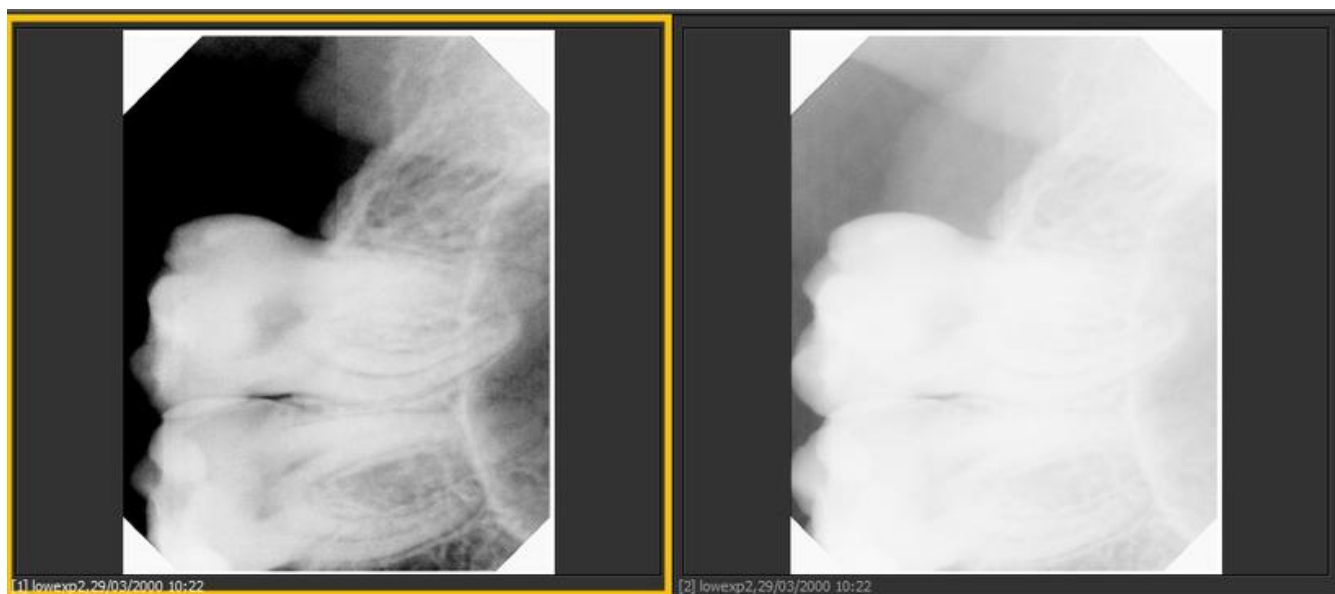


If you have chosen **YES**, you will be prompted for a name.

4. Click on the **Save** button

The image will appear in the Image Library.

In this screenshot you see the difference between 2 images. The **left** image is the modified image with the Windowing feature, the **right** image is the original image.



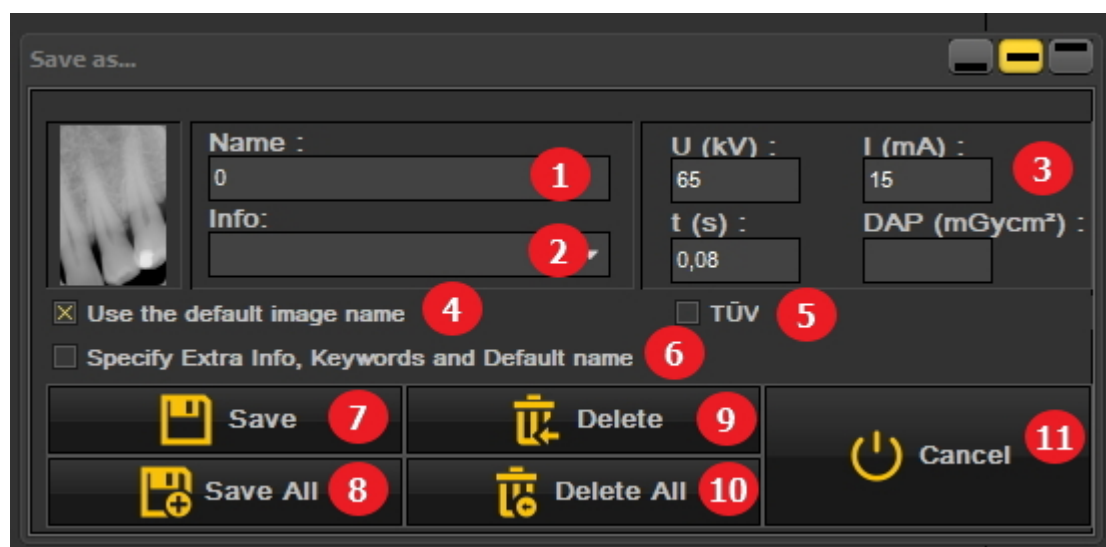
5.4 Saving an image

When you have made an **acquisition** and you quit the acquisition screen you will be presented with a dialog box to **save the images**.


In this dialog box you also get the possibility to add **additional information** for later reference.

You can add:


- Name of the image
- Info : extra information about the image
- Settings : U (kV), I(mA), t(s), DAP
- TÜV : This is optional and can be configured not to appear in the Save as ... dialog box. **Contact us for more information (Section 13).**
- To organize your images specify extra information and keywords.



1	Name of the image.
2	Extra information for later reference.
3	Measures : pure for your information, this will not have an impact on the image or device.
4	Use the default image name : when checked, the default name will be used. See the article Specify default image name (Section 6.5.6) for more information.
5	Setting TÜV : When this is ticked your image will be locked and can no longer be changed/saved. In some countries you have to make reference images that may not be changed afterwards.
6	You can add extra info and keywords to your image for later reference. See Also Working with the Image Library (Section 6.5.4) and Specify Extra Info & Keywords (Section 6.5.2) . Also see the article on how to set the default name of an image : Specify default image name (Section 6.5.6) .
7	Save and Save All 8 the pictures to the Image library.
9	Delete and Delete All 10 the pictures in the Image library.

11	Quit the screen
	Choose to change the position of the dialogue box = bottom, middle or top of the screen.

To save an image you give the image a name and fill in the extra information fields click on the **Save** button.

 It is however very practical to work with the **Status Mount**. This will allow you to save time because the name of the images will be automatically filled (tooth/teeth number) based on the association made in the Status Mount. Learn more about how to work with the Status Mount in the topic : **Working with the Status Mount. (Section 6.4.1)**

5.5 Printing images

Printing images is one of the easiest ways to share images with your colleagues or your patients.

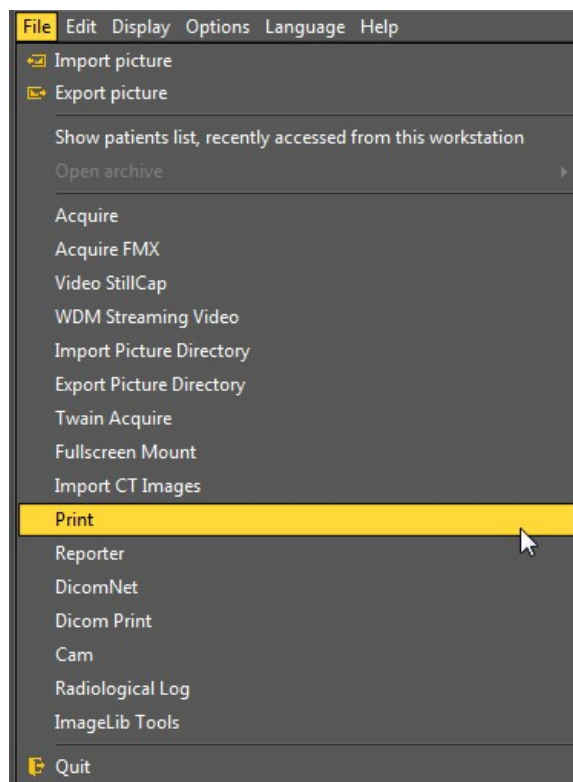
In Mediadent you have to:

1. Choose the **patient** you want to print images for
2. Choose the **print icon** in the iconset



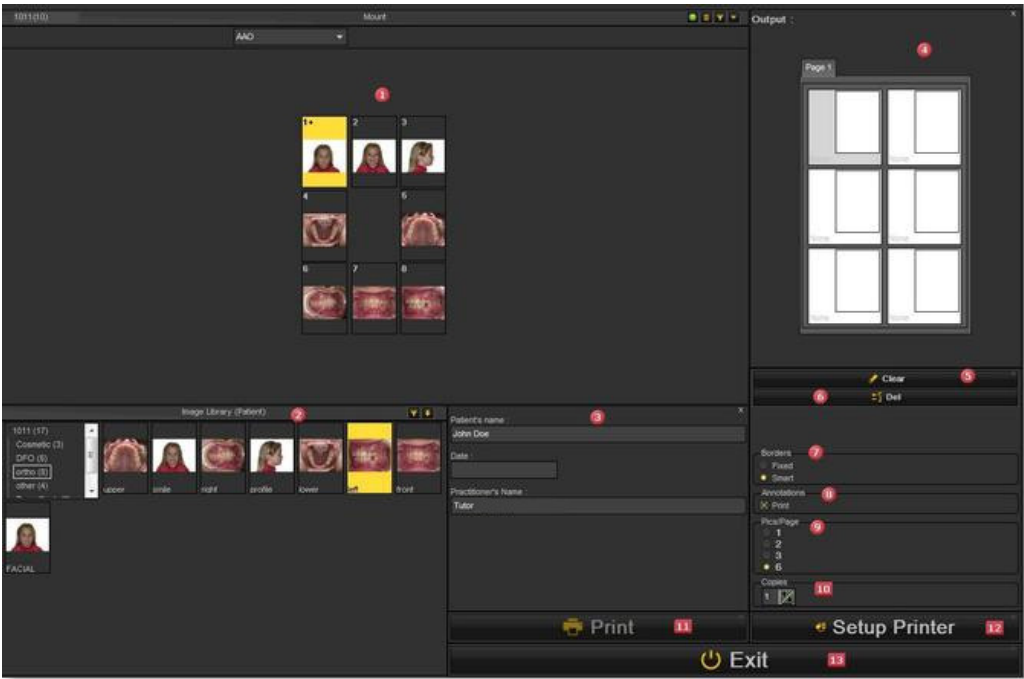
- or -

Choose in the Mediadent menu **File>Print**

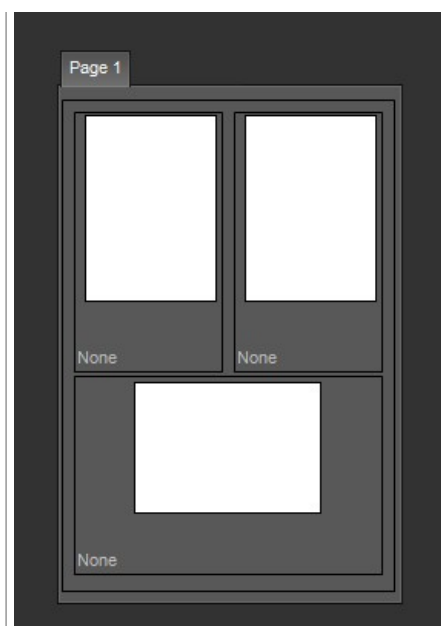


1. Overview Print module

Depending on the Desktop that has been selected, you will see the images of this patient in the Status mount and in the Patient's Library.



Screen elements	
<div><div>1</div>Status Mount</div>	<p>Will show the images in the Status mount.</p>
<div><div>2</div>Image Library</div>	<p>All the images taken from this patient will be organized in his library. You will see the subfolders. Select one of the subfolders if you want to print one of the images.</p> <p>The Status mount and Image Library are different ways of organizing the patient's images. In the print module you will see both and you can choose your images from both Libraries.</p>
<div><div>3</div>Additional fields you can customize</div> <div><div><div><div>Patient's name :</div><div>John Doe</div></div><div><div>Date :</div><div></div></div><div><div>Practitioner's Name :</div><div>Tutor</div></div><div><div>Comment :</div><div></div></div></div></div>	<p>You will be able to change the patient's name, date and practitioner's name.</p> <p>If you want you can add some additional comments.</p>
<div><div>4</div>Output screen</div>	<p>This part will show the layout of the images on the paper. In this example you see that 3 images will be printed out.</p>

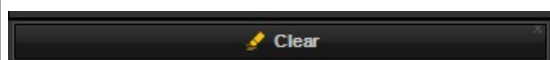


Just double-click on an image and it will appear in one of the boxes of the Output screen.

In this example we have the possibility to add 3 images on 1 page.

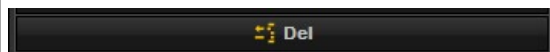
This can be changed by adapting the number of images per page (Pics/Page) ⁹ option.

5 Clear button



The **Clear** button will clear **all the images** on the page

6 Del button



The **Del** Button will **delete the image** that is selected on the Output screen.

7 Borders

Fixed
Smart

8 Annotation



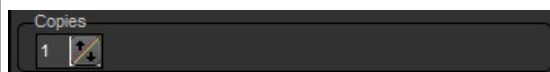
When you select this option, the **annotations** will be printed onto the image

9 Pics/Page



The Pics/Page will allow you to choose the **number of images** per page (1,2,3 or 6 images).

10 Copies



Select the **number of copies** you want to print

11 Print button

The **print** button will print to your primary printer.

12 Setup Printer

If you want to **change the printer setup**, for example change the paper size or orientation, you can select the 'Setup Printer' button.


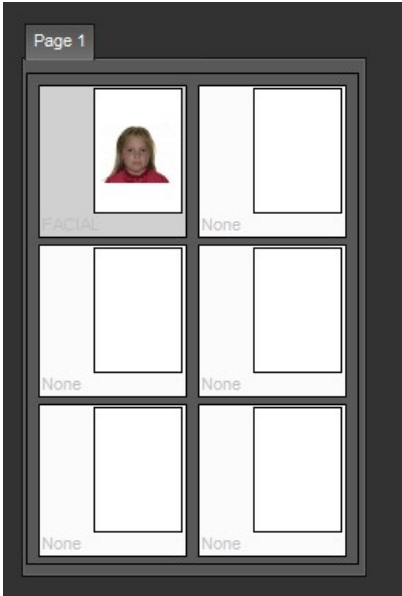
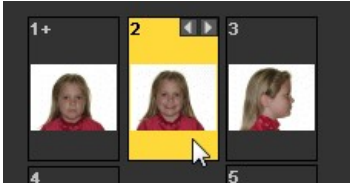
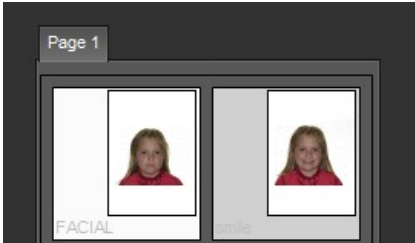
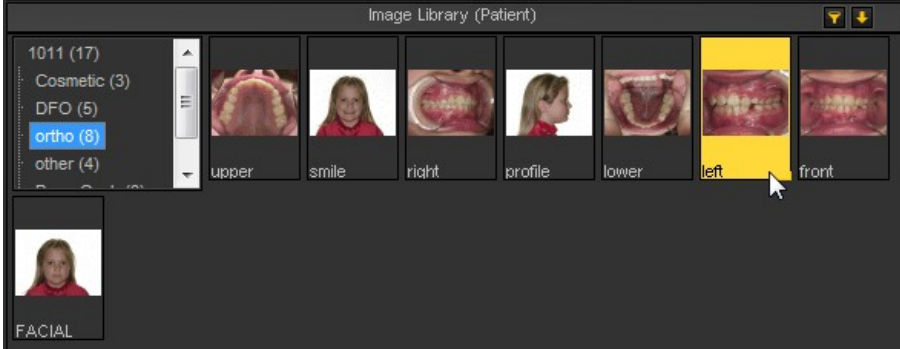
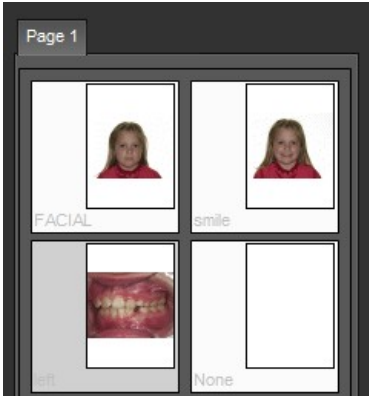
13 Exit


The **Exit** button will exit the print module.


2. Selecting images to print

If you want to **print** an image, just **double-click** on it and it will appear in the Output screen.
The name of the image will appear as a caption on the page.

First select the number of images you want to print on a page **BEFORE** selecting the images.
If you first select the images and then change the number of pictures per page, you will lose your selected images.

Action	Explanation and result
<p>1. Double click on a picture out of the Status Mount</p> 	<p>By double-clicking on the picture, it will be loaded into the output screen.</p> 
<p>2. Double-click on another image.</p> 	
<p>3. Click on the 'ortho' subfolder in the Image Library.</p>	<p>Select another subfolder, for example the 'ortho folder'.</p>
<p>4. Double click on an image in the 'ortho' folder.</p> 	

 With the extra **Reporter module** you can create standard documents such as referral documents and add the patient's images and information. For more information, read the topic **Working with the reporter module (Section 6.6.1)**.

 If you have problems **viewing** all these elements on the screen, you might want to consider choosing another Desktop that is better suited for your screen. Read the topic on **Loading another desktop (Section 7.2.7)**.

6 Working with

6.1 Working with the Mediadent screen

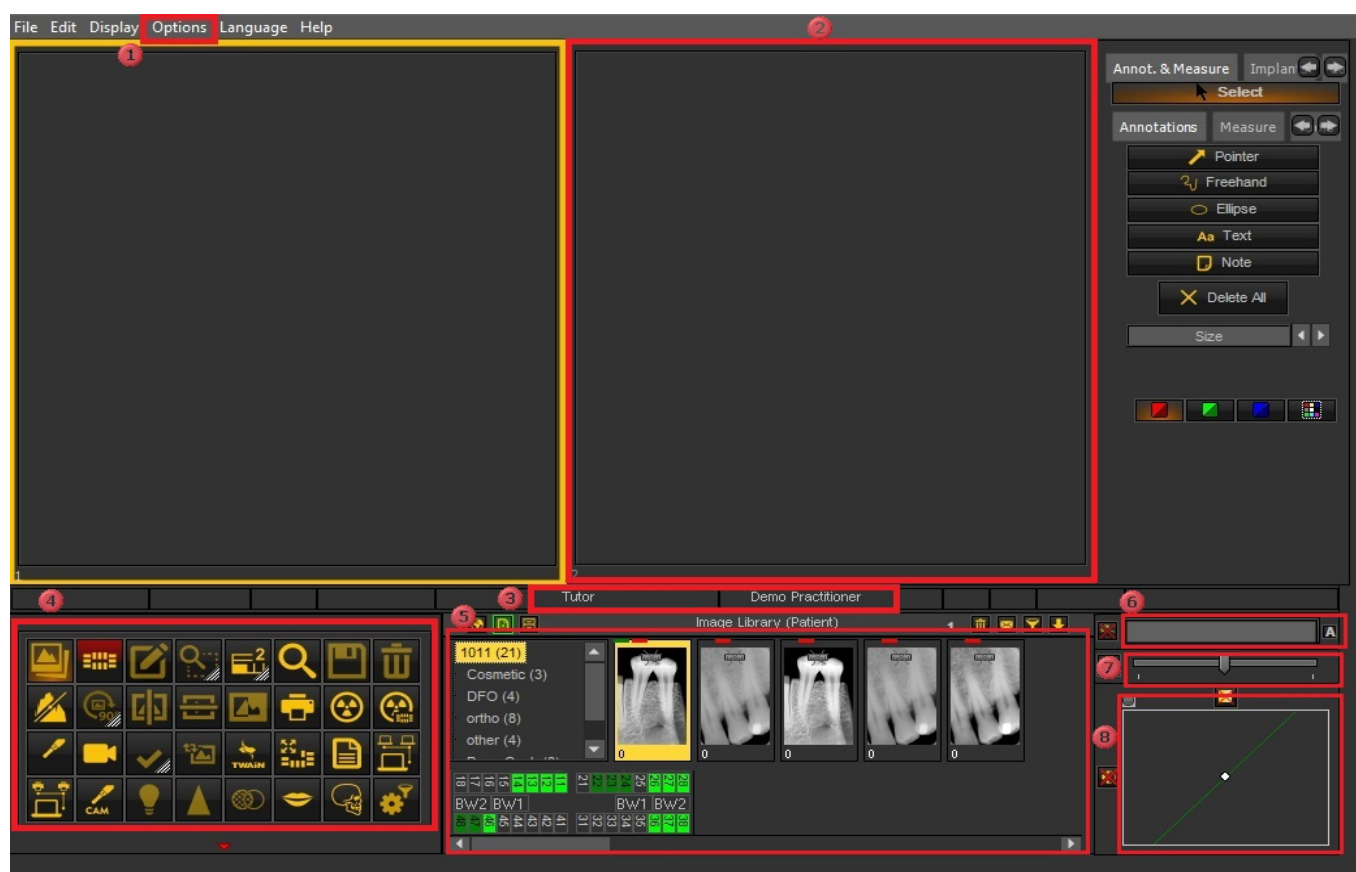
6.1.1 Overview of the Mediadent screen elements

You will **launch** Mediadent through your **Patient Management System** (PMS). Mediadent will receive its patients information (name, ...) from the Patient Management System.

In this article we will give an **overview of the different Mediadent screen elements** and there function.

It's a good start to getting to know Mediadent better.

Once you have launched Mediadent can get the following screen:



1

These are the different options in the menu. In most of the cases the options are also available through the **Icon Set**.

2	These boxes on the screen are called Viewports . You can activate a Viewport and load a patient's image. For analysis and diagnoses purposes you can have up to 5 Viewports on your screen. This means you can compare up to 5 images of the same patient. Explore the possibilities of the Viewports in the article Working with Viewports (Section 6.1.3) .
3	This is the Status Bar , it will show you the patient's name and practitioners' name.
4	The Icon Set allows you to quickly access certain functionality. Clicking on an icon will get you to the desired functionality.
5	The Imaging library contains all the images from a particular patient. The patient information can be read on the Status bar . You can also see the images of the patient in the Status Mount. See Also Working with the Image library (Section 6.5.4) .
6	The Windowing slider is one of the most powerful features of Mediadent. It allows you to limit the number of gray scales in your image. See Also Working with Windowing (Section 6.2.2) .
7	The Pseudo Color slider allows you to convert the gray scales from the image into pseudo colors. See Also Working with Pseudo Colors (Section 6.2.3) .
8	The Histogram of the image represents the distribution of the pixels. It shows the amount of pixels per gray scale. You will be able to improve the images. See Also Basic manipulation of an image (Section 5.3) .

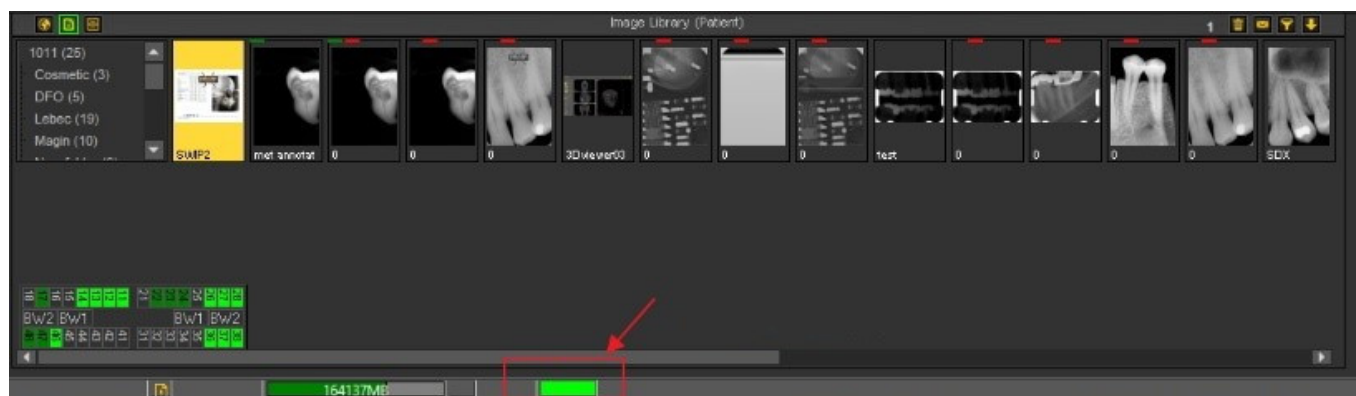
At the **bottom** of the screen you will see a bar :



The bar indicates how much **disk space** is in use. If the bar is **green**, you have enough room to store the images. An **orange** or **red** bar indicates that it is time to look for an extension of your hard disk/server.

The **new notification center** which is integrated in the lower information bar at the bottom of the screen will give you a visual aid and warn you when there are problems.

When everything is fine, the bar is green.

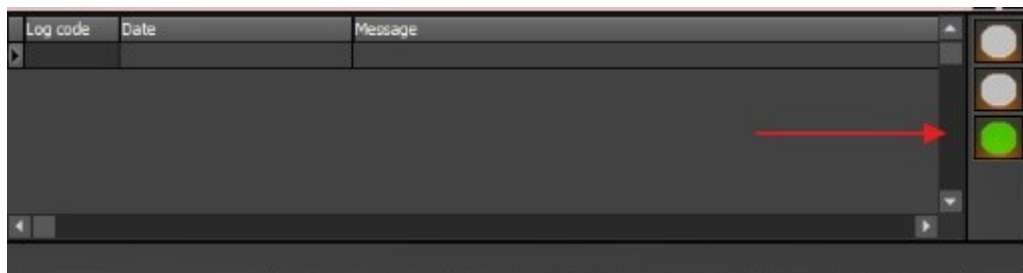


Double click on the bar and this will show if there is a problem.

You will get an overview of the problems, if there are any. A simple traffic light will show you if the issue is critical or not.

- Green : everything is fine
- Orange : be careful, you should take a look at the issue
- Red : critical error

In the screen, you will get a description of the issues.

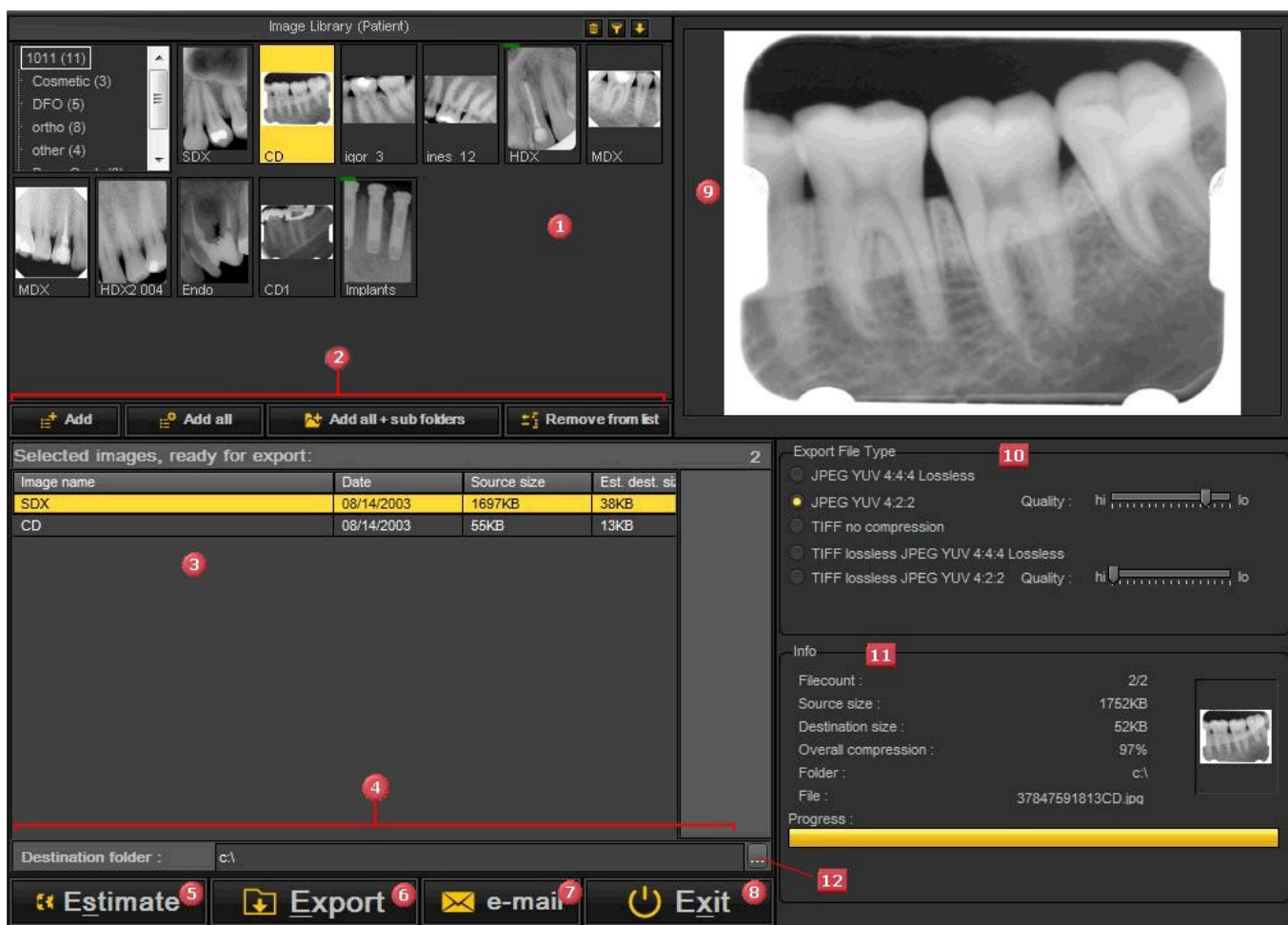




6.1.2 Overview of the export picture directory screen

The Export Picture Directory screen

The Export Picture Directory screen is the dialog box used to select the images that need to be **exported** in a specific format and to a particular folder (Destination folder).

This option is also used to send images via **e-mail**.



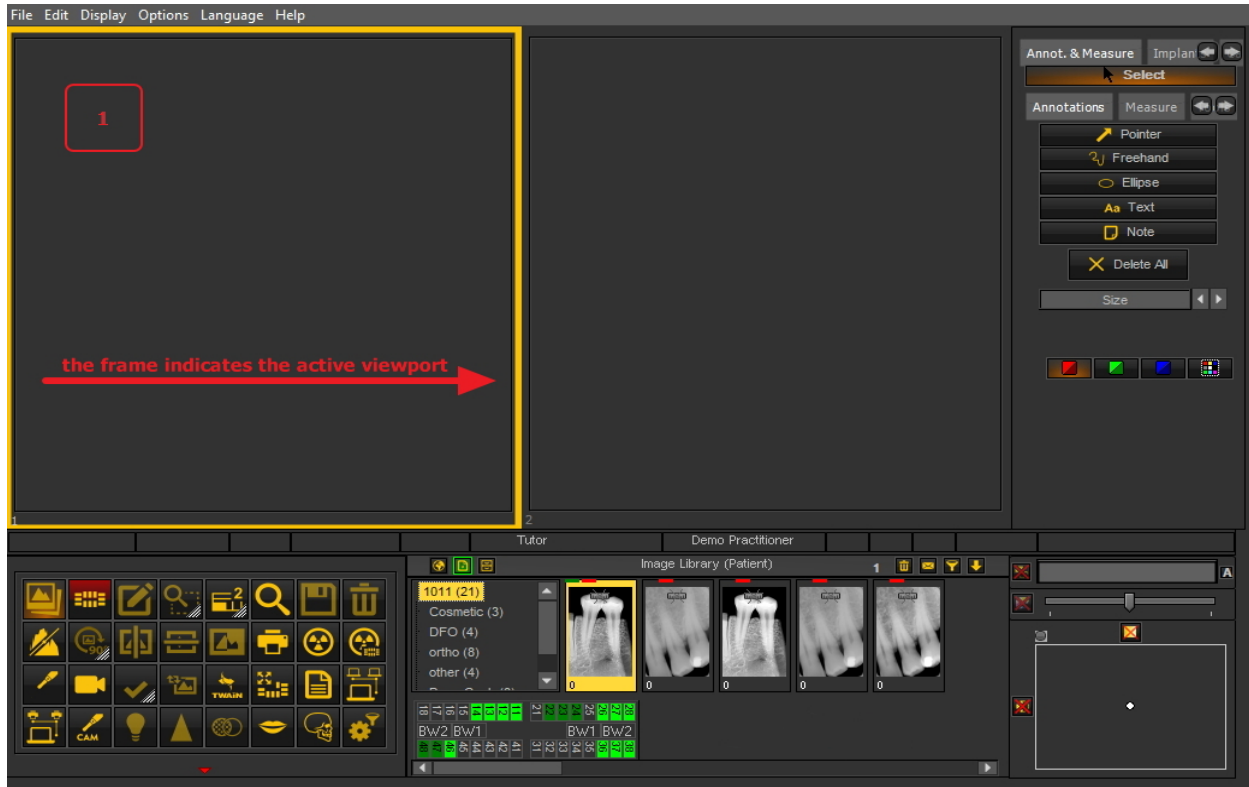
1	The Patient Image Library showing the images taken for the selected patient.
2	<p>The buttons to add the images to the export list 3</p> <ul style="list-style-type: none"> - Add button : Select the picture and click the Add or click with the RIGHT mouse button on an image. - Add all button : Will add all the pictures from selected folder in the Patient Image Library. - Add all + sub folders : Will add all the pictures from the Patient Image Library (including the images in the sub folders). - Remove from list : Will remove the selected image from the export list.
3	The export list contains the selected images that you want to export or send by e-mail .
4	The Destination folder is the folder you will export your files to.
5	<p>The Estimate button is practical because it will calculate the number of files, the source size, the destination size, the compression, folder and file of the images that will be exported or e-mailed.</p> <p>This information will be shown in the Info box 11.</p>
6	The Export button will actually export the images to the Destination folder .
7	The e-mail button will launch your e-mail program and attach the images to a new e-mail message. You only need to add the names of the recipients and the images will be sent.
8	<p>The Exit button will close the dialog box.</p> <div> <p> Do not Exit before all the files have been exported since this will break off the export procedure.</p> </div>
9	<p>The Viewport will allow you to view the images before selecting them to be exported or sent by e-mail.</p> <p>Double click on the image and it will be loaded into the Viewport.</p>
10	<p>The Export File Type box will allow you to choose the file type you want the files to export to. More information about the different file types you can export to, see the topic 'Export File Types' ('Export File Types' in the on-line documentation).</p> <div> <p> Important to understand is that the higher the quality, the larger the image files become. Some e-mail programs have a limitation of files sizes that can be send. If the image files are too large, the e-mail program will not send the images.</p> </div>
11	<p>The Info box will give you interesting information such as the number of files, the source size, the destination size, the compression, folder and file of the images that will be exported or e-mailed.</p> <p>The green bar at the bottom of the Info box will also show the progress of the export.</p>
12	By clicking on this button, you will be able to choose another destination folder.

6.1.3 Working with viewports

In this article we will explain how to load an image in a Viewport.

1. To load an image in a **Viewport**, you first have to **activate** the Viewport by clicking with your **left mouse button** in the Viewport area **1**.

The active Viewport is **highlighted** with a frame (in this screenshot, the frame is yellow).



2. Then you need to **double click** on the image in the **image library** **2** and the image will be loaded in the selected Viewport.



The image is now ready for analysis.

6.1.4 Working with desktops

In this article we will explain what the Mediadent **Desktop** is, how you can load another Desktop to better suit your needs.

For the more advanced users, we will explain how to **configure** a new Desktop.

You also have the possibility to **delete** a Desktop you have created.

We will explain the following topics:

1. Overview of the Mediadent Desktop

A **Desktop** is the way in which the **different screen elements** like Viewports, Icon set, Image Library, ... are presented on your screen.

The Desktop will determine :

- How many **Viewports** A **Viewport** is a region to which you can load an **image** for analysis purposes. Loading an image can be done by first **activating** the Viewport. To activate a Viewport you have to select it by clicking in the region with your left mouse button. Once the Viewport is activated you will see that it changes color (dark grey). Now you can **double click** on the image and it will be loaded into the Viewport. are visible.
- What the position is of the Iconset.
- Where the Image library is positioned
- If and where the histogram is positioned
- If and where the brightness/contrast bar is positioned

In short it determines the look of your Desktop within Mediadent.

Read more about the **different Desktop elements** in the topic about the **screen elements (Section 4.1)**.

Example of one of the standard Mediadent Desktops :



Important to understand is that the Desktop is also tied to the **resolution** of your screen. When changing the screen or screen resolution it may be necessary to load another Desktop or to create your own Desktop.

2. Loadloading another Desktop

The desktop that is loaded is the Mediadent **screen layout** that has been configured for your monitor size and resolution.

It will show all the different Mediadent screen elements.

To get a better understanding of the desktop, read the article **A desktop (Section 12.2)**.

If you are not happy with the current Mediadent screen configuration, you can load **another desktop**.



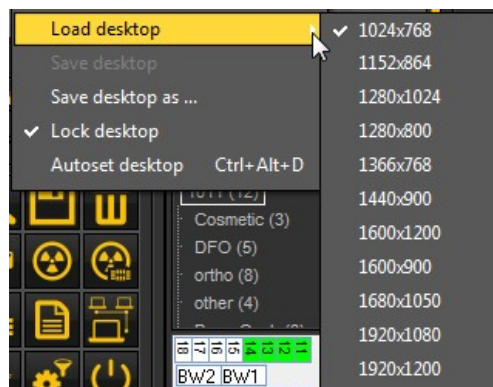
Be aware that if you load a desktop that does not fit your monitor, some Mediadent screen elements will disappear from your screen. For example choosing a desktop that is suited for a wider monitor will have as a consequence that the Mediadent screen elements (like Windowing, Histogram, ...) on the right hand side are not shown on a monitor that is smaller.

1. Choose in the Mediadent menu **Display > Desktop Panels > Load desktop**



You will get a list of **default desktops** that are available. These desktops are linked to the resolution of your screen.

2. **Click** on the Desktop you want to load



You will see a list of **pre-installed desktops**. The names indicated most current screen resolutions. Depending on the type of screen you have, you will be able to choose one of the desktops.



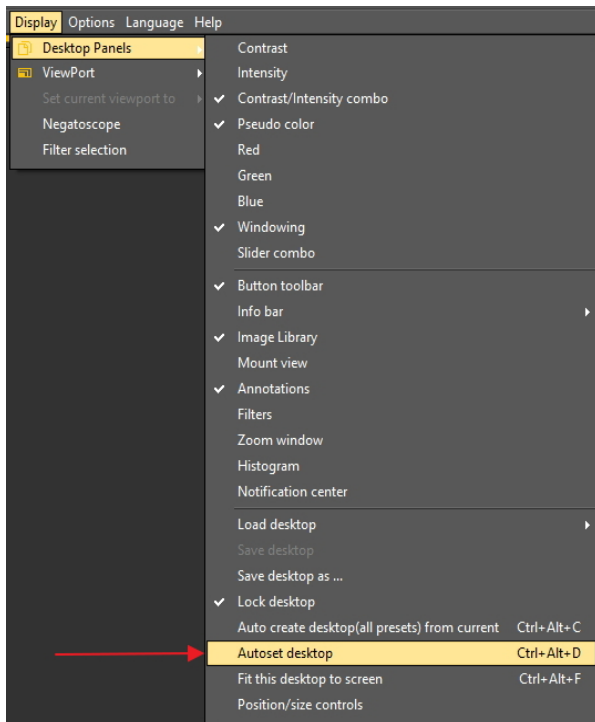
A Desktop '1024x767' means that the Mediadent desktop will show on your monitor in '1024 pixels (width) by 768 pixels (height)

resolution.

Once you have activated one of the default desktops, it is possible your desktop is not yet optimized. For example you still have some room left on your screen that is not used.

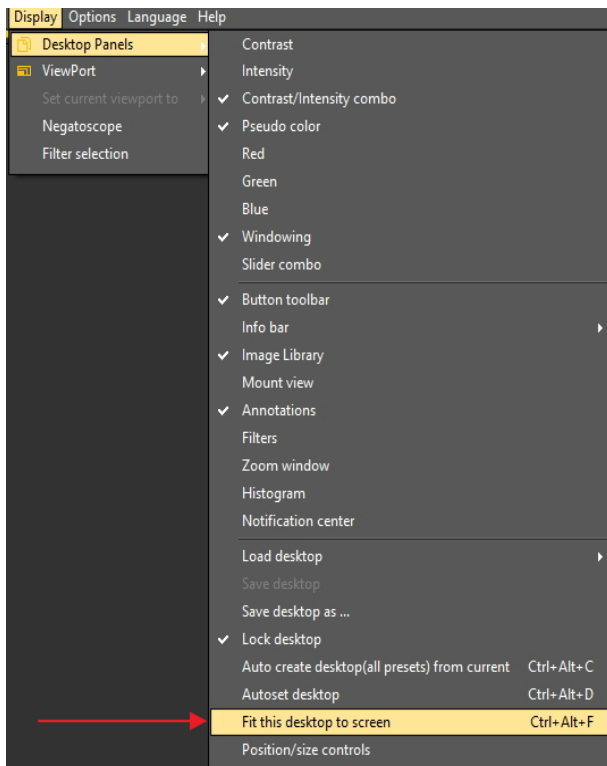
If your desktop is not optimized, there are **2 options** you can use to optimize your desktop :

1. After you have loaded one of the default desktops and you are not happy, you can choose the option **Display>Desktop Panels>Autoset desktop** in the Mediament menu.



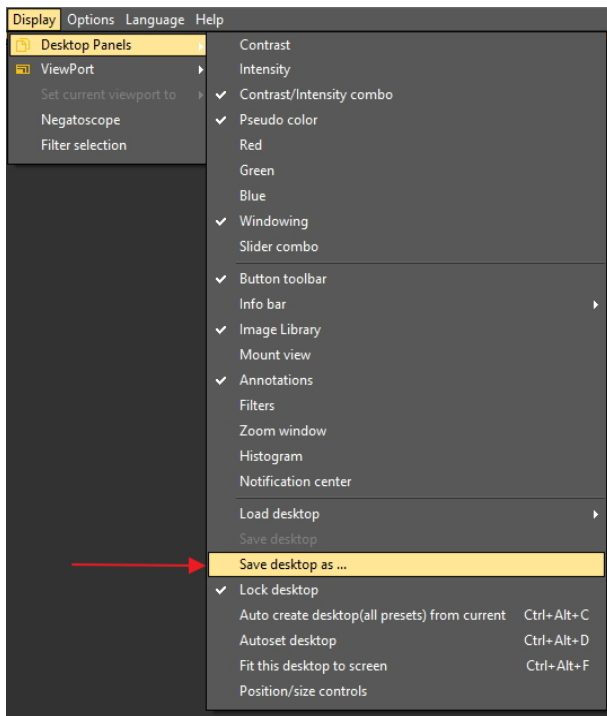
This option will use the most optimal default desktop.

2. If there is still room for improvement, choose **Display>Desktop Panels>Fit this desktop to screen**

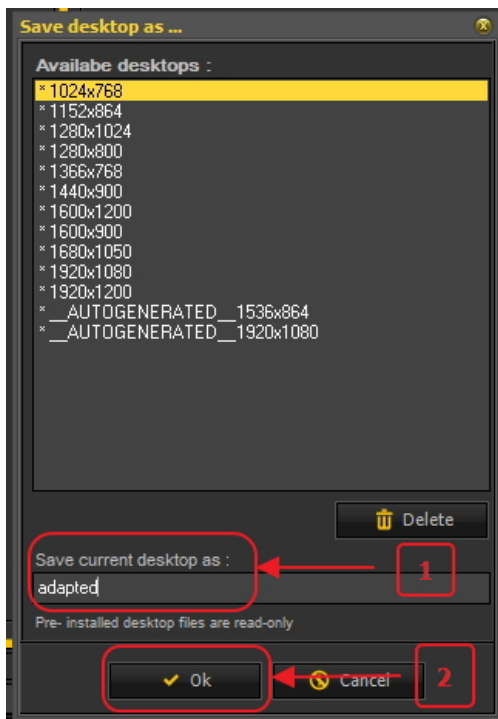


Once you are happy with the desktop, you have to save it.

To Save the adapted desktop, choose **Display>Desktop Panels>Save desktop as ...**



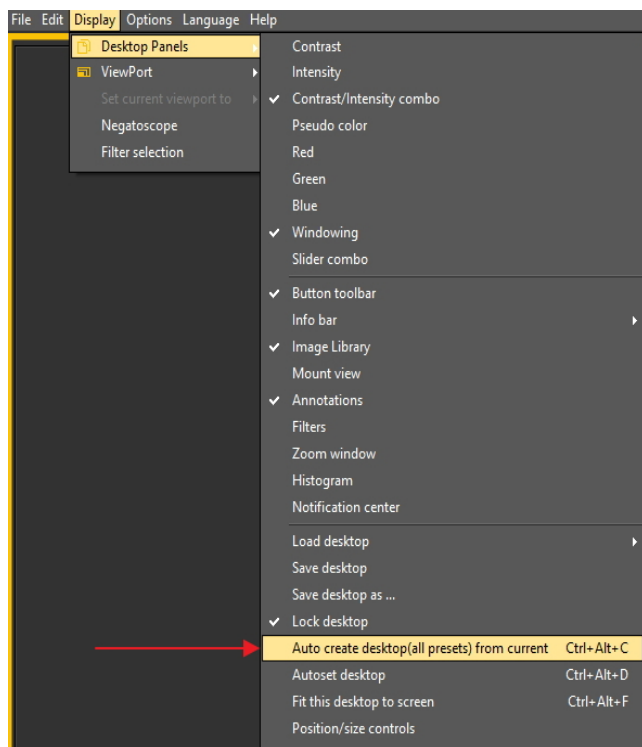
Give the desktop a name, in this case 'adapted'. This desktop will be active the next time you launch the program.



By selecting the optimized desktop, you will make maximum use of the resolution of your monitor.

Once you have the ideal desktop, you may want to automatically create all the desktops based on this ideal desktop.

This can be done with the following option : **Display>Desktop Panels>Auto create desktop (all presets) from current**



This will auto generate all the desktops (1 viewport, 2 viewport, 3 viewport ...) based on this ideal desktop. So if afterwards you switch to another desktop, because, for example, you want to see more viewports, the desktop will already be optimized.

3. Configuring the Desktop

The **Desktop** is the way in which the different elements of Mediadent are presented on your **screen**.

The advantage is that you can **change the layout of the different screen elements**, reflecting your way of work.

If you want to change the desktop, you will first need to know how to **activate/deactivate certain screen element**.

Once activated you **move** the screen elements or even **re-size** them to fit your needs.

To change the Desktop follow these **steps**:

1. **Activate/Deactivate** screen elements
2. **Unlock** the Desktop
3. **Move or resize** the elements
4. **Lock** the Desktop
5. **Save** the Desktop



First read the article **Overview of the Mediadent screen elements (on-line documentation)** to get a better understanding of the different screen elements.

1. Activate/deactivate Mediadent screen elements



When activating a screen element, the element will be **visible**.

To activate an element


Display > Desktop Panels > select the deactivated element

Remark : make sure the  sign is in front of the option

or **click** on the corresponding **icon** in the Iconset to **activate** the element.

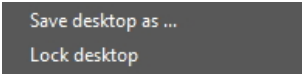


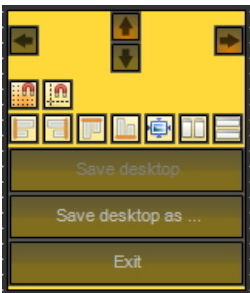
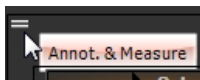


To deactivate an element choose

Display > Desktop Panels > select the active element

Remark : make sure the  sign is **NOT** in front of the option
or **click** on the corresponding **icon** in the Icon set to **deactivate** the element.

2. Change and Save the Desktop layout

Once you have chosen the screen elements you want to activate. You have the possibility to move them to another location on your screen. Follow these steps to **change** the Desktop and to **save** it.

Action	Explanation
1. Unlock the Desktop	
<p>1. Always Unlock the desktop first</p> <p>Display > Desktop Panels > Lock desktop</p> 	<p>Remark : please make sure the  is not in front of the option.</p> <p>Always unlock the desktop before making changes.</p> <p> You will notice the desktop is Unlocked when there are handles available in the left top corner and the right bottom corner of the screen element.</p>
2. Move and/or resize the Mediadent screen elements	
<p>2. The screen elements are free and can be moved to another location on the screen or resized to show all the options.</p> 	<p>Move the screen elements to another location by dragging and dropping the elements via the handles, situated in the left top hand corner of the element.</p>  <p>Resize the screen elements by using the handle in the right bottom corner.</p> 
3. Lock the Desktop	
<p>3. If you are pleased with the result, you must lock the desktop.</p> <p>Display > Desktop Panels > Lock Desktop</p>	<p>Remark : the  sign needs to be in front of the option in the menu.</p>
4. Save the Desktop	
<p>Display > Desktop Panels > Save desktop as ...</p>	<p>You will see a list of pre-installed desktops (indicated with *). They cannot be changed.</p>

Save desktop as ...

Available desktops :

* 1024x768

* 1152x864

* 1280x1024

* 1280x800

* 1366x768

* 1440x900

* 1600x1200

* 1600x900

* 1680x1050

* 1920x1080

* 1920x1200

Delete

Save current desktop as :

Pre- installed desktop files are read-only

Ok

Cancel

After saving your desktop, you will be able to select it via **Display > Desktop Panels>Load Desktop**

5. Type in a recognizable desktop name in the 'Save current desktop as : ' box.

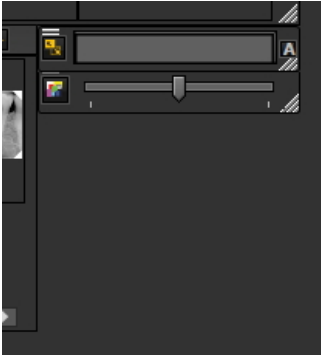
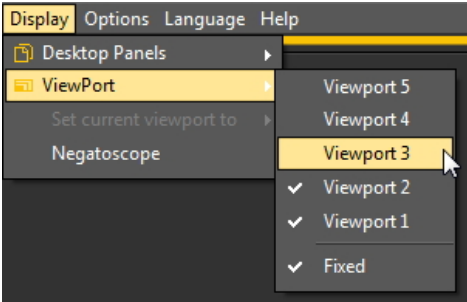
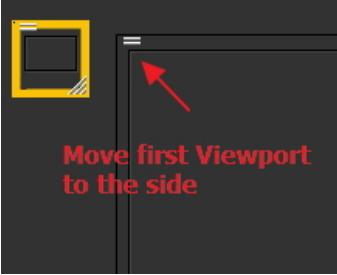
6. Click

Ok

 to confirm.

Click on this title to view the examples

Action	Explanation
As described above, unlock the desktop	.
We will deactivate the Contrast/Intensity combo . In the Mediadent menu choose Display > Desktop Panels > deselect one of the elements <div><div>DisplayOptionsLanguageHelp</div><div><div>Desktop Panels</div><div>ViewPort</div><div>Set current viewport to</div><div>Negatoscope</div></div><div><div>Contrast</div><div>Intensity</div><div>✓ Contrast/Intensity combo</div><div>✓ Pseudo color</div></div></div> For example : Contrast/Intensity combo The screen element is gone.	Remark : please make sure the <div>✓</div> is not in front of the Contrast/Intensity combo option.

	
<p>Adding an additional Viewport</p> <p>In the Mediadent menu choose</p> <p>Display > ViewPort and select the Viewport you want to activate.</p> <p>In this example we would like to see 3 Viewports.</p> 	<p>Be aware that the Viewports that are activated will appear under the existing Viewports. If your desktop is Unlocked you will be able to move the Viewports to another location and you will see the newly activated Viewports appearing.</p> <p>In this example the Viewport 3 was under the Viewport 1. By moving the Viewport 1 you will see the Viewport 3.</p> 
<p>You can now position the 3 Viewports. See the following article New tools to create and modify a desktop in Mediadent v8 (Section 4.5).</p>	
<p>As described earlier, lock the desktop and save it.</p>	.

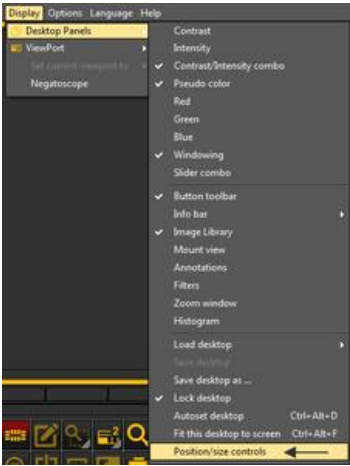
3. New additional tools to create or modify a desktop

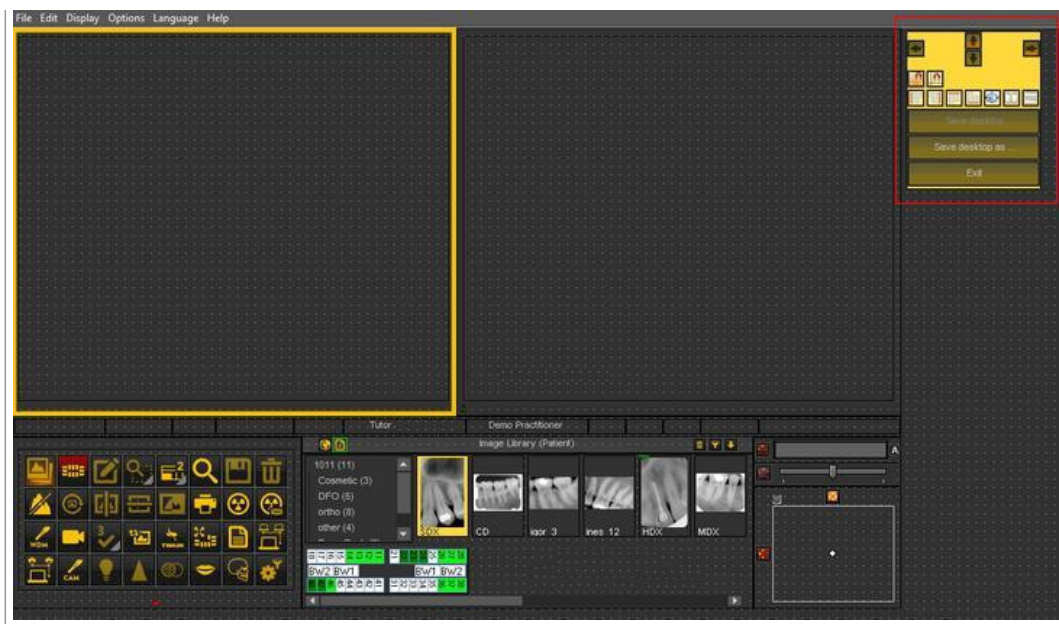
In this latest versions a lot has been added to improve the creation of desktops in the program.

To understand what a desktop is, read this article first : **A desktop (Section 12.2)**

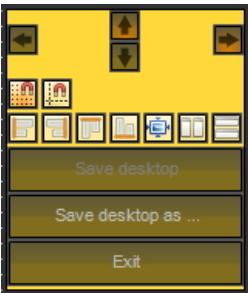
In this section, we will explain the additional tools you have to modify the desktop.

1. Activate the desktop panel options

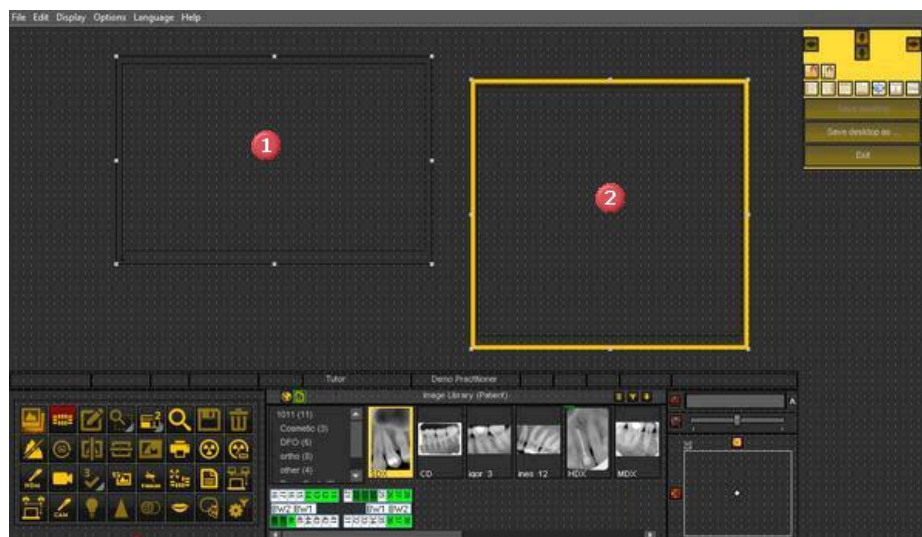
<p>In the menu, choose Display > Desktop Panels > Position/size controls</p>	
	



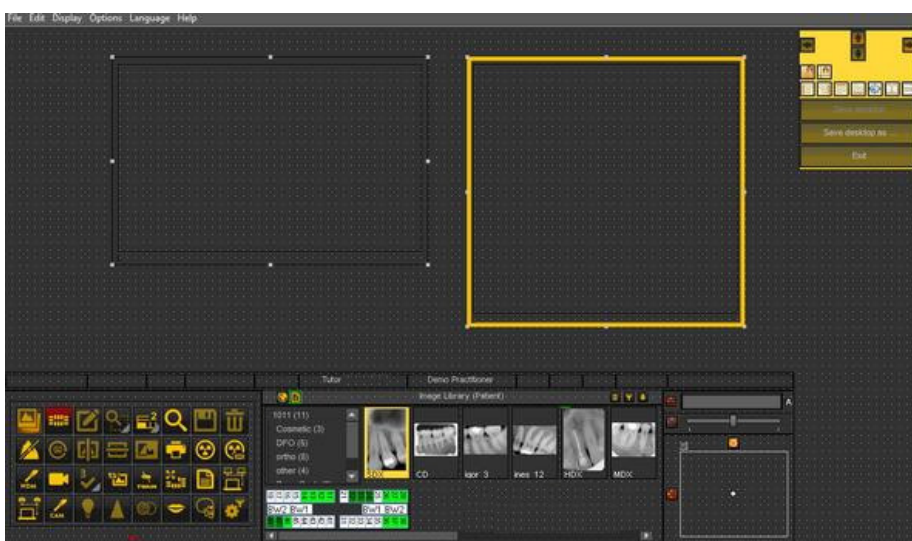
2. Overview of the toolbox icons and examples



Icon	Explanation
	These are the controls that determine the position of the toolbox. The options are left, right, top and bottom. It is also possible to drag and drop the toolbox manually.
	Snap to grid : when the icon has a red glow the screen elements will snap to the grid. This can be de-activated by clicking on the icon.
	Align to grid : this will allow you to align the screen elements to the grid.
	<p>Alignment of the screen elements.</p> <p>Align left, align right, align top and align bottom.</p> <p><i>The alignment is done against the first selected box.</i></p> <p><u>Example</u> : alignment top</p> <p>Select first box 1</p> <p>Select the second box with Ctrl and click on the second box 2</p> <p>Click on icon align top </p>




Result :

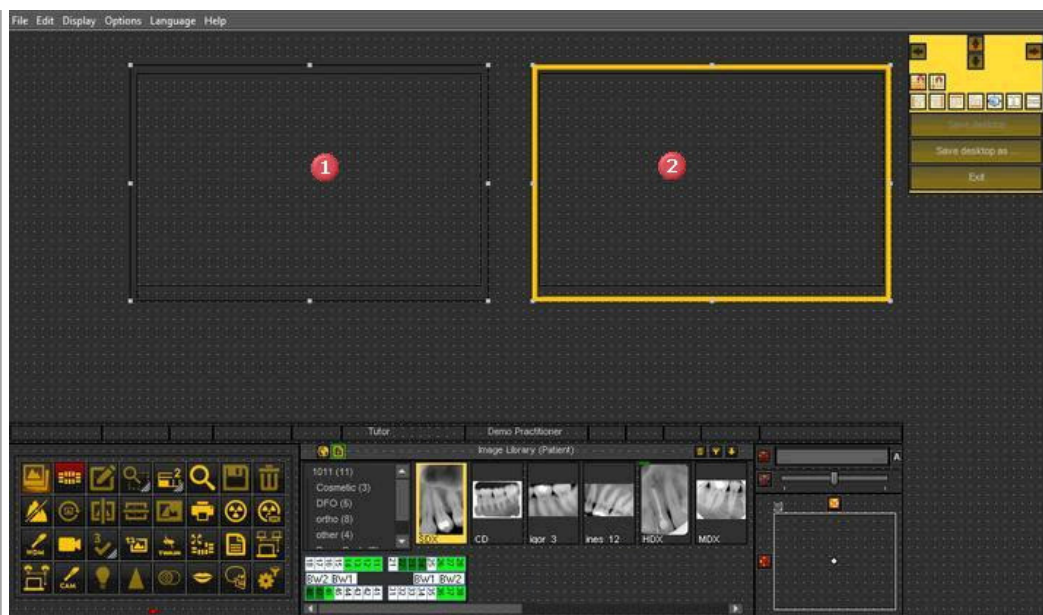


Alignment next to each other or on top of each other.

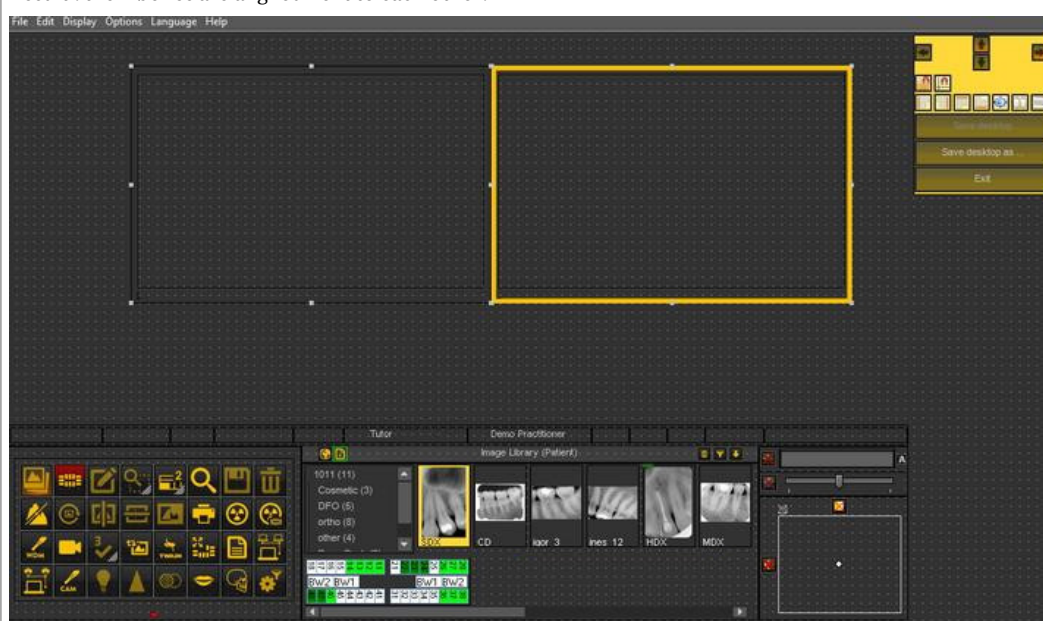
Example : alignment next to each other.

Select first box and select second box by pressing and holding the **Ctrl** button.

Click on the icon  to position the 2 windows next to each other.



Result : the 2 boxes are aligned next to each other.



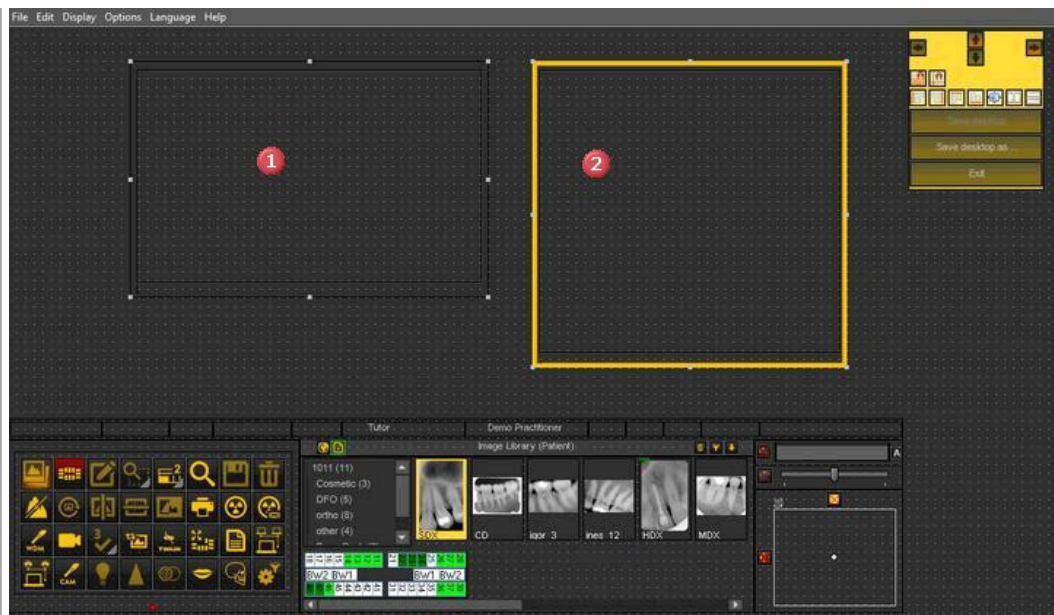
Same size


This option will allow you to create screen elements with the same size.

The first selected box will determine the size of the other selected box.

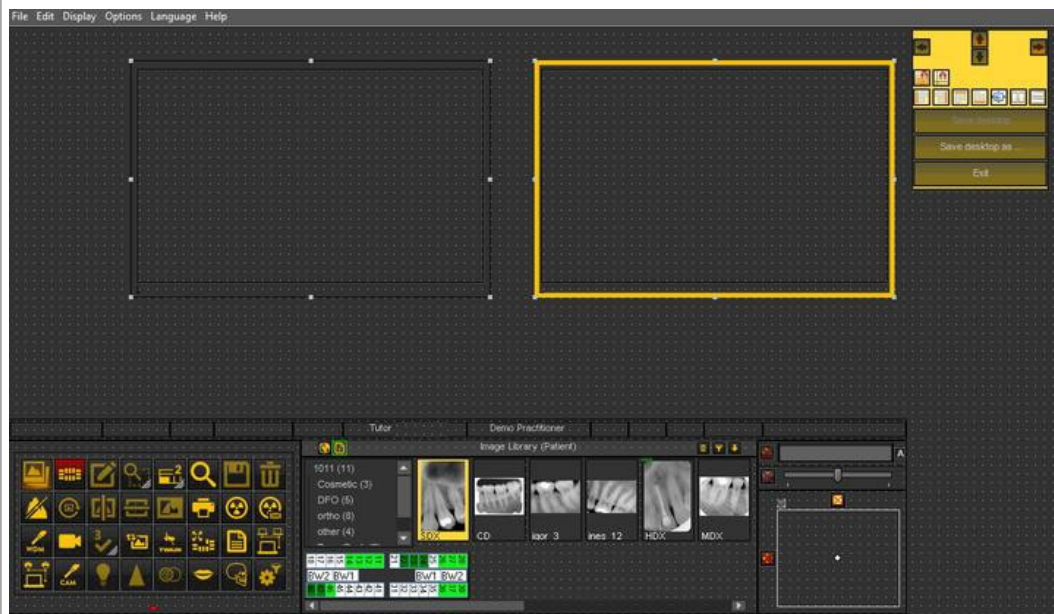
Select the first box that has the desired size.

Select the second box by pressing and holding the Ctrl key.



Click on the icon 

Result : The second box has the same size and the first box.

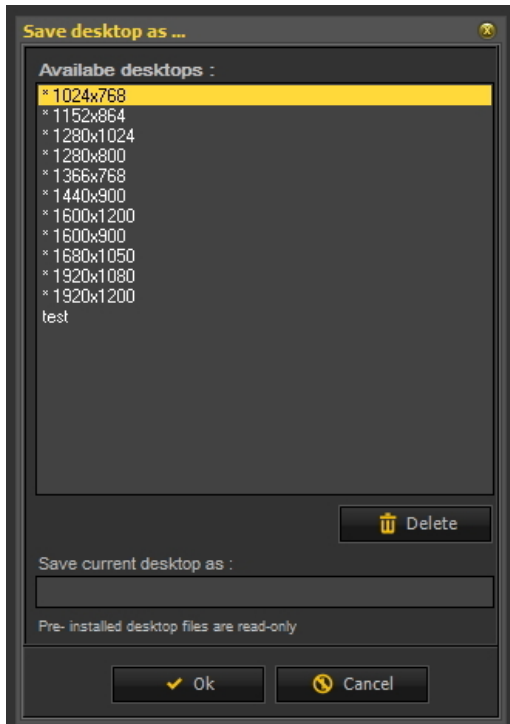


4. Deleting a Desktop

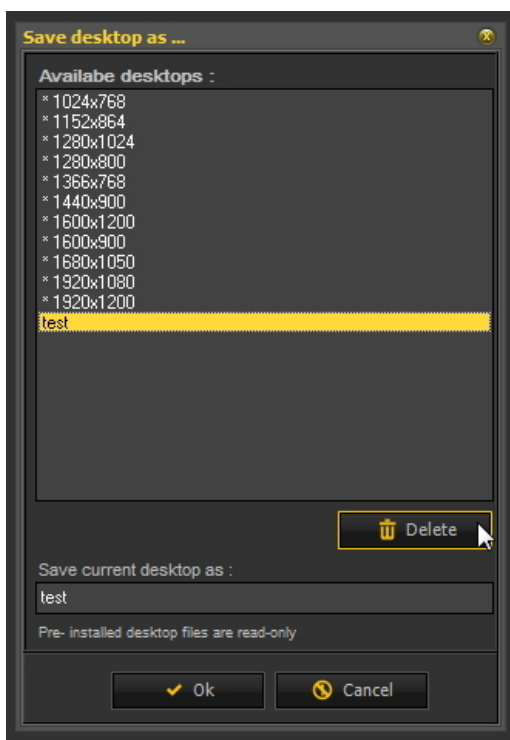
Changing your monitor is often a reason to delete a previous created desktop with another screen configuration.

Follow these **steps** to delete a desktop


1. **Display > Desktop Panels > Save desktop as ...**



2. **Select** the desktop in the list you want to delete. In this example we choose for the desktop **test**.



3. Click the **Delete** button.

 Make sure the desktop you want to delete is not active.

6.2 Working with images

In this section you will learn the different manipulations you can do on an image to support your diagnosis,

treatment planning and follow-up.

We will start with the **basic manipulation**. This is a great starting point if you have just started using Mediadent.

Afterwards if you want you can take a closer look at certain topics.

Great overview:

1. Basic manipulation of the images (Section 5.3)

More detail on working with the different features

2. Working with Windowing (Section 6.2.2)

3. Working with Pseudo Colors (Section 6.2.3)

4. Working with the Zoom Window (Section 6.2.5)

5. Working with Annotations (Section 6.2.4)

6. Working with the Region of Interest (Section 6.2.6)

More advanced manipulation of the images:

7. Working with the Optimize feature (Section 6.2.8)

8. Working with Filters (Section 6.2.7)

9. Working with the filter window (Section 4.9)

6.2.1 Working with images

Mediadent offers a wide range of **tools** to **manipulate** your images so they can help you with your diagnoses.

Often the raw image is of a poor quality, maybe images are too light or too dark.

It can also be practical to zoom into a particular area of the image for detailed analysis.

This article will explain the **basic manipulations of images**.

But first things first, **load an image into a Viewport** and find out what the possibilities are!

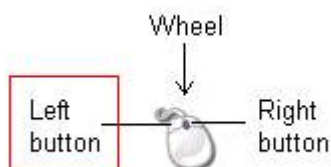
1. Manipulation of the image by using the mouse

<u>Action</u>	<u>Result</u>
<u>LEFT mouse button</u>	<ul style="list-style-type: none"> - Go to full screen mode - Change the brightness and contrast of the image.
1. Full Screen View of an image	
By double clicking with your left mouse button on the image, you will see the image full screen.	For detailed analysis you can view the image full screen.

To go back, just **double click** again and you will return to the Mediadent screen.

2. Change contrast and brightness

Press and hold the **LEFT** mouse button and move the cursor on the image : up and down, left to right.



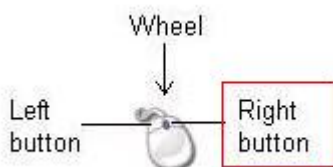
If your picture has a bad quality you can quickly change the contrast and/or brightness.

RIGHT mouse button

- Activate the **magnification frame**
- Change the **magnification** within the magnification frame

3. Magnify a part of the image

Press and hold the **RIGHT mouse button** to use the **magnification frame**. You can **move** the cursor while pressing and holding the right mouse button so you can go to a particular area you want to analyse in more detail.



For detailed analysis of a certain problem area you can activate the **magnification frame**.

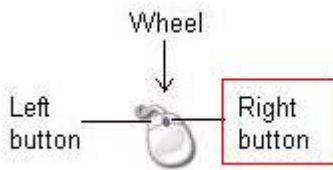
The magnification frame will appear if you **press and hold the right mouse button**.

4. Change the magnification within the magnification frame

Press and hold the **RIGHT mouse button** to use the **magnification frame**.

Sometimes the magnification in the magnification frame is not enough. You can

While **pressing and holding the RIGHT mouse button** you can turn the **wheel the mouse** up and down.



zoom in or out in the magnification frame. This will allow you to do a detailed analysis of the patient's problem.

If you want to change the magnification within the magnification frame, you can turn the **wheel** of the mouse up and down while **pressing and holding the RIGHT** mouse button.

2. Manipulating images by using the Windowing

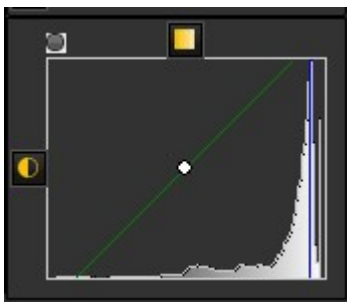
The **Windows function** is a very powerful feature in Mediadent.

- It will allow you to **improve** the quality of your image with 1 mouse click (automatic windowing, described in the article).
- It will allow you to **modify** the images that are of a **lesser quality**, too bright or too dark.

The **Windowing feature** will allow you to **filter** out the gray scales that are not relevant .

The **histogram** shows the retribution of the gray scales of an image.

For example: If an image is **too bright** you will see that the histogram shows spikes on the right hand side of the chart.



This screenshot shows spikes on the right hand side, indicating that the image is too bright.

When activating the Windowing feature, the **gray scales** on the left hand side of the histogram are not relevant and can be discarded.

In this **example** the image is very bright as a result of too little exposure time.



To get a better picture quality, we will use the **Windowing** ruler.



The **Windowing** ruler and the **histogram** work together.

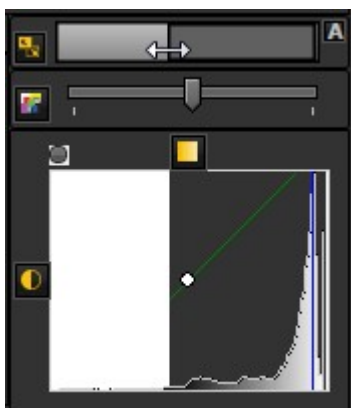


In this section you we will cover the following topics :

1. Use the Windows slider

In this example we will slide the Windowing ruler to the **right**, because the histogram indicates that there are relevant gray scales.

To slide **PRESS** and **HOLD** the **left mouse button** while dragging the slider to the **right**.

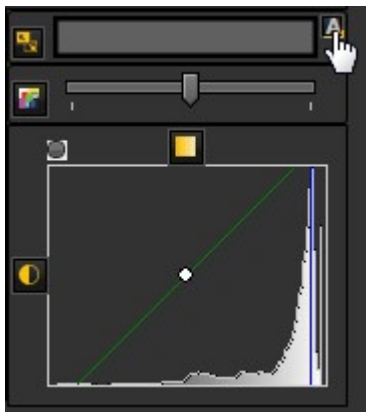


You will see the image changing on the fly.

2. Use the automatic Windowing

We have made it even easier for you with the **automatic Windowing feature**.

Press the **icon** on the right hand side of the Windows ruler and Mediagent will **automatically filter** out the most relevant gray scales.



3. Reset the image

You can **reset** your changes by clicking on the small icon on the left hand side of the Windowing ruler.



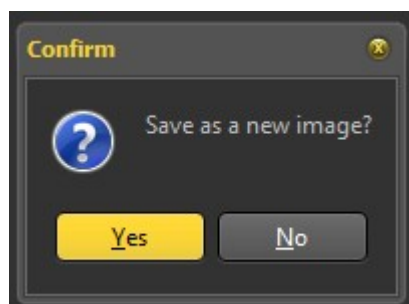
You will see the image revert to the original state.

4. Save the modified image

Once you have modified the image via the Windowing feature, you can **Save the image**.

1. Click on the **Save icon**



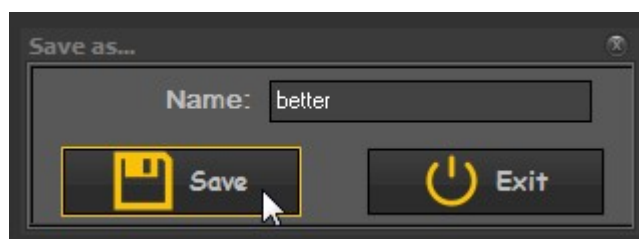
2. **Save** as a New Image

Choose **YES** if you want to keep the original version of the image.

Choose **NO** if you want to replace the original version.

We will choose to save the image as a new image. This means a new file will be created.

3. Give a name to the file

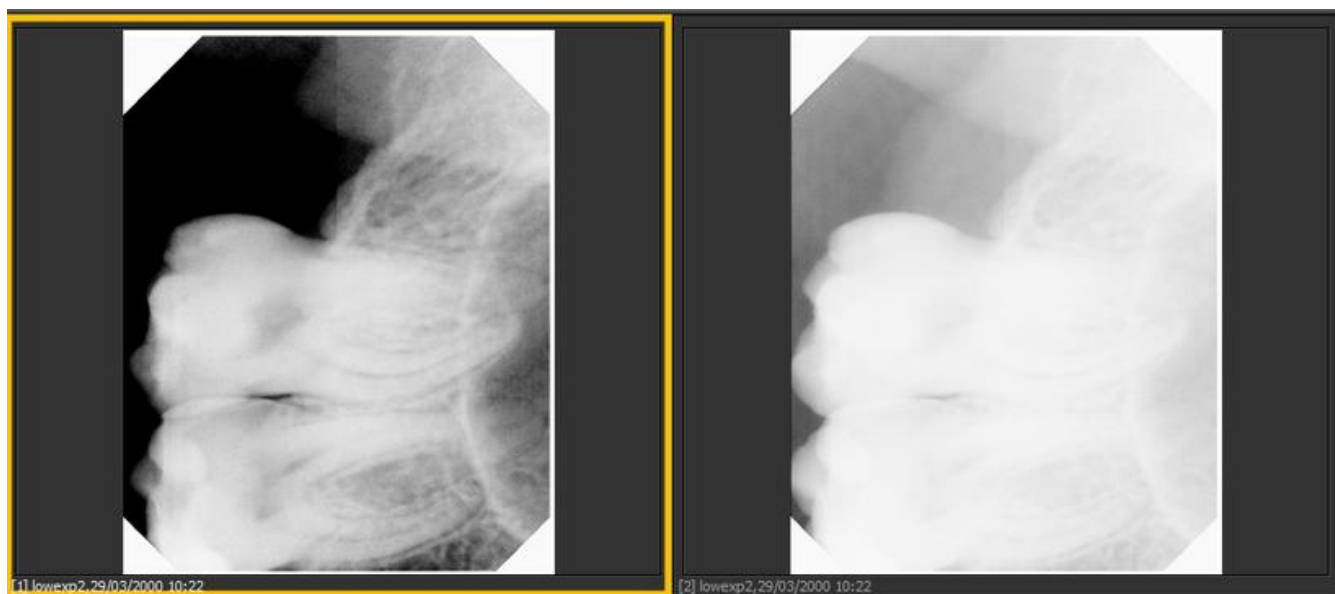


If you have chosen **YES**, you will be prompted for a name.

4. Click on the **Save** button

The image will appear in the Image Library.

In this screenshot you see the difference between 2 images. The **left** image is the modified image with the Windowing feature, the **right** image is the original image.



6.2.2 Working with windowing

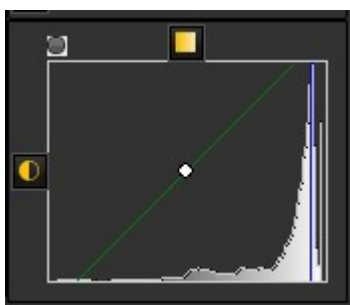
The **Windows function** is a very powerful feature in Mediagent.

- It will allow you to **improve** the quality of your image with 1 mouse click (automatic windowing, described in the article).
- It will allow you to **modify** the images that are of a **lesser quality**, too bright or too dark.

The **Windowing feature** will allow you to **filter** out the gray scales that are not relevant .

The **histogram** shows the retribution of the gray scales of an image.

For example: If an image is **too bright** you will see that the histogram shows spikes on the right hand side of the chart.



This screenshot shows spikes on the right hand side, indicating that the image is too bright.

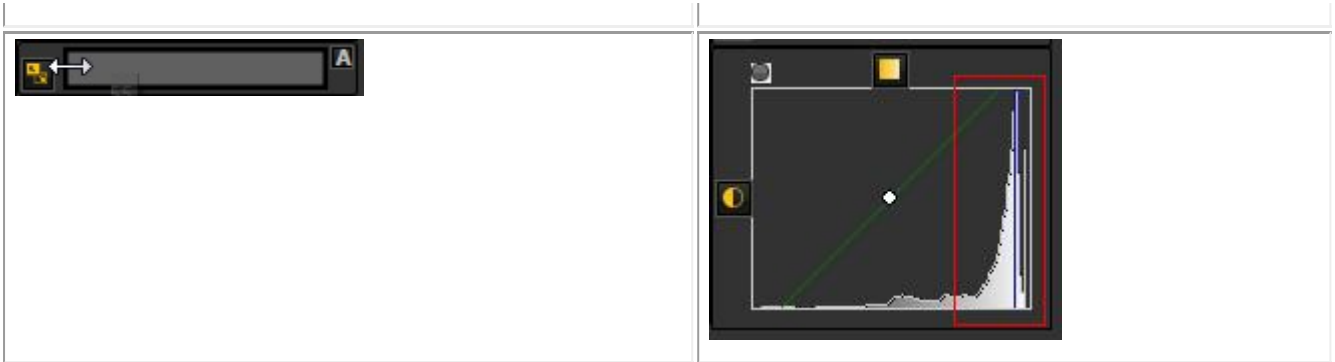
When activating the Windowing feature, the **gray scales** on the left hand side of the histogram are not relevant and can be discarded.

In this **example** the image is very bright as a result of too little exposure time.



To get a better picture quality, we will use the **Windowing ruler**.

The **Windowing ruler** and the **histogram** work together.

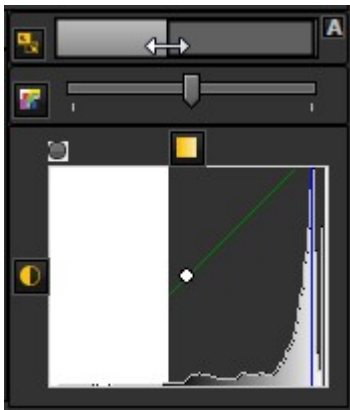


In this section you we will cover the following topics :

1. Use the Windows slider

In this example we will slide the Windowing ruler to the **right**, because the histogram indicates that there are relevant gray scales.

To slide **PRESS** and **HOLD** the **left mouse button** while dragging the slider to the **right**.

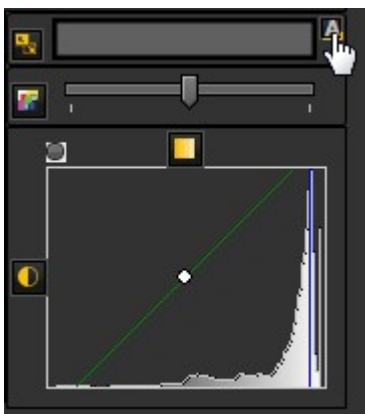


You will see the image changing on the fly.

2. Use the automatic Windowing

We have made it even easier for you with the **automatic Windowing feature**.

Press the **icon** on the right hand side of the Windows ruler and Mediadent will **automatically filter** out the most relevant gray scales.



3. Reset the image

You can **reset** your changes by clicking on the small icon on the left hand side of the Windowing ruler.



You will see the image revert to the original state.

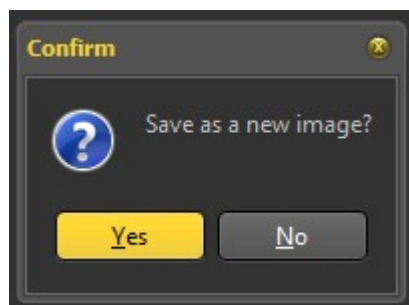
4. Save the modified image

Once you have modified the image via the Windowing feature, you can **Save the image**.

1. Click on the **Save icon**



2. **Save** as a New Image



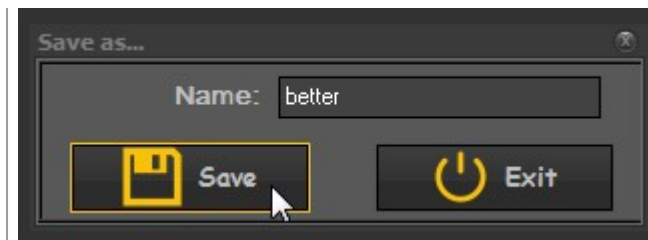
Choose **YES** if you want to keep the original version of the image.

Choose **NO** if you want to replace the original version.

We will choose to save the image as a new image. This means a new file will be created.

3. Give a name to the file

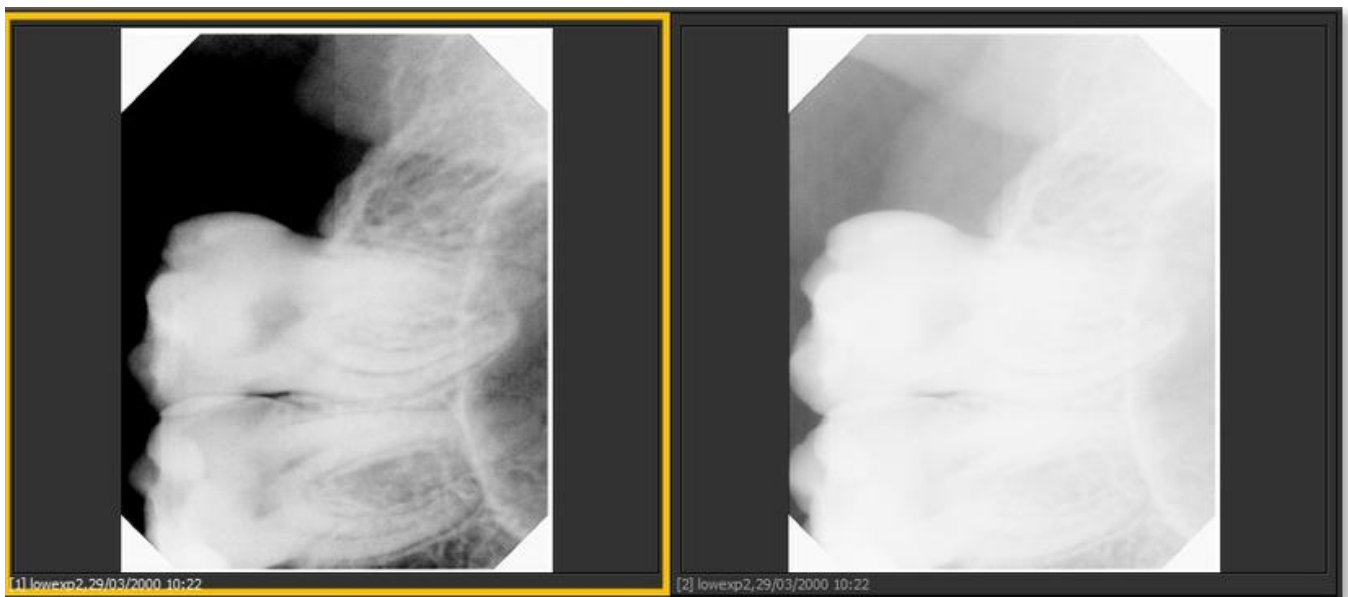
If you have chosen **YES**, you will be prompted for a name.



4. Click on the **Save** button

The image will appear in the Image Library.

In this screenshot you see the difference between 2 images. The **left** image is the modified image with the Windowing feature, the **right** image is the original image.

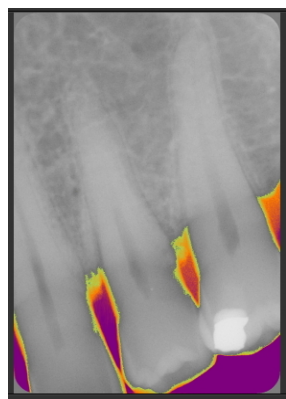


6.2.3 Working with pseudo colors

Pseudo colors can be used when you want to **analyze** images from patients in great detail.

It helps to visualize for example **fractions** in the tooth because you will see a different coloration of the fraction within the tooth.

By using the **Pseudo colors** the grayscales are **converted** to pseudo colors so you we see the difference in density.



Follow these steps to use the **Pseudo colors**.

Action	Explanation
<div>1. Select an image in the Viewport</div> <div></div>	<div>The image in the Viewport.</div>
<div>2. Use the <i>slider Pseudo color</i> slider</div> <div></div>	<div>Slide to the right, the grayscales on the left hand side of the histogram are colored. Slide to the left, the grayscales on the right hand side of the histogram are colored.</div>
<div>3. Slide to the right</div> <div></div>	<div>In this example we will slide to the right.</div>
<div>4. Result</div> <div></div>	<div>You will see the grayscales converted into pseudo colors.</div>

5. To reset, click on the small icon on the left of the slider.



This will reset the image to its original state.

6.2.4 Working with annotations

Annotations can be an important analysis tool.

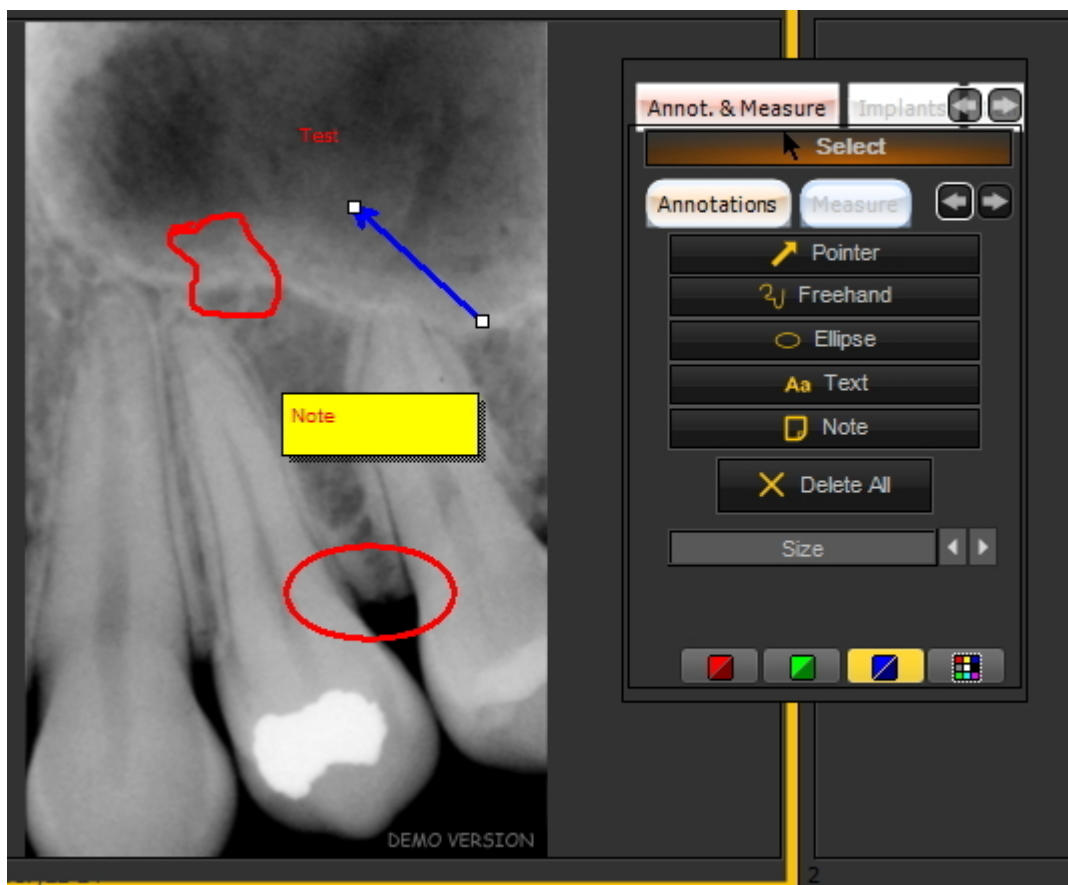
By adding annotations, you can provide your patients with extra information or point out to your peers the problem areas.

Important to understand is that the **annotations** reside in a **layer** on top of your image. It will not effect the original image.

You can add **different types** of annotations:


- Simple annotations (annotations tab)
- Measure annotations (measure tab)
- Implants (separate module)

The annotations can be **saved, printed** and sent by **e-mail**.



In the latest version of the software, the annotations toolbox is always available.

It is situated next to the viewport to the right. You have the possibility to change the way the annotations toolbox is presented.

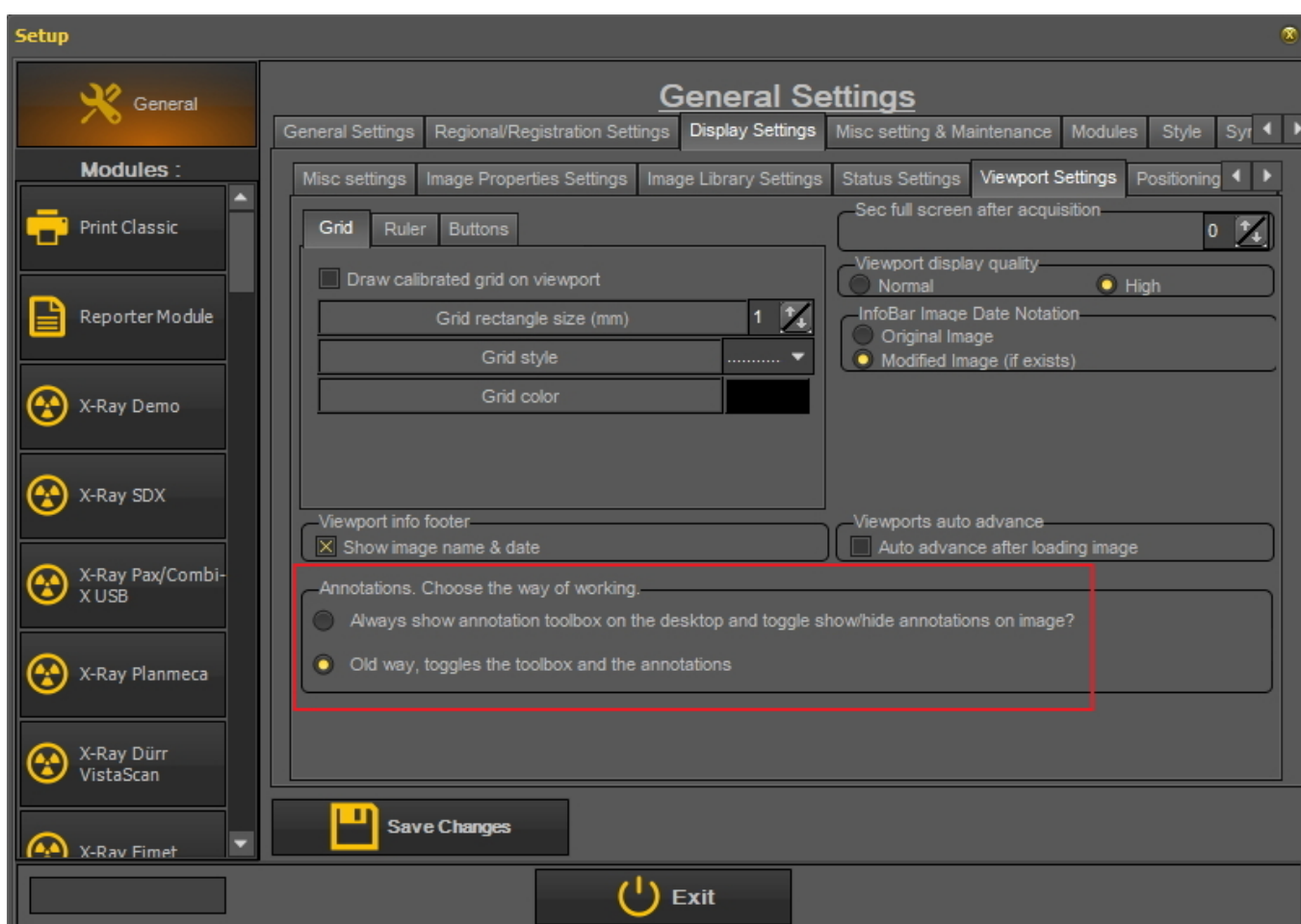
 If the Annotations box is not correctly positioned on your screen, read the article **How to move the zoom window (Section 7.2.8)** and learn how to move the Annotations box.

Changing the behavior of the Annotations dialog box

Go to **Options > Setup**

In the General settings choose the tab **Display Settings > Viewport Settings**

In the box : Annotations. Choose the way of working., you have the option to always show the annotations toolbox or to toggle (this means choose manually to activate the annotations toolbox).



Using the Annotations

To **activate** the **Annotations**, **click** on the icon  in the Iconset.

Once you have saved an image with annotations, you will see a **small green** bar on the top of the image.



1. Overview Annotations dialog box

In this topic you will find an **overall overview** of the different elements in the Annotations dialog box.



1	<p>Annotations and Measure tab: This is by default opened when you activate the Annotations. It will allow you to add annotations such as pointers, freehand, Eclipse, Text and Notes to your images.</p> <p>On this tab you will be able to Delete All 9 the annotations and change the size 10 and the color 11.</p>
2	<p>The optional Implants module. If you don't have this module, the tab will not be visible. If you want to learn more about the capabilities of the Implant module, read the article 'Implants Module'. If you want to know how to acquire the Implants module, please contact us.</p>
3	<p>Calibrate tab: with this tab you will be able to calibrate your image. To learn more read the article How to calibrate an image.</p>

4	Analytics tab (optional) : By clicking on this tab you can access to the caries detection toolbox
5	Selection tool : click on this button before you select an annotation.
6	Measure tab : On this tab that will be explained later, you will be able to add, other types of annotations.
7	Simple annotations : These annotations are not related to the size of the image.
8	Delete All : All annotations made by the Annotations tab will be deleted when clicking on this button.
9	Size: Increase the size of the selected annotations.
10	Color : Change the color of the selected annotation. Every specialist can have his own color.

2. How to use the annotations on the Annotations tab

In this section we will explain the annotations that can be used on the default **Annotations tab**.

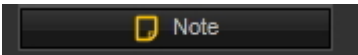


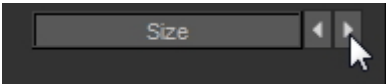

These annotations are free and not relative to the image (so the size of the annotations is not relative to the image). This can be used for example to quickly show your patient the problem area.


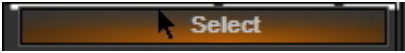
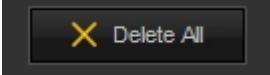

This tab provides you with the **basic usage** of the annotations.




Action	Explanation
Load an image in the Viewport.	Make sure you have an image loaded into a Viewport and that


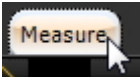
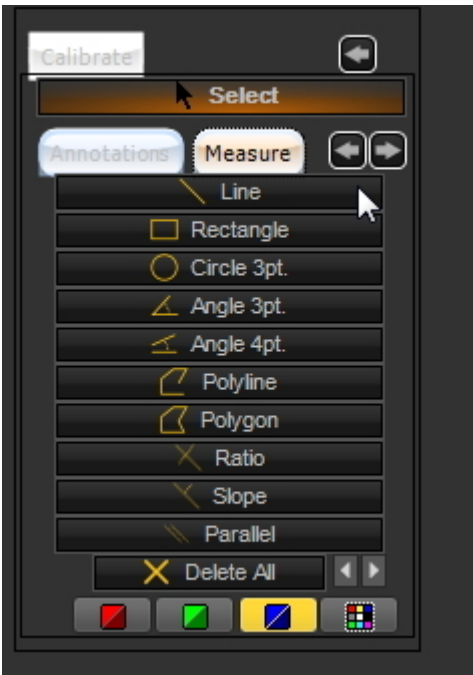

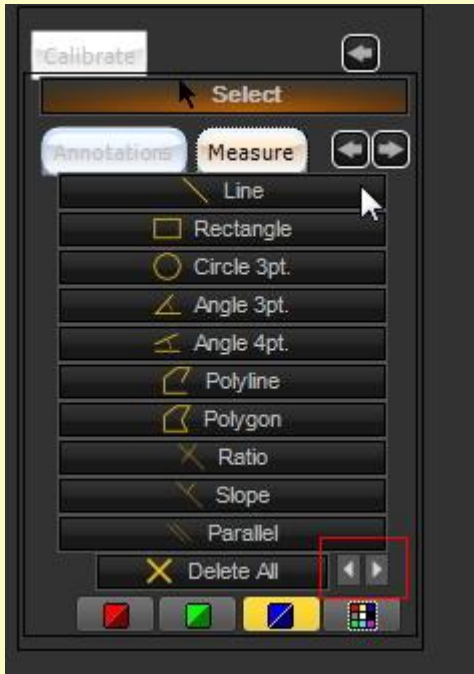
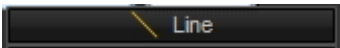
	the Viewport is selected.
<p>Activate the Annotations by using the icon.</p> 	<p>Once the annotations tab is activated you will see the icon is grayed out.</p>
1. Add a pointer to your image	
<p>Click on the Pointer button to add a pointer.</p> 	
<p>Press and hold the LEFT mouse button while drawing the pointer.</p>	<p>The point where you start drawing the pointer is the tip of the pointer or the arrow.</p> <p>Drag the box out while pressing and holding your LEFT mouse button.</p>
2. Add freehand drawing to your image	
<p>Click on the Freehand drawing button</p> 	
<p>Press and hold the LEFT mouse button while drawing your freehand shape.</p>	<p>Draw the shape while pressing and holding the left mouse button.</p>
3. Add an ellipse to your image	
<p>Click on the Ellipse button</p> 	
<p>Press and hold the LEFT mouse button while drawing the ellipse.</p>	<p>Draw the ellipse while pressing and holding the left mouse button.</p>
4. Add text to your image	
<p>Click on the Text button</p> 	
<p>Press and hold the LEFT mouse button while drawing the text box.</p> <p>Type the text in the text box.</p>	<p>Draw the text box while pressing and holding the left mouse button.</p> <p>The text box will appear and you can start typing the text in the text box.</p>
5. Add a note to your image	



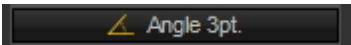
<p>Click on the Note button</p> 	<p>By using the Note it seems like you paste a post-it on top of your image.</p>
<p>Press and hold the LEFT mouse button while drawing the note box.</p> <p>Type the text in the note box. In this example I typed 'Note'.</p>	<p>Draw the note box while pressing and holding the left mouse button.</p> <p>The note box will appear and you can start typing the text in the text box.</p>
<h2>6. Change the size of the annotations</h2>	
<p>Select the annotation (eclipse) by clicking on the select button (make sure the select button is highlighted) and then on the border ellipse.</p> 	<p>In this example we will change the size of an eclipse.</p> <p>The same steps can be applied to the other annotations.</p> <div style="border: 1px solid black; padding: 10px; background-color: #ffffcc;"> <p> When the Select button is pressed and you move towards the border of the annotation, you will notice that the cursor changes shape. At that moment you can click with the left mouse button to select the annotation.</p> <p>When selecting a shape, you will notice small rectangles in the 4 corners.</p> <p>This means the shape is correctly selected.</p> </div>
<p>Click on the right arrow of the size button to enlarge the eclipse border.</p> 	<p>In the example we clicked about 10 times on the right arrow of the size button to have the result.</p>
<h2>7. Change the color of the annotations</h2>	
<p>Select the annotation (eclipse) by clicking on the select button (make sure the select button is highlighted) and then on the eclipse.</p> 	<p>In this example we will change the color of an eclipse.</p> <p>The same steps can be applied to the other annotations.</p> <p>When selecting a shape, you will notice small rectangles in the 4 corners. This means the shape is correctly selected.</p>
<p>Click on one of the color icons to change the color</p>	<p>In this example we will change the color into red.</p> <p>You can change it into red, green, blue by default.</p>

	
<p>Click on the icon to choose another color.</p>	<p>If you are not happy with the color, you can click on the icon and choose another color.</p> <p>This dialog box appears, select one of the colors.</p>
<p>Click on the Define Custom Colors>> button to customize your colors.</p>	<p>If this is not sufficient, you can even define custom colors!</p> <p>Click with the mouse in the colored area and Add to Custom colors.</p>
<h3><u>8. Delete annotations</u></h3>	
<h4>Delete a particular annotation</h4>	
<p>Select the annotation you want to delete</p>  <p>Press the delete button on your keyboard.</p>	<p>To verify that the correct annotation is selected, you need to see small rectangles in the corners surrounding the annotation.</p>
<h4>Delete All annotation</h4>	
<p>Click on the icon to Delete All annotations</p> 	<div style="border: 1px solid black; background-color: #ffffcc; padding: 10px;"> <p> Be aware that the Delete All button will only delete the annotations made via the Annotations tab.</p> <p>If you have added annotations via the Measure tab, they will not be deleted. To delete those annotations, you will have to select the Measure tab and click on Delete All button.</p> </div>

3. How to use the measure annotations on the Measure tab

 When you use the annotations of the Measure tab, your image has to be **calibrated**. You will notice that an image is NOT calibrated when you draw an annotation (from the Measure tab), you will see the measurement in **Pixels** instead of in **mm**. Read the article [How to calibrate an image](#) for more information on calibrating an image.

Action	Explanation
1. Load an image in the Viewport.	
Activate the Annotations by using the icon. 	
2. Draw a line via the Measure tab	
 	Choose the Measure tab in the Annotations and Measure dialog box.  To change the font size of the displayed text (too small) like measurements, select the object and use the small arrows. 
Click the Line button 	
Press and hold the LEFT mouse button while drawing a line on the image.	It is important to press and hold the left mouse button while drawing the line. Once you release the left mouse button, the line will be drawn.
2.1. Manipulations of the line	
Press and hold the LEFT mouse button when moving the line handles .	By grabbing the line handles (the little small rectangles) you can make the line longer or shorter. You can also move the orientation of the line.

	<p>Move the line handles (small rectangles) from left to right, to shorten or lengthen the line.</p> <p>Move them up and down to change the orientation of the line.</p>
3. Draw a Rectangle	
<p>Click on the Rectangle button</p> 	<p>You have the possibility to draw a rectangle on your image to draw the attention to a certain area.</p>
<p>Click the LEFT mouse button in the left hand corner of the rectangular. When you have positioned the mouse pointer in the right hand corner, click again and the rectangular gets automatically drawn.</p>	<p>The handles can be used in the same way as the lines.</p> <p>To resize the rectangle drag the handles out will enlarge the rectangle, and dragging the handles inward will decrease it's size.</p> <p>You also see the measurements of the rectangle.</p>
3.1 Manipulations of the rectangle	
<p>Press and hold the LEFT mouse button while dragging the handles to resize the rectangle to the desired size.</p>	<p>In the corners of the rectangle, you will see the handles (small rectangles). You can make the rectangle smaller or larger.</p>
4. Draw a circle	
<p>Click on the Circle 3 pt. button</p> 	<p>To draw a circle in Mediadent, you need to indicate 3 point that make the size of the circle. (Hence the name of the button: Circle 3pt.).</p> <p>If you want to point the attention to a certain portion of the image, you just outline the area with 3 points and automatically the circle get drawn.</p>
<p>To outline 3 points, just click with the left mouse button 3 times around the area you want to point the attention to. The circle is automatically drawn.</p>	<p>You will see that the circle gets drawn automatically when you have placed the 3rd point.</p> <p>As with the previous shapes, you can use the handles to resize the circle.</p> <p>Press and hold the LEFT mouse button while resizing the circle via the handles.</p>
5. Draw an Angle 3pt.	
<p>Click on the Angle 3 pt. button</p> 	<p>To draw an angle, you will need 3 points: the beginning of the first half line, the point of the vertex and the ending of the last half line.</p>

Indicate the **beginning** of the first half line by clicking with the **LEFT** mouse button, you have now blocked the mouse pointer and can **move** to the endpoint or **vertex**.

Click with the **LEFT** mouse button to indicate the **vertex** of the angle.

Now you can **move** the mouse to the **endpoint** of the **second half line**. Click to **fix** this point and the angle will be drawn.

To draw an angle you only have to click 3 times :

First for the **starting point** of the angle, second for the **vertex** and third for the **endpoint**.

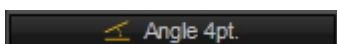
The **angle** is automatically calculated.

As in previous examples, you can use the **handles** to change the **starting point**, point of the **vertex** and the **endpoint**.

Automatically the **angle** will be **recalculated**.

6. Draw an Angle 4pt.

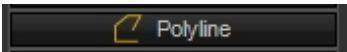
Click on the Angle 4pt. button



During the analysis process it is useful to be able to calculate the **angle** between 2 teeth.

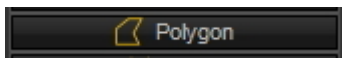
In Mediadent you can draw a **4 point angle**.

You need 4 points, the beginning- and endpoint of the **first** half line and the beginning- and

	<p>endpoint of the second half line.</p> <p>The angle will be calculated automatically.</p>
Click the first point (you have blocked the mouse), you can move to the end point of the first half line.	You need to click twice with the LEFT mouse button in the beginning of the half line and a second time at the end of the half line.
<p>Move to the first point of the second half line and click with the LEFT mouse button.</p> <p>Move to the end point of the second half line and click with the LEFT mouse button.</p>	<p>Once you have clicked the 4th point, the angle between the two half lines will be calculated.</p>
7. Draw a Polyline	
<p>Click on the Polyline button</p> 	<p>A Polyline is a connected series of line segments and is often used to analyse the root canal of a tooth.</p> <p>You will be able to get the measurement of the root canal.</p>
<p>Click on the first point of the polyline</p> <p>Click with the LEFT mouse button to create a line segment.</p>	<p>Every time you click with the LEFT mouse button you have created a point (line segment) on the polyline and you will get the the measurement.</p> <p>You will notice that the line turns RED when you have clicked with the LEFT mouse button for the first time. This means you have created you first line segment.</p>
To end the polyline, double click with the LEFT mouse button.	You will see the total measurement of the polyline and the point you have created.

8. Draw a Polygon

Click on the **Polygon** button



In the same spirit of the Polyline, you will be able to use the polygon to calculate the surface of a shape.

It can be practical to calculate the **surface** of particular problem area.

Click with the **LEFT** mouse button on the **starting point** of the area you want to measure.

As long as you don't click to add a point, the line will remain **black**.

Every time you click with the **LEFT** mouse button you will create a point on the Polygon.

You can **add points** to the area by clicking with the **LEFT** mouse button.

Here I have created 4 points on the Polygon.

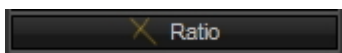
To **end** the polygon, **double click** with the **LEFT** mouse button

You don't have to close the polygon, when you double click the polygon is closed automatically.

Automatically the **surface** is measured.

9. Draw Ratio lines pieces

Click on the **Ratio** button



You have the possibility to draw 2 line pieces and let Mediadent calculate the **ratio** between the 2 line pieces.

The ratio is calculated by taking the length of the first line piece and divide it through the length of the second line piece.

Click with the **LEFT** mouse button on the image to indicate the **begin point** of the first line piece.

Once you have clicked with the **LEFT** mouse button to indicate the end point of the first line piece, you will notice the line piece turns **RED**, indicating the end of the first line piece.

Click with the **LEFT** mouse button to indicate the **end point** of the first line piece.

You can now move the mouse to the begin point of the second line piece and click with the **LEFT** mouse button.

Move to the point on the image you want to indicate the **starting point** of the **second line piece** and click with the **LEFT** mouse button.

We want to calculate the ratio between 2 line pieces, this could be the length of the teeth.

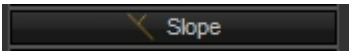
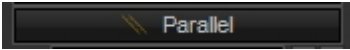
Move to the point on the image you want to indicate the **end point** of the **second line piece** and click with the **LEFT** mouse button.

Once you have clicked the last end point of you last end point, you will see the lines turn **RED** and the ratio is calculated.

10. Draw a Slope

Click on the **Slope** button

Mediadent will calculate the **slope** between

	two line pieces.
<p>Click with the LEFT mouse button to indicate the beginning of the first line piece.</p> <p>Move the mouse to the end point and click a second time with the LEFT mouse button.</p>	<p>As long as the line is black, you can reposition the mouse pointer.</p> <p>Once you have clicked with the LEFT mouse button to indicate the end point, the slope will be calculated.</p> <p>You will notice the slope is RED indicated the calculation is done.</p>
11. Draw parallel lines	
<p>Click on the Parallel button</p> 	<p>It can be practical to draw parallel lines on an image.</p>
<p>Click with the LEFT mouse button to indicate the beginning of the first line piece.</p> <p>Move the mouse to the end point and click a second time with the LEFT mouse button.</p>	<p>The second time you click with the LEFT mouse button, the parallel lines get drawn automatically.</p>

4. Printing annotations

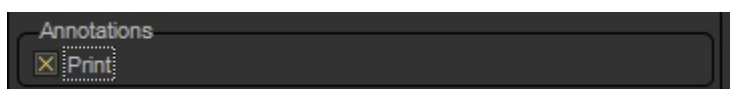
To print annotations, you will need to indicate this in the **print dialog** box.



1. In the Mediadent menu choose **File>Print -or-** Click on the **Print** icon.

2. Load an **image** to print.

3. **Check** the Print Annotations box in the Print dialog box.



Learn more about the possibilities to print an image in the article '**Printing images**' (Section 5.5).

6.2.5 Working with the zoom window

The **Zoom** window will allow you to do **very detailed** analysis of your images. It is often necessary to go into great detail to support tracking fractions and problems with the tissue.

The Zoom window will allow you to:



1. Magnify or zoom into a particular part of an image
2. **Apply different filters** to the image :
 - Invert
 - HistoEqualize
 - Emboss_NE

- Gamma Correction

In this article we will explain how to **activate** the Zoom window and how you can **apply** a filter.

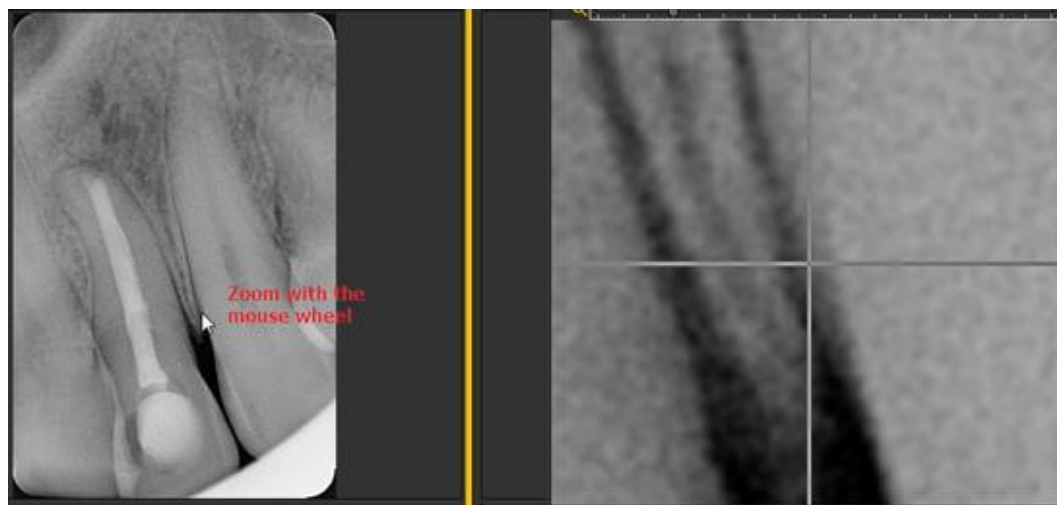
1. Working with the magnification or zoom function


Follow the steps to use the **Zoom** window:

Action	Explanation
1. Select an image and load it into the Viewport	
2. Click on the ZOOM Windows icon  -or- In the Mediadent menu choose Display > Desktop Panels > Zoom Window	
	<p>An additional screen is opened next to the Viewport.</p> <p>In the screen you will see a magnification of the point where the mouse is positioned in the Viewport.</p> <p>The screen acts as a magnifying glass.</p> <p>You will see the tissue and the teeth structure in large detail.</p> <p>By moving you mouse to the correct position on the image in the Viewport, you will be able to analyze that specific area of the image in the ZOOM Window.</p>
<p>There are 2 ways to zoom into the area :</p> <p>First move your mouse to the ZOOM Window.</p> <p>1. If you have a mouse with a wheel :</p> <ul style="list-style-type: none"> • Move the wheel of your mouse UP to increase the magnification of the area. 	<p> If the zoom does not work with the wheel of the mouse, you can use the zoom</p>

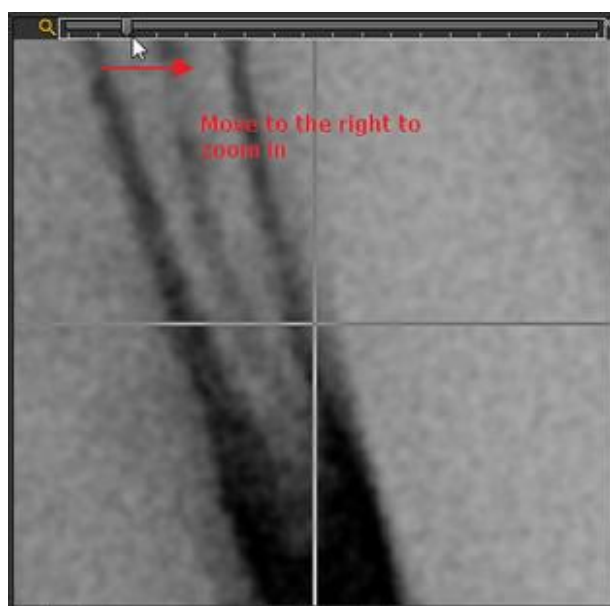
- Turn the wheel of the **mouse DOWN** and you will **decrease** the magnification. (This will depend on the way the wheel mouse is setup).

ruler on top of the Zoom window (method 2).



 You can also use the arrow Up or Down to increase or decrease the magnification.

2. Use the ruler on the top of the ZOOM Window and slide it to the right to get a greater magnification.

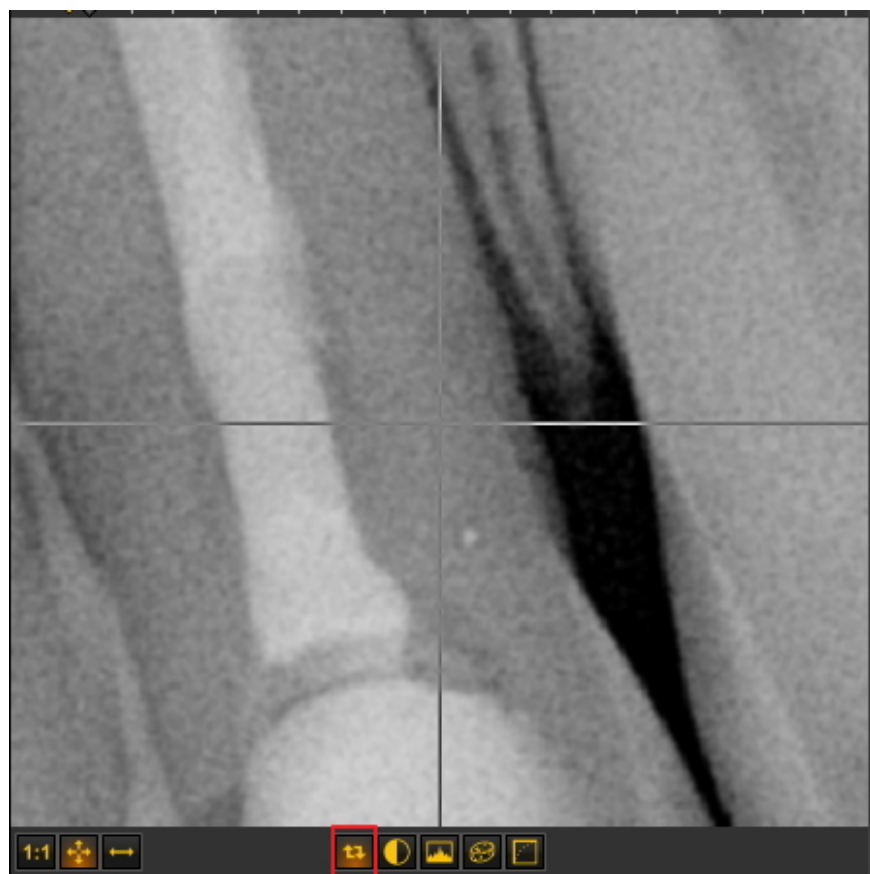


2. Applying a filter to the Zoom Window

If you want to apply a **filter**, click on the corresponding icons at the bottom of the screen. You can switch from one filter to another at any time.

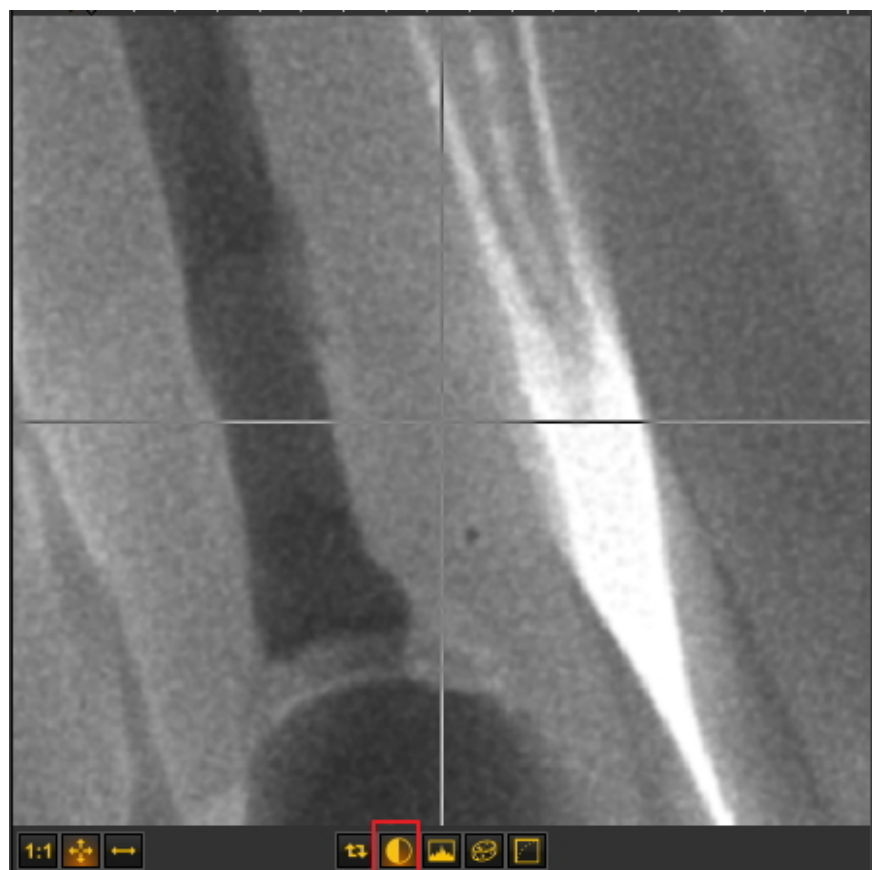
Back to normal

The first icon will reset the image.



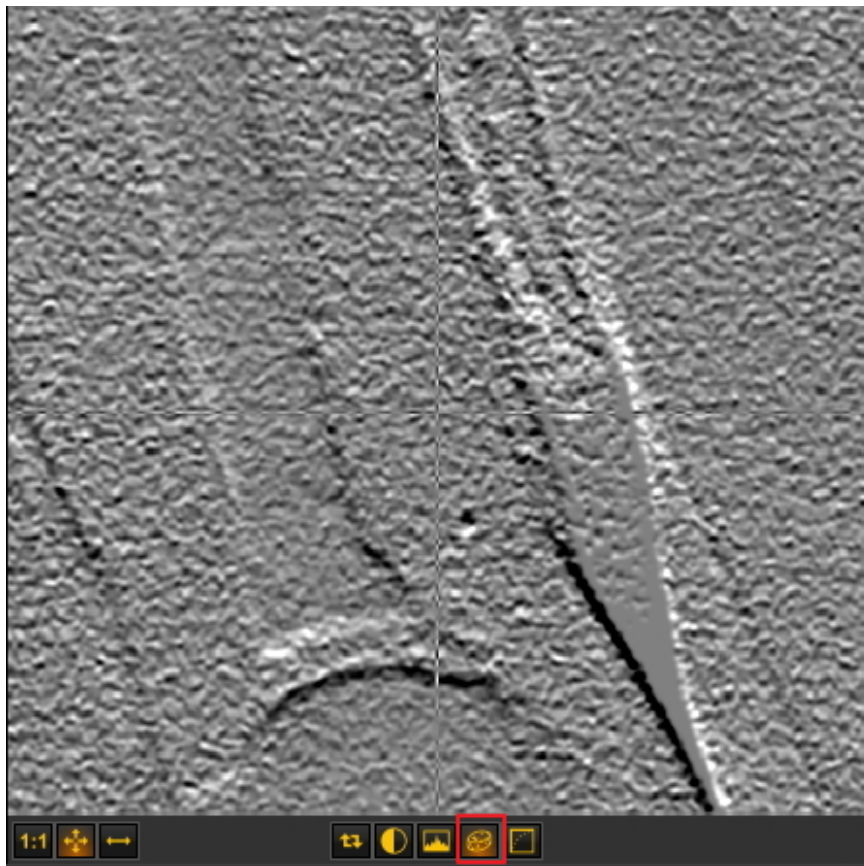
Invert

This filter will invert the image.



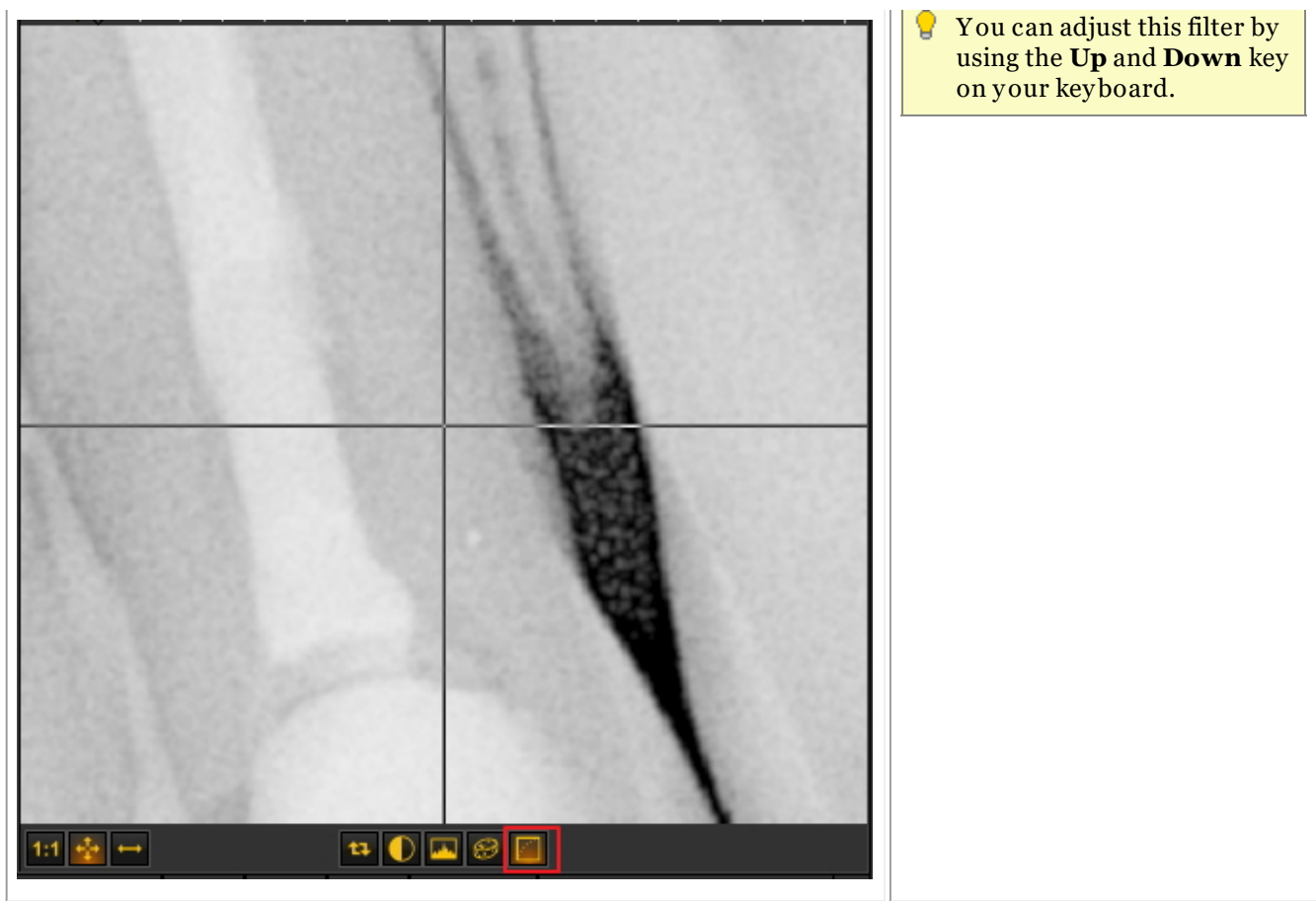
HistoEqualize



Emboss_NE

You can adjust this filter by using the Up and Down key on your keyboard.

Gamma Correction



6.2.6 Working with region of interest


Next to the **Zoom Window (Section 6.2.5)**, the Region of Interest (ROI) is a very practical feature if you want to **analyze** parts of your image in greater detail.




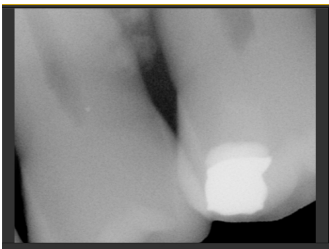


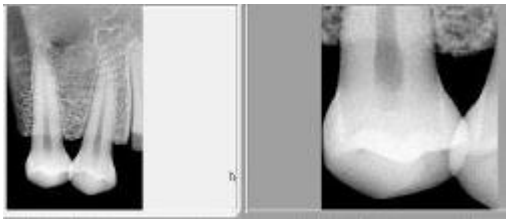
It will allow you to **CUT** a piece out of an image and analyze it in, for example another Viewport.

All the manipulations you make on an image are also possible in the ROI.

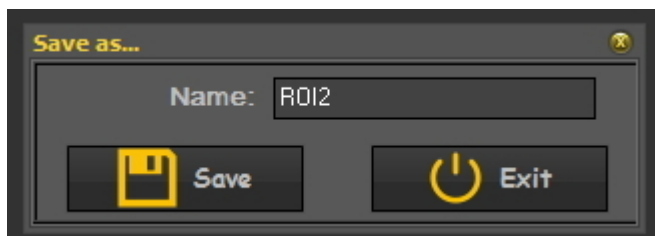
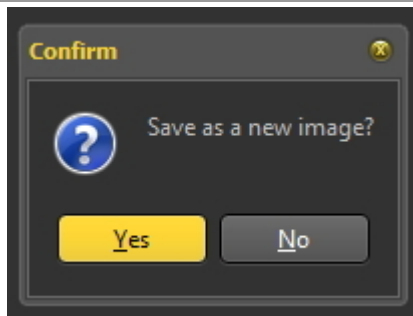
In this article you will learn how to **create** a ROI and how to **analyze** the ROI in a separate Viewport. You will also learn how to **save** the ROI.

To create the **Region of Interest** follow these steps:

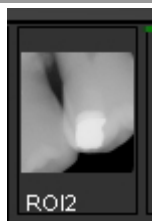
Action	Explanation
<div>1. Load an image in a viewport</div> <div></div>	<div>Load the image you want to analyze in more details.</div>

<p>2. Click on the Region of Interest (ROI) icon.</p> 	<p>Use the Region of Interest (ROI) icon to cut a piece out of the image you want to analyze in more details.</p>
<p>3. Draw the part that you want to examine in more detail.</p> 	<p>Press and hold the LEFT mouse button while drawing the ROI.</p> <p>By default you will cut out a rectangle.</p> <p>The part of the image you have cut out can be used for further analysis.</p>
<p>4. If you want to analyze this part of the image in this viewport, just click on the ROI icon again.</p> 	<p>Notice that the second time you click on the ROI icon, it has a darker color. It means you are ready to analyse this piece of the image.</p>
	<p>The result is that the image in the Viewport is replaced by the ROI (piece that was cut out).</p> <div data-bbox="831 1200 1458 1373"> <p> If you want to revert to the original image, click on the Reload icon and the original image will appear in the Viewport.</p>  </div>
<p>If you do not want the Viewport to be replaced and you want to analyze the ROI in another Viewport, follow these steps:</p>	
<p>1. Repeat step 1 to 3</p> <p>2. BEFORE you click on the ROI icon, select another Viewport</p> <p>3. Click on the ROI icon</p>	<p>You will notice that the ROI (part that was cut out) is loaded into the other Viewport.</p> <p>Now you can do any manipulations you would do on an image, like Windowing (Section 6.2.2), Pseudo Coloring (Section 6.2.3), change brightness and contrast etc...</p> 
<p>To SAVE the ROI (piece of the image):</p>	


1. **Select** the Viewport with the **ROI**.
2. **Click** on the **Save** icon.



Give the **image** a name.



The image will appear in the **Image Library**.

 You can choose the way in which you cut out of piece of the image : **rectangular** or **freehand**.

To choose **another** way : **Click** and **hold** the icon, you will notice that **extra icons** become available, choose **freehand** or **rectangular**.



The **first icon** is a nice **rectangle** the second is **freehand**. With freehand, you can draw yourself the area you want to analyze.

6.2.7 Working with Filters

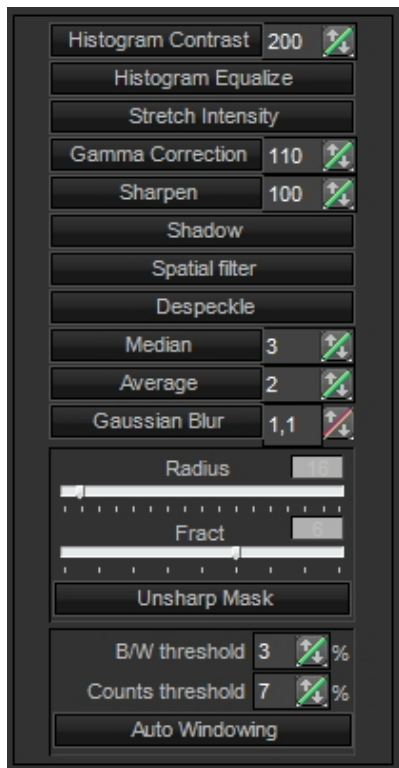
You have the possibility to tweak the image by using the **different filters** in Mediadent.

In this article you will learn about the different filters you can apply to your images in Mediadent.



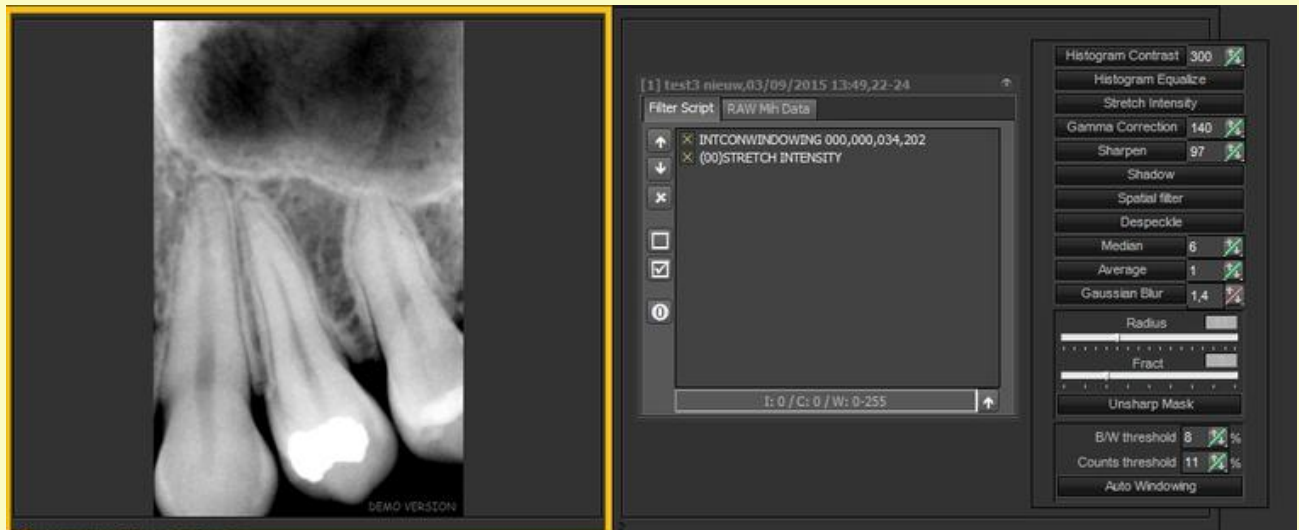
To activate the filter dialog box, click the **icon**

The **Filter dialog box** will appear with the different options you can use to modify your image.



For the best experience, you can use this in combination with the **filter script**. This will allow you to manipulate the filters in an effective way. Read the article **How to use the filter script (Section 4.7)**

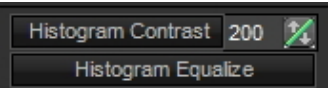
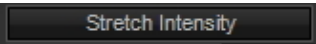

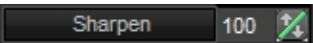
To launch the filter script, load an image in the Viewport and choose **Ctrl-f**. The filter script will open. Now you can apply the different filters.

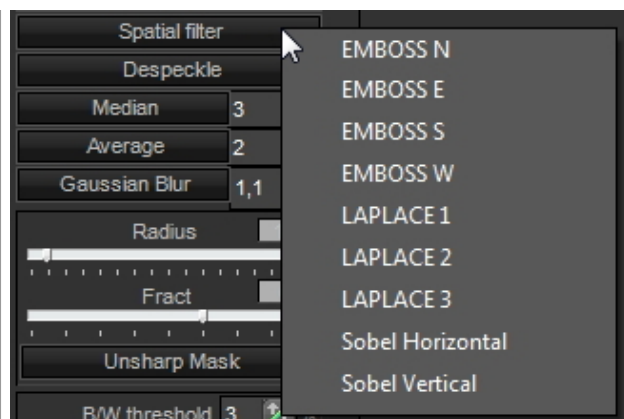


This is an **advanced** feature, if you have made modification to your image by using the filter options, you

can always **reload** your image by clicking on the following icon:



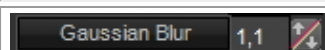
Option in Dialog box	Explanation
	<p><u>Using the Histogram Contrast/Histogram Equalize</u></p> <p>If your scanned image appears darker than the original and you want to balance the values to produce a lighter image, you can use the Histogram Equalize. The Equalize command redistributes the brightness values of the pixels in an image, so that they more evenly represent the entire range of brightness levels. When you choose the command, the software finds the brightest and darkest values in the image and averages all the brightness values so that the darkest value represents black and the brightest value represents white.</p> <p>Together with the Histogram Contrast which does not affect the color balance of the image, you can see before and after brightness comparisons.</p>
	<p><u>Using the Stretch Intensity</u></p> <p>The Stretch intensity command performs the equivalent of the Levels slider adjustment automatically, these features automatically define the lightest and darkest pixels in each channel as white and black, then redistribute the intermediate pixel values proportionately.</p> <p>In general, the Auto feature gives good results when a simple contrast adjustment is needed to an image with an average distribution of pixel values. However, this feature does not provide the more precise control that can be achieved by adjusting the Levels or Curves controls manually.</p>
	<p><u>Using Gamma correction</u></p> <p>This is used to adjust the way the images are shown on the monitor or printed out.</p> <p>Minor color corrections can be made, depending which monitor you are using.</p> <p>Gamma correction is the process of adjusting your monitor and the software color conversion settings, to compensate for factors that affect both the onscreen image and its conversion to printed output.</p>
	<p><u>Using Sharpen</u></p> <p>For blurry images you can use the Sharpen filter.</p> <p>Sharpen filters focus blurry images by increasing the contrast of adjacent pixels. These include the Sharpen and Focus filters, both of which find the areas in the image where significant color changes occur (such as at the edges) and sharpen them.</p>



Spatial filters

These are advanced filtering possibilities.

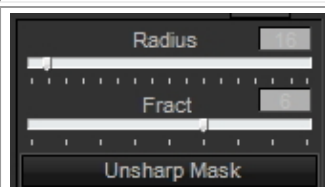
Press the **RIGHT** mouse button to get the list of advanced filters.



Using Gaussian Blur

Noise reduction can be used to remove problem areas from an image, such as electron **noise**, **dust** and **scratches**.

Gaussian blur gives better results, due to the advanced formula, but this filter works slower.



Using Unsharp Mask

This filter is interesting for images you want to **print** or **view online**.

Unsharp mask or **Focus** is a traditional film compositing technique used to **sharpen edges** in an image. The Unsharp Mask filter corrects **blurring** introduced during photographing, scanning, re-sampling or printing.

Unsharp mask locates pixels that differ from surrounding pixels and increases the pixel's contrast by the amount you specify. In addition, you specify the radius of the region to which each pixel is compared.

The effects of the Unsharp Mask filter are far more pronounced on-screen than in high-resolution output. If your final destination is print, experiment to determine what settings work best for your image.

Best setting for Focus:

- Hi-res image (3000 pixels H or V):
- Radius: 16
- Fract: 6
- Decrease Radius, if the image is smaller (less pixels)
- Decrease Fract if the filter is too strongly pronounced.



If your images you acquire always need the **same adjustments**, it can be useful to use the **Optimize** option. This will apply **by default** the desired filters when selecting a certain Optimize number.

Read the article '**Working with the Optimize feature**' (Section 6.2.8).

6.2.8 Working with the optimize feature

The Optimize feature is an **advanced** feature that allows you to **standardize** the filters (masks ...) that can be applied to your image.

Real-time filters in Mediadent may instantly provide an improved image quality and may facilitate diagnosis, treatment planning and follow-up.


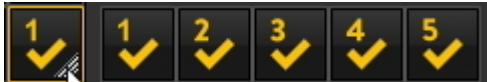
Often after acquiring the images, additional manipulations are necessary to provide the clarity that is needed for detailed analysis. These manipulations can be automated through an optimization profile.

You have for example the possibility to determine which filters you will apply by default when acquiring an image.

In Mediadent you can to configure **5 Optimization profiles**.



You will be able to **link** a certain Optimize profile to a particular **acquisition device**. Read more about this in the article **The optimize module (Section 11.1)**.

Action	Explanation
<u>1. Apply Optimization profile 1</u>	
<p>Click on the icon in the Iconset and the Optimization 1 profile will be applied to the image.</p> 	<p>By default the Optimization profile 1 is available in your Iconset.</p> <p>By clicking the icon a number of filters and/or actions will be applied to the image as configured in the Optimization profile 1.</p>
<u>2. Apply another Optimization filter</u>	
<p>Press and hold the left mouse button on the Optimization icon in the icon set.</p> <p>Select the Optimization profile you want to apply to your image.</p> 	<p>The Optimization icon will expand and you will get the 5 icons.</p> <p>You will receive 5 icons (1 to 5), representing 5 Optimizations profiles you can apply to the image.</p>
	As an example choose Optimization profile 5 to test.



If you are not happy with the result of your optimizations, you have the possibility to re-load your

original image by clicking ,the **re-load icon** in the iconset .



6.2.9 How to use the filter script

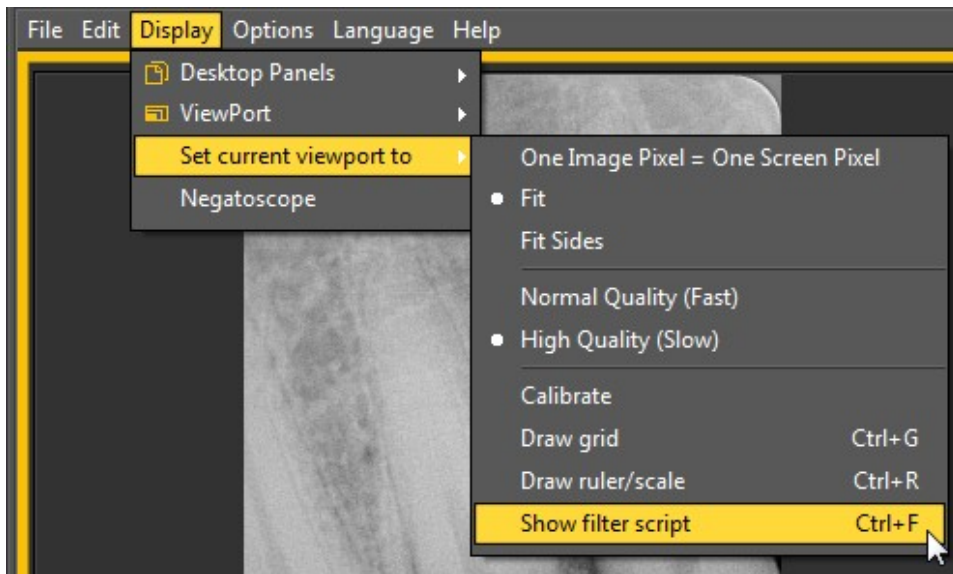
The filter script is a **feature of Mediadent v8**. This option will allow you to see the filters that are used on the selected image. For improved image quality sometimes **filters** are applied to an image. The filter script monitor will help you to **manage** the different filters. You will be able to **quickly apply** different filters on the fly and change the order.

It is an important option for trial and error purposes when working with filters because it allows you to quickly **activate** or **de-activate** particular filters. You immediately see the result of the applied filters.

In this version of the program, the filter script is saved in a separate file from the image and is applied every time the image is loaded. This offers greater flexibility in the usage of filters.

To **activate** the filter script, load an image in the Viewport and choose

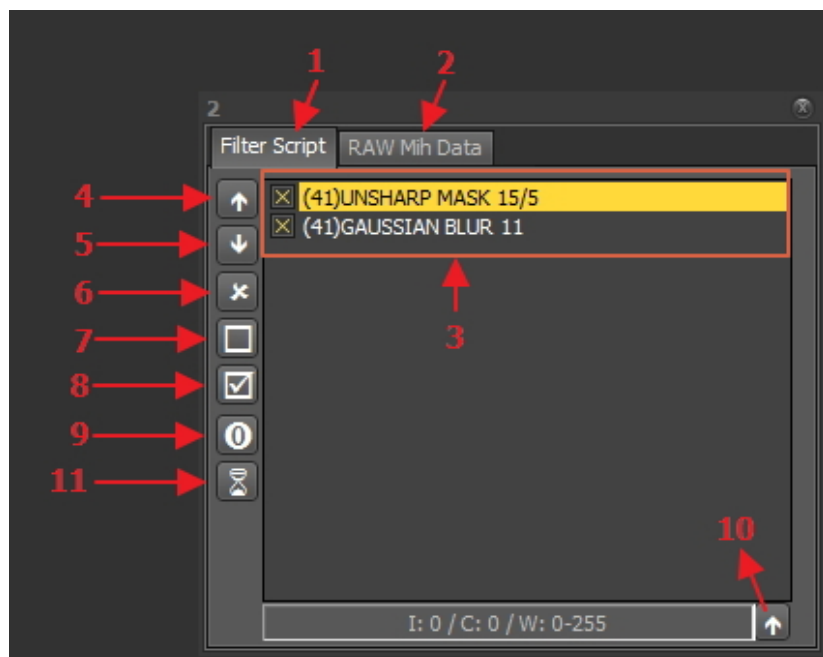
Display > Set current viewport to > Show filter script



or

Ctrl F

After activating the option, you will be presented with the following screen :

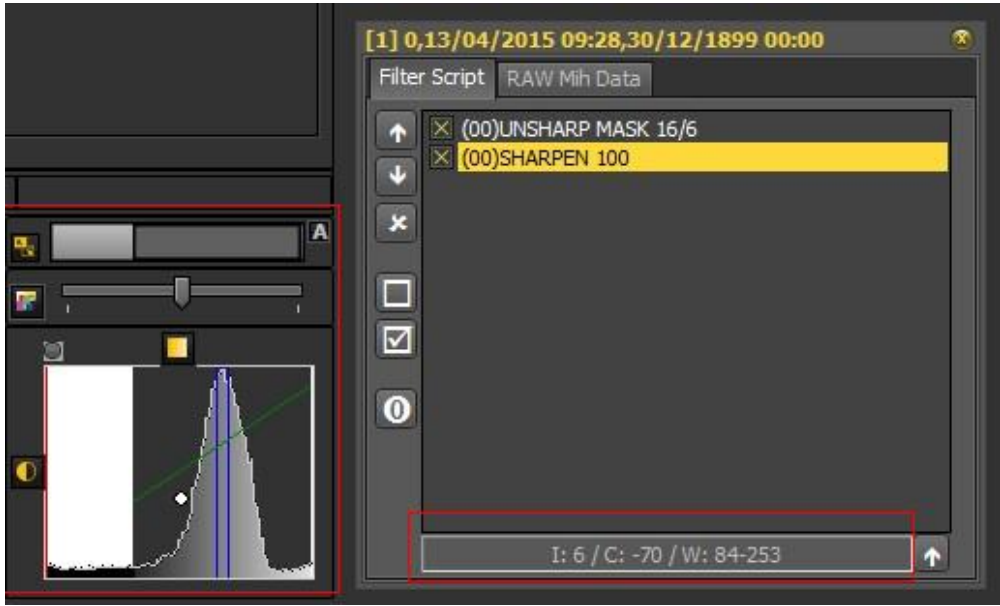
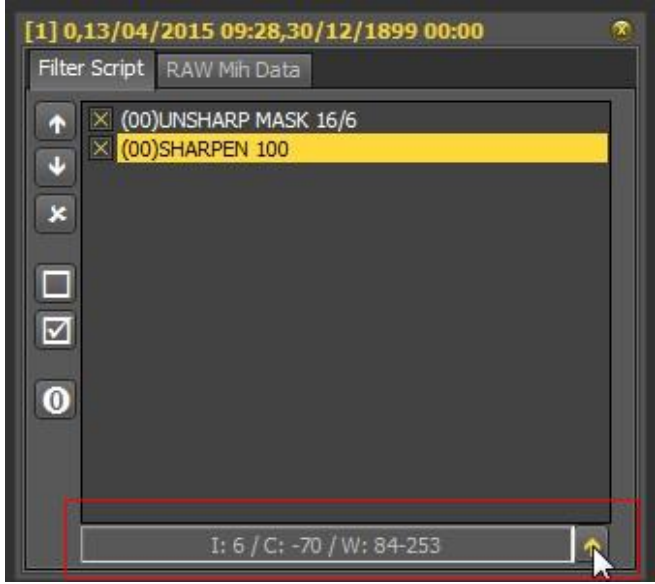


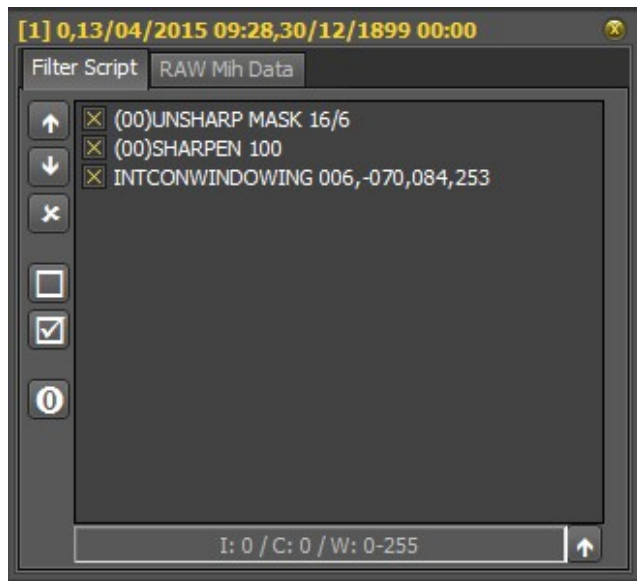
Nr	Explanation
1	Filter script : this tab will show you the applied filters. You will be able to manage the filters, change the order in which the filters will be applied, remove the filter from the script, activate or de-activate the filters.
2	RAW Mih data : an image in Mediadent consists of 3 files (.dic, .bmp and .mih). The .mih file contains the metadata of the image like applied filters, name of patient On this tab you will see the applied filters to the image. This option is an expert option.
3	This is the list of the filters applied to the image. Detailed information on the filter codes can be found in the topic 'Filter codes'.
4	Changing the order of the filters applied can have an important influence on the image quality. With this icon you can move the selected filter up.
5	With this icon, you can move the selected filter down.
6	This icons removes the selected filter from the filter script.
7	When you are trying out different filters it is easy to de-activate a filter with this icon.
8	You can activate a particular filter with this icon.
9	This icon will show the original script for the image. Some images come with a filter script, with this option you can see the original filter script.
10	Apply real-time values to filter script : this option allows you to definitely apply the changes made to the contrast, intensity and windowing.
11	This icon activates the window that show the number of filters available to apply to the images.

More information about the **different filters** that can be used, please read the article **Working with Filters (Section 6.2.7)**

In the histogram of the image, the **contrast, intensity and windowing** options are only applied on the display of the image (See article **Working with windowing (Section 6.2.2)**). To apply these modifications to the filter script you need to use the option '**Apply real-time values to filter script**'.

In this example we will modify the contrast, intensity and we will apply the windowing.

Action	Explanation
<div>1. Make the changes to contrast, intensity and windowing</div> <div></div>	<div>You see that we have modified the intensity : 6, contrast -70 and windowing w:84-253.</div> <div>To learn more on how to manipulate the images, read the articles : Working with images (Section 5.3) Working with windowing (Section 6.2.2)</div>
<div>2. Choose to apply real-time values to filter script.</div> <div></div>	<div>If you have happy with the modification made to the contrast, intensity and windowing, you can apply this to the filter script.</div>
<div>3. Result : the changes are added to the filter script</div>	<div>You see the line</div>



INTCONWINDOWING 006,-070,084,253 is added to the script.

The filter script is an important tool and creates visibility on the applied filters. It will help professionals improve quality image.

Since the filter script is a separate file, it is now easy to Undo and Redo different filters.

Filter Codes

The filter codes are a way of indicating where the filter line is coming from. The filter could have been applied manually or coming from the device itself. In the Optimize module you can also add filters.

List of
filter
codes

(00)

This code indicate that the filter was manually added through the filter icon.



More detailed information of the possibilities read this **Working with Filters (Section 6.2.7)**

(42)

This is an internal filter added by the options of the X-ray device.

(41)

This filter was configured in the Optimize module and applied to the image.

(65)

This is the filter added via the Optimize icon



6.2.10 Working with the filter window

Real-time filters in Mediadent may instantly provide an improved image quality and may facilitate diagnosis, treatment planning and follow-up.

The filter window will give you a visual overview of the different filters applied to your image. It is a great visual aid to help you choose the best image quality for you.

Once you have chosen, you can apply it to the image.

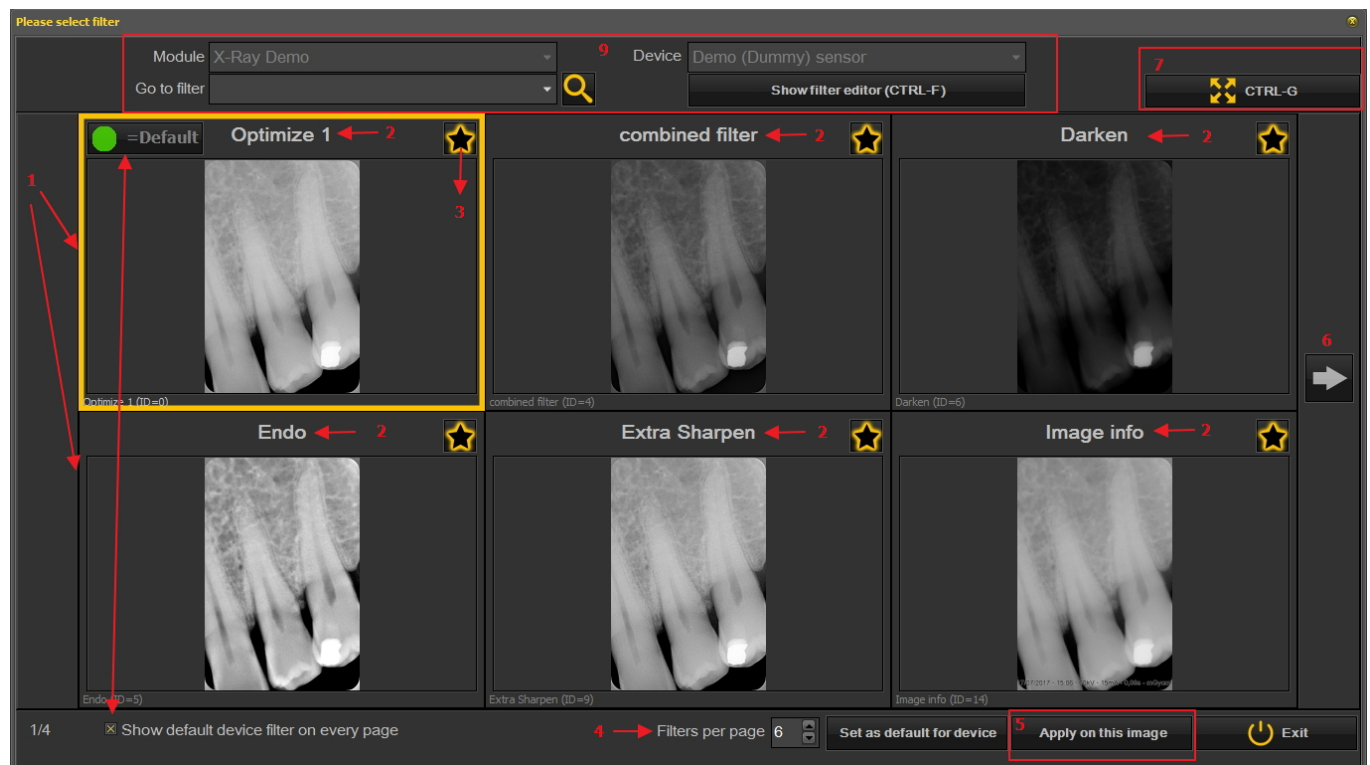
For future usage, you can also set this quality (filters) as the default.

The filter window is accessible to you during the **acquisition** of an image or afterwards, just by clicking on the **icon**.






1. Overview of the Filter window screen

Here you will find the different functions of the windows screen



Nr. Explanation

- 1 In this example you see 6 filters applied to your image
- 2 The name of the different filters applied : Optimize 1, Optimize 2, Endo ... These filters are defined in the setup 'Optimize'. See the article **The optimize module (Section 11.1)**
- 3  By clicking on the  icon, you select the filters you want always want to see on the first screen. This is practical when you have a large number of filters, you can select your favorite filters. Once selected, you will see this icon 
- 4 The number of filters shown on 1 screen can be configured. In this example 6 filters are proposed. You can have from 2 to 10 filters on your screen.
- 5 Once you have selected a filter that gives you the best image quality, you can apply this filter to the image.

- 6 Click on the arrow and show the next series of filters.
- 7 Click on the icon and you will see the selected image full screen. Click on the icon again and return to the original screen.
- 8 Show default device filter on every page. This can be switched on or off.
- 9 Additional information about the image. What is the device the image is taken with (module and device). Go to the image with the selected filter. Show the filter editor = the filter script will be shown (See **How to use the filter script (Section 4.7)**)

2. Using the Filter window screen in acquisition

These are the steps you can follow to use the windows screen in acquisition mode

Icon



Explanation



Prepare the X-ray device so an image can be taken. Click on the acquisition icon.

Grab an image




The Filter window icon is available. Once selected, the Filter window will open with an overview of the multiple filters.

Choose the desired filter and apply it to the image.

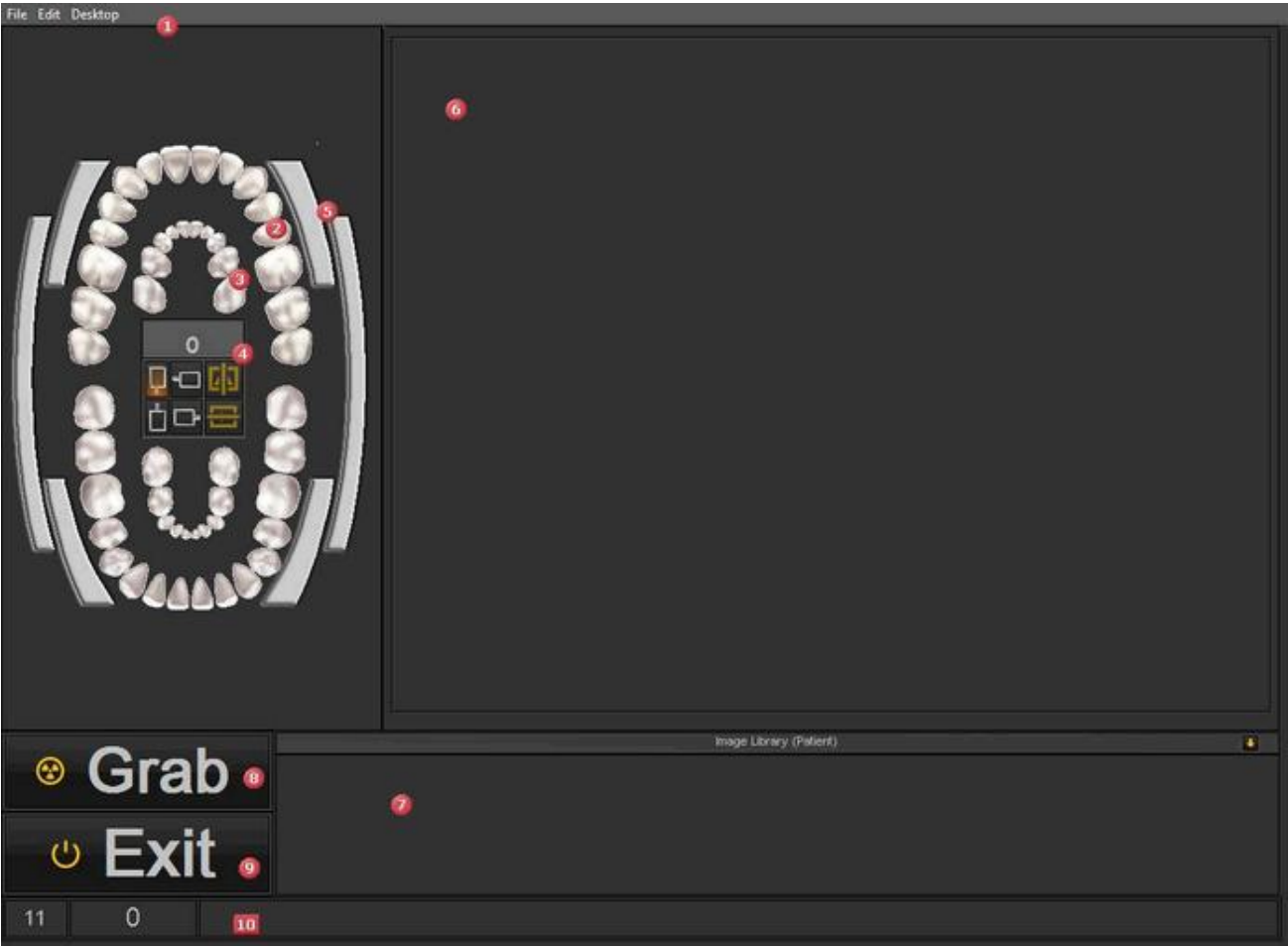
 The filter window can be activated on any selected image. Just load the image in the viewport and select the filter window icon. 

6.3 Working with the teeth scheme

6.3.1 Working with the teeth scheme

Once you have selected to make an acquisition  the status is presented with the teeth scheme. In this screen you will indicate from which tooth or teeth you will make an image of. This section will explain :


1. Overview of the screen



1	Menu of the Acquisition screen. See Also Overview of Acquisition menu (on-line documentation) .
2	Teeth scheme or status for an adult .

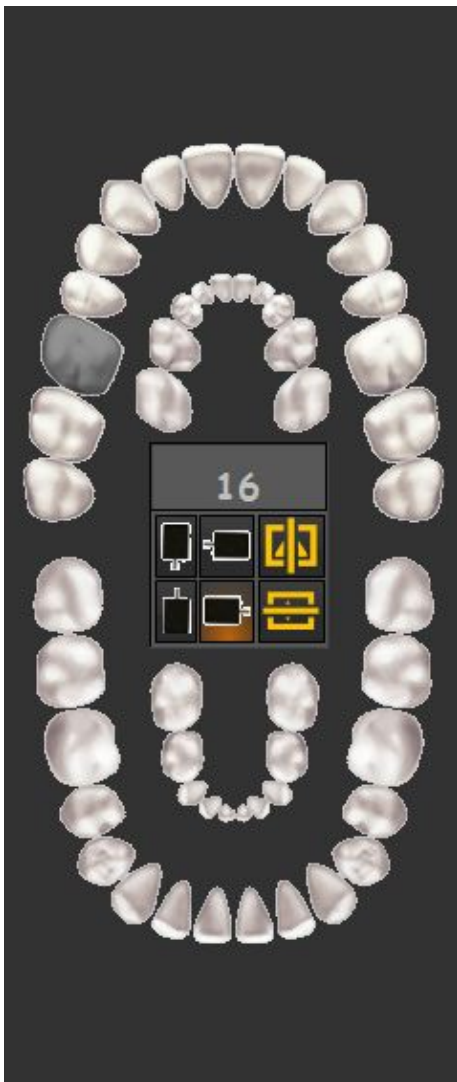
3	Teeth scheme or status for a child .
4	This small dialog box in the middle of the scheme will show the tooth or teeth that are selected, the sensor and the orientation. See Also Manipulating sensor and orientation (Section 6.3.2) .
5	The Bite wing selector gives you the possibility to select a bite wing.
6	The Viewport where the image will be loaded.
7	The Image Library where the images for the patient will be stored.
8	The Grab button will make the acquisition.
9	The Exit button will exit the acquisition module and will prompt you to save the images. See Also Saving an image (Section 5.4) .
10	This is the status line it will show the name of the image and will also show the if the device is Ready For Exposure . If you are experiencing problems check the section Troubleshooting (Section 9) .
11	The little arrow will give you access to a menu allowing you to change the order in which the images are presented. See Also Change the order of the images (on-line documentation) .

2. Select the tooth, teeth or bitewing

 Before you **Grab** an image it is important to **associate** a tooth, teeth or bitewing to the image. It will help you organize the Image library better.

Action	Explanation
Select 1 tooth	
Select the tooth (Click on the tooth with the left	You will see the selected tooth is now dark grey.

mouse button) in the status.



In the dialog box you will notice that **tooth 16** is selected.

You now have the possibility to change the sensor and orientation.

See Also [Manipulating sensor and orientation](#).

When you select a teeth the positioning guide will give you a visual aid on how to position the intra-oral sensor in the patient's mouth. See **Working with the positioning guide (Section 4.3)**.

Select more teeth

Select the tooth **next** to the tooth you have selected previously.

Repeat this process until you have selected the desired number of teeth.

Select **4 consecutive teeth** by clicking on every tooth.

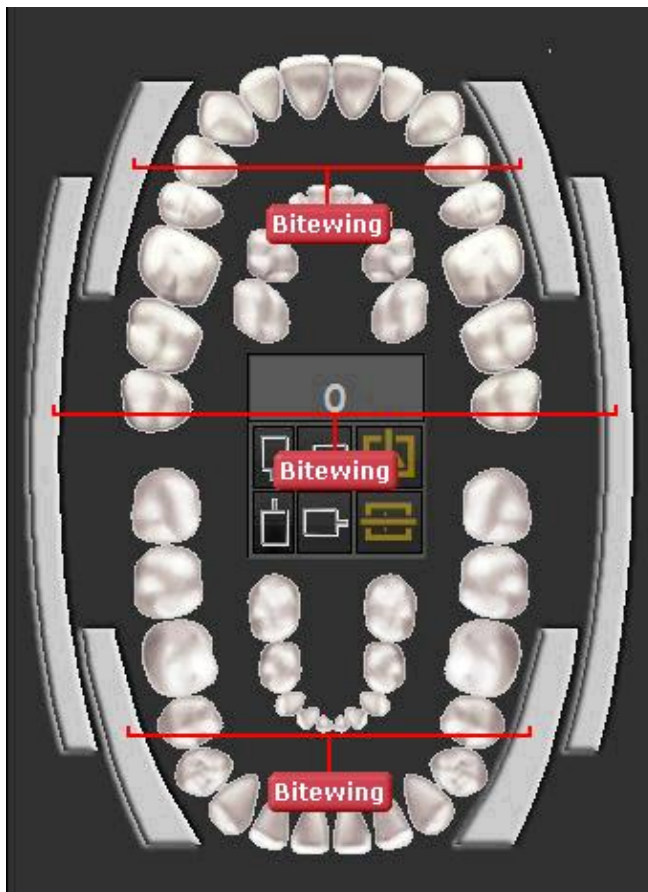
You can also click on the **first tooth** and the **last**



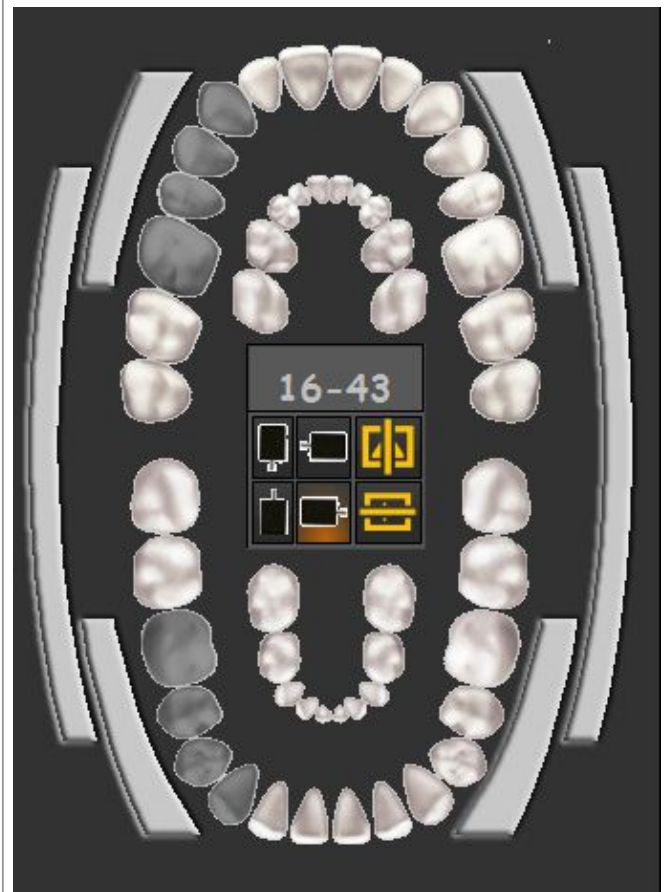
tooth, automatically the teeth between will be selected.

Select a bitewing

Select one of the bitewings by clicking on the Bitewing bars.



By **clicking** on the bars you will see the selected teeth.



6.3.2 Manipulating sensor and orientation

When you make an **acquisition** by means of the teeth scheme or status, you have the possibility to change the **orientation of the sensor**.

Click on the sensor buttons to **change** the sensor orientation. The option with the **glow** is the active setting.



You can also flip the image from **Left to right**  or **Top to bottom** 

The changes you make to the orientation of the sensor will be **saved** for the next time.

6.3.3 Working with the positioning guide

The positioning guide offers you a **visual aid** on how to position the intra-oral sensor.

The new guide is integrated in the teeth scheme so depending on the **teeth selection** you will be presented with a picture on how to **position** the sensor in the mouth of the patient.

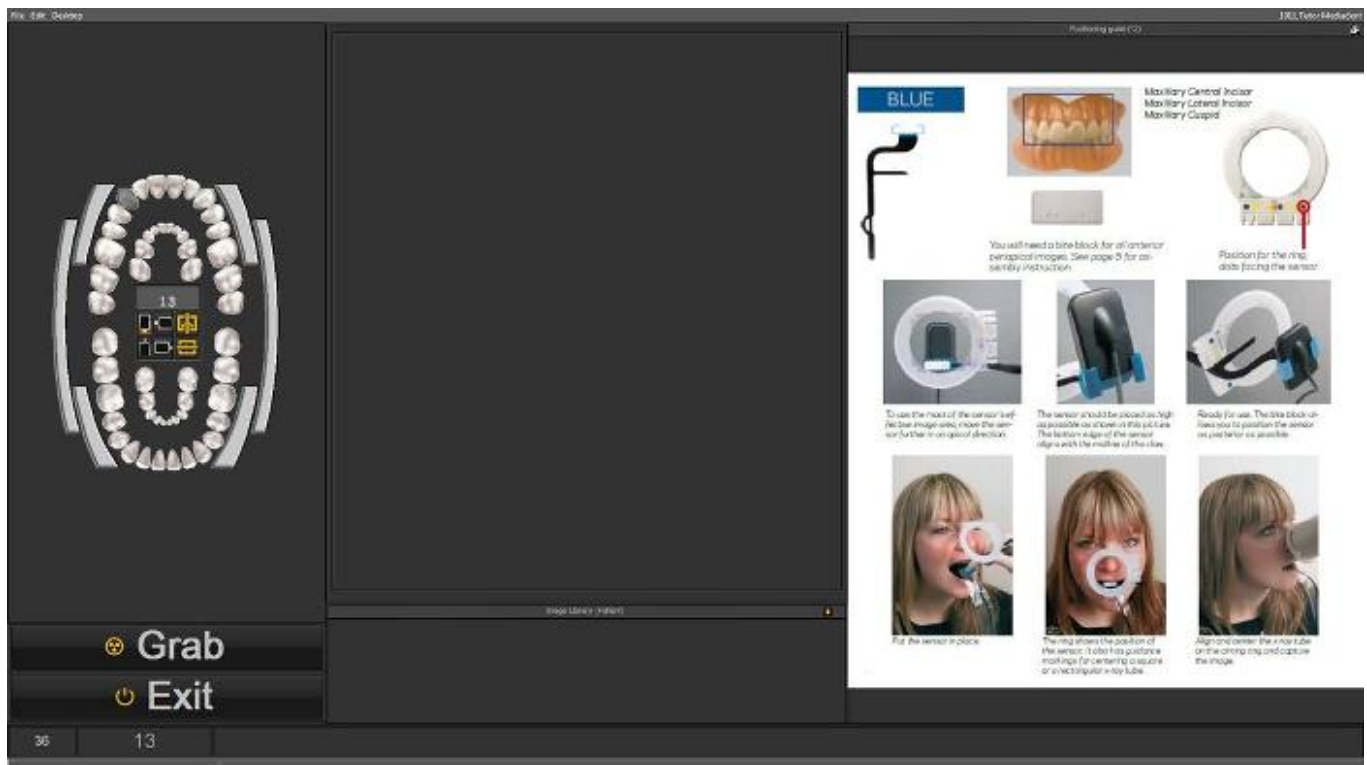
You can also have the possibility to pay a short instruction movie.



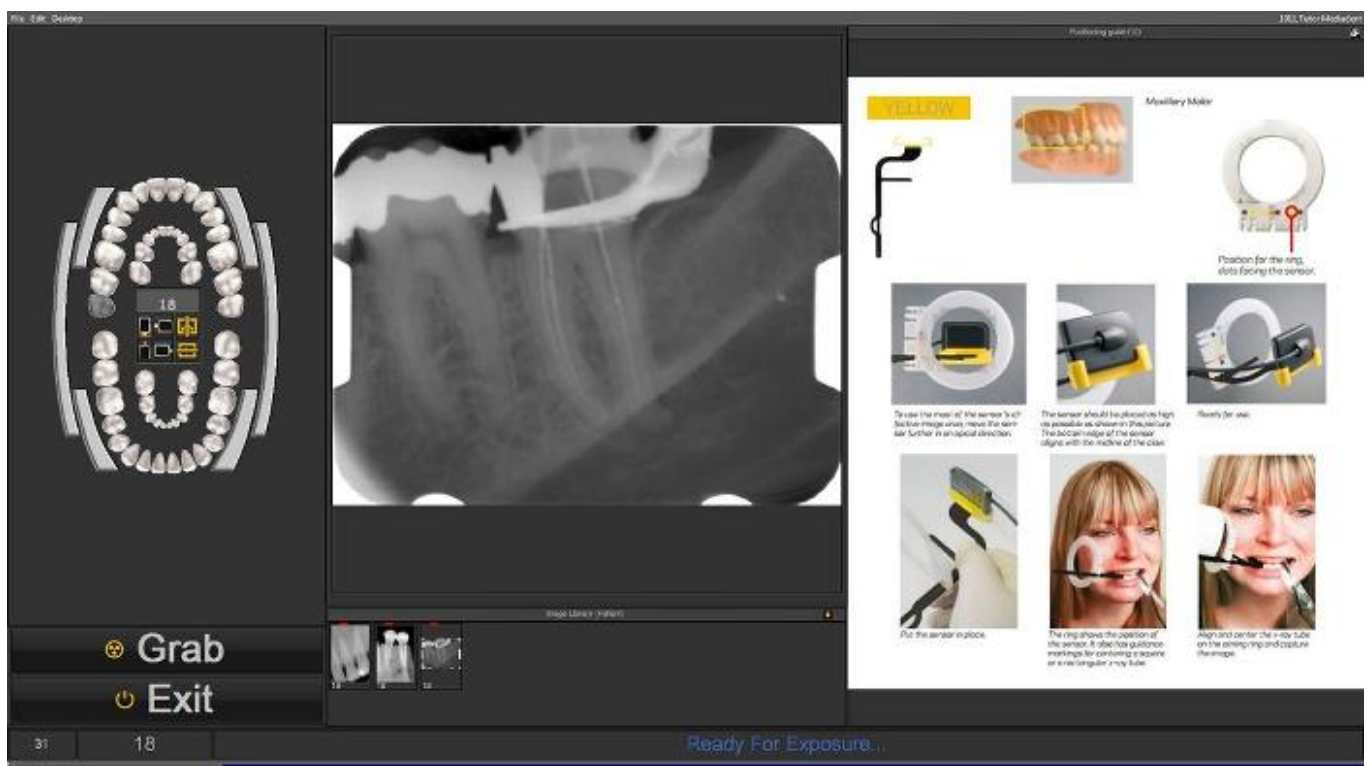
At this moment the positioning guide is still under construction and not yet complete.

Our goal is to have different examples for every tooth selection.

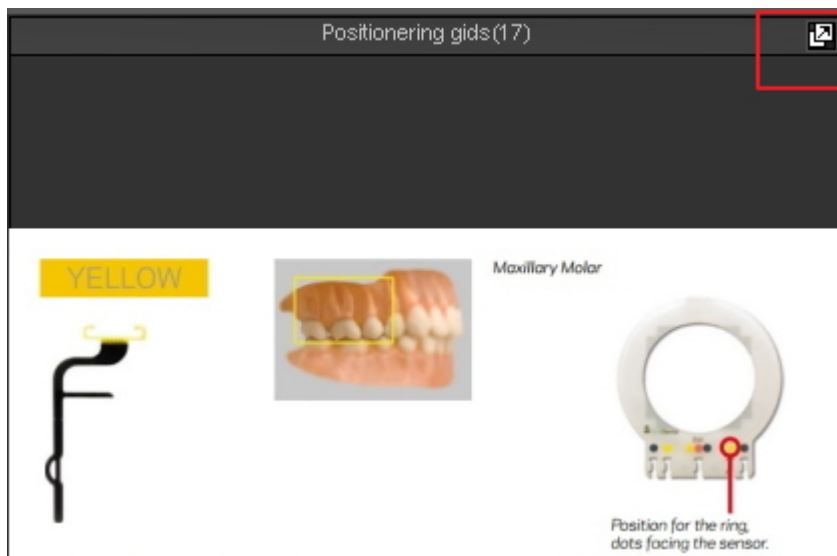
In this example we select **teeth 13** and the positioning guide will show you how to use the holder set and how to position the sensor in the mouth of the patient.



If **tooth 18** is selected another picture will appear showing you the way to position the sensor for this tooth.



You have the possibility to see the positioning guide in full screen mode. Click on the small icon in the right top corner of the positioning guide.



6.4 Working with the status mount

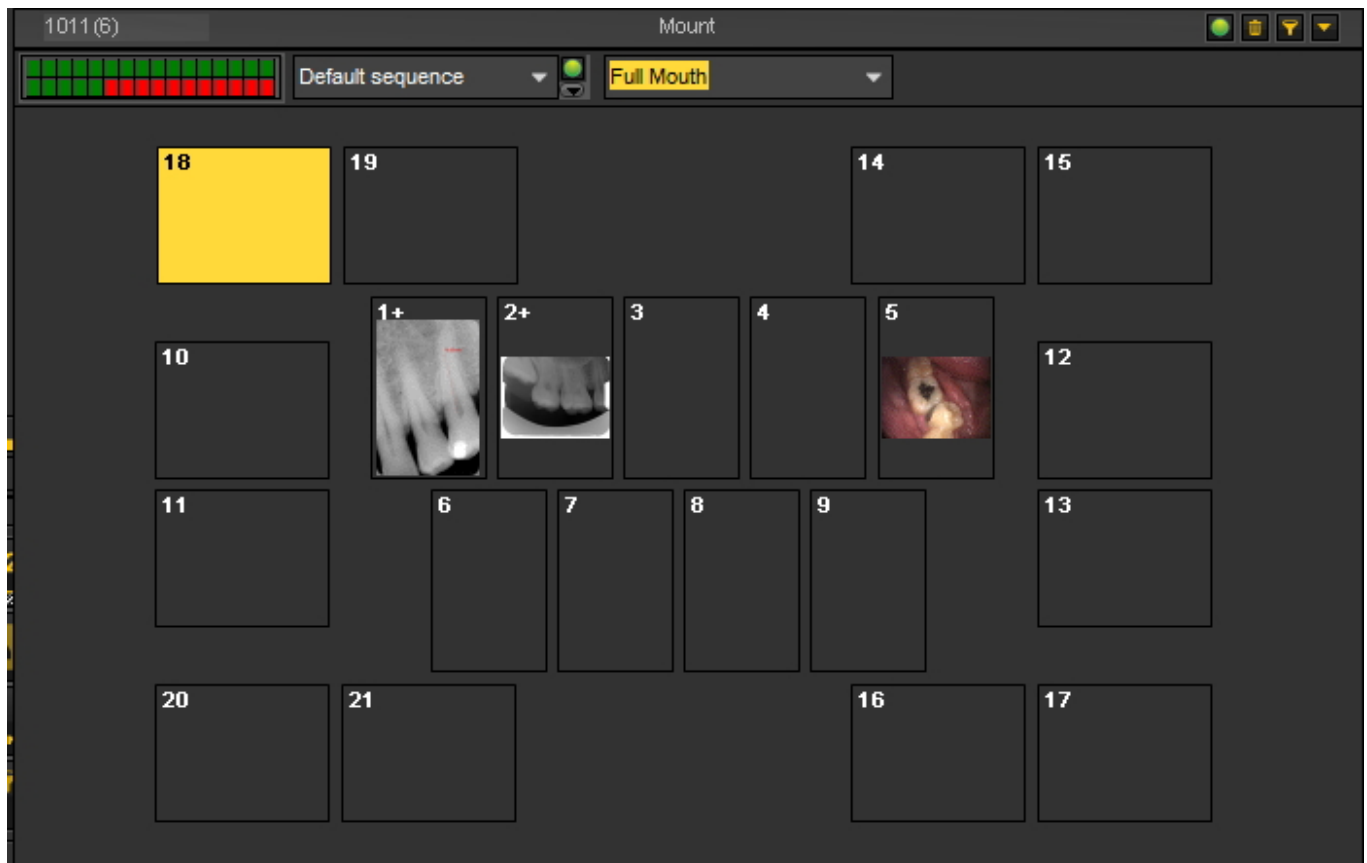
What is a Status Mount

In this topic we will explain the basics of an alternative way of working with your images.

The **Status Mount** is together with the **Image Library** a way to **organize** your images.

The images can be stored, modified or deleted in the Status Mount or the Image Library.

You can also use the Status Mount in **acquisition** mode. The images will be captured in the boxes.



Differences between the Image Library and the Status Mount

The **Image Library** is the main container where the images are stored in. The manipulations you do on the images in the Image Library are **permanent**. This means deleting an image in the Image Library will also result in the deletion of the image in the Status Mount. Removing an image from the Status Mount will not result in the deletion of the image.

Working with a Status Mount has a couple of **advantages**:

- You have the possibility to **automate** the image taking process. In some offices there is a **procedure** in place for taking pictures. For example in some cases it is common practice to take images of the full mouth. In that case it is very handy to be able to automate this.
- Another advantage of using the Status Mount is that you can automatically **associate** the tooth or teeth to the image. The name of the image will represent the tooth or teeth association.
- Also the **order** in which the pictures are taken can be determined in the Status Mount.
- If you take intra-oral images it is also possible to change the **orientation** (rotate 90° or flip horizontally or vertically) of the image in the Status Mount Box independent of the original image.


6.4.1 Working with the status mount and the image library

In this article we will explain how you can use the Status Mount. We will give an overview of the **screen elements** and explain the **Status Mount Controls** and **Submenu**.

We will also show you how you can **move** images from the Image Library to the Status Mount boxes.

1. How to activate the Status Mount

There are **2 ways** to activate the Status Mount

Action	Explanation
<p>In the Mediadent menu choose Display > Desktop Panels > Mount View</p> <p>-or-</p> <p>Choose the icon in the Icon set</p> 	<p>If you are not yet sure what the Status Mount can do for you, you can read this article: A Status Mount.</p>

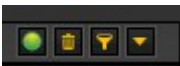
The Status Mount will appear on your desktop and you will be able to view the different images in the Status Mount.

2. Overview Status Mount Screen







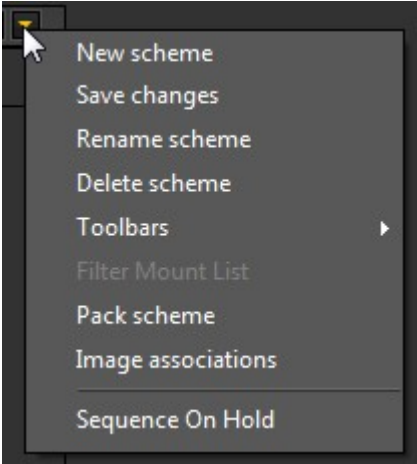
1	Identification of the patients
2	Status Mount Controls. You will have the possibility to start/stop the sequencing, deleting images from the Status mount boxes, filter images and access the Status Mount Submenu. Learn more about the Status Mount Controls in the topic: <u>Overview of the Status Mount controls.</u>
3	Image container configurator: This rectangular box contains 32 little boxes (or squares). Each little box represent a Status Mount box where you drag an image in. The green indicator means the box is active in the status mount. This will be used when you want to create your own Status Mount . See the topic ' How to create a Status Mount. (Section 7.5.1) '
4	The Status Mount selector . You will be able to select another Status Mount. By default there are a number of Status Mount schemes available for example the AAO, this is the Status Mount of the American Association of Orthodontists. You will also be able to select your own Status Mount.
5	On the screen you will see a number of boxes where the images can appear in. How to activate these boxes and change their configuration, you will read in the article ' How to create a Status Mount (Section 7.5.1). '
6	This pull down menu allows you to create a sequence. This sequence is used when acquiring images in the status mount. See the topic Working with the status mount in acquisition mode (Section 6.4.2).

3. Overview Status Mount Controls



You will find the Status Mount Controls in the **top right hand corner** of the dialog box.

	Start/Stop Sequencing The Start/Stop icon will allow you to temporarily stop the sequence when taking images. This is used when you use the Status Mount in acquisition mode. To learn more about how to use the Status Mount in acquisition mode read the article: Working with the status mount in acquisition mode (Section 6.4.2).
	Deleting This icon has the same usage as in the Image Library. When you drag an image on the Delete icon the image will be deleted. See the topic ' Working with the Image Library ' (Section 6.5.4).
	Filter This icon will allow you to filter on different images, for example images taken on a specific date. It will allow to search through the images and filter out the relevant images based on date, grade, user, type and keywords . The usage of the icon can be found under the topic ' Searching images ' (Section 7.3.3).
	Sub Menu To show the Status Mount sub menu click on the small arrow in the right top corner of the Status Mount Dialog box.




These menu options are used when you want to create your own Status Mount.

We will explain these options in the topic : **‘How to create a Status Mount’ (Section 7.5.1).**


4. Move an image from the Image Library to a Status Mount box

You have the possibility to move an image from the Image Library into one of the boxes in the Status Mount.

Action	Explanation
<p><i>Display > Desktop Panels > Mount View</i></p> <p>or</p> 	<p>If you don't have the Status Mount screen on your desktop, you first have to activate the Status Mount via the Menu or my using the icon in the Iconset.</p>



Select the image in the Image library and **drag and hold** the left mouse button and point to the desired Status Mount box. When you release the mouse the image will appear in the Status Mount box.



By repeating this process with other images, you have the ability to drag and drop more than 1 image on the same Status Mount box.

By clicking on the **little arrows** you will be able to see the different images associated to that particular Status Mount box.

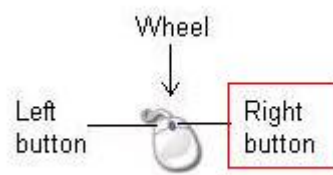
Another indication is the **+-sign** next to the tooth number. This is an indication that there are more images associated to this Status Mount box.

5. Image manipulation in status box

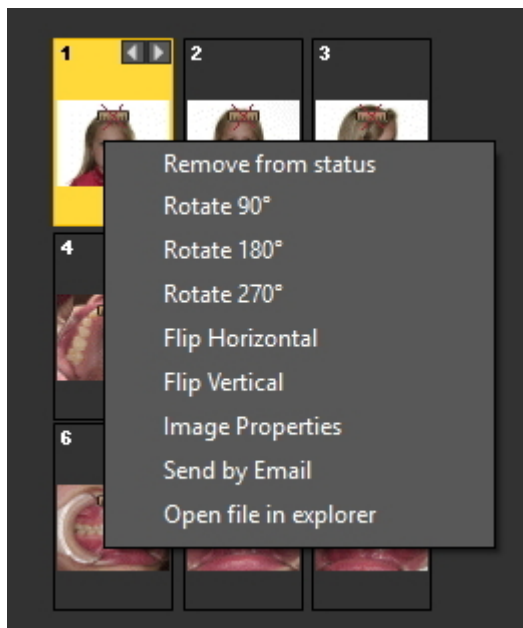
Once an image is placed in a status box, there are several possibilities to manipulate these images. You can rotate the image, remove the image from the status box, flip horizontal or vertical and modify the image properties.

Action	Explanation
Select the image in the status box	Click on the image in the status box to select it. You will notice the image is selected because the background color has changed.

Click with the **right mouse button** on the selected image.



The menu will appear



In this menu you will be able to manipulate the images.

From this menu you can even **Send the image by Email** and **open the file** in the windows file explorer for further investigation.



Learn how the Status Mount can help you save time in **acquisition mode**: read the article : **Working with the status mount in acquisition mode (Section 6.4.2)**.

Maybe you want to **create** your own Status Mount, read the How to article : **How to create a Status Mount (Section 7.5.1)**.

6.4.2 Working with the status mount in acquisition mode

The **biggest advantages** of working with the Status Mount can be found when you are using it in **acquisition mode**.

In acquisition mode you will be able to **automatically** take pictures in a certain **sequence**, automatically **associate** a teeth or tooth to an image.

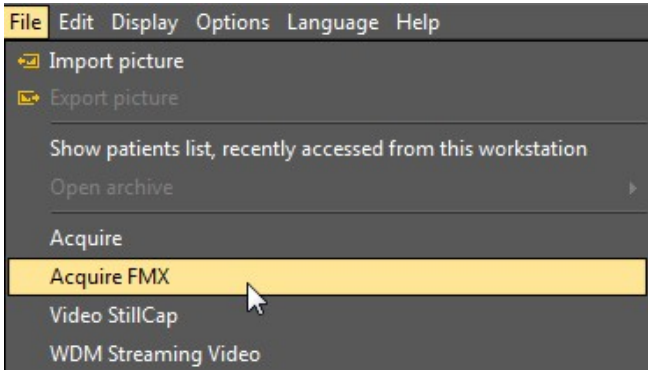

Especially in large offices with more practitioners it will allow you to **standardize** the way in which the images are taken.


Every practitioner will be able to use the same Status Mount so a standard set of images are taken for every patient.

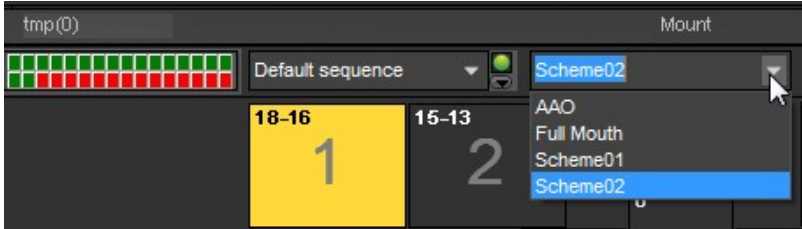


In this article we will explain how you can **use the Status Mount in Acquisition mode** and also how to select **another Status Mount** and use it.




The following steps explain **how to activate the Status Mount** in acquisition mode and how to **use** it for taking 3 images.

Remember that the screenshots of the Status Mount acquisition screen may differ from your environment. To follow the steps you can select the Demo Sensor, via the Mediadent menu **Options>X-Ray Acquisition>X-Ray Demo Sensor**.

Action	Explanation
<p>Choose in the Mediadent menu File > Acquire FMX</p>  <p style="text-align: center;">-or-</p> <p>Click on the icon in the Icon set.</p> 	<p>If you want to use the Status Mount in acquisition mode, you can go through the Mediadent Menu or choose the icon in the Iconset.</p> <p>FMX stands for Full Mount X-ray.</p>

1. Overview Acquisition screen	
<p>The acquisition dialog box has 3 parts :</p> <ol style="list-style-type: none">1 The teeth scheme2 A viewport3 The Status Mount 	
<p>In the Status Mount you will see the different Status Mount boxes with large numbers and</p>	

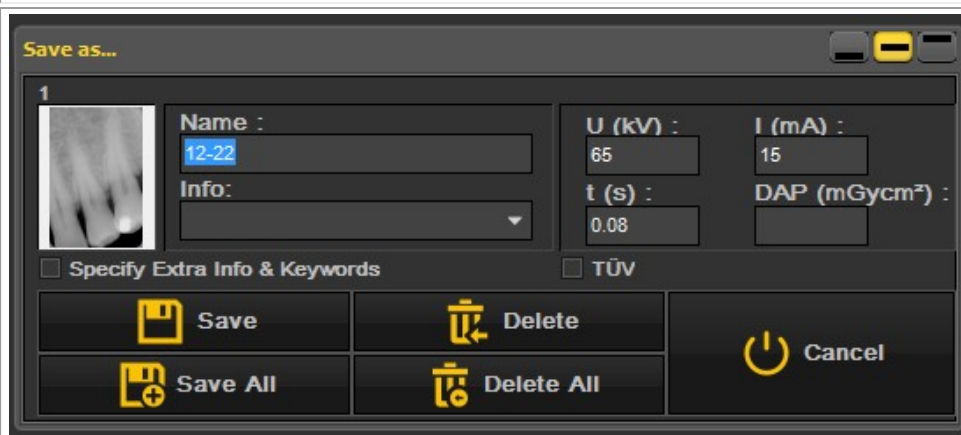
<p>small numbers in them.</p> <p>The large numbers is the sequence in which the images will be taken. The small numbers are the tooth association prepared in the teeth scheme.</p>	
<p>2. Choose another Status Mount</p>	
	<p>Verify or choose another Status Mount. The Status mount you choose will determine the sequence and the tooth association.</p> <div><p>⚠ Once you have chosen the Status Mount and you have started the acquisition process, you can no longer change the sequence or tooth association.</p></div>
<p>Without changing anything in the software, the images will automatically appear in the boxes in the correct sequence. You will only need to position the acquisition device correctly.</p>	
	<p>Position the acquisition device and click on the Grab button.</p>
	<p>You will see the image appear in the box nr 1.</p> <p>This is tooth number associated to this image is number 12-22.</p>
<p>Click on the Grab</p>	

<div> Grab</div>	button.
<div></div>	The image will automatically appear in box nr. 2 . The tooth association is tooth number 42-32 .
<div></div>	<p>The images will be saved to the Image Library. Notice that the name of the images are the teeth that were associated in the Status Mount boxes.</p> <p>When you activate the Status Mount you will see the images in the Status Mount.</p>

3. Automatic tooth/teeth association when exiting the acquisition screen

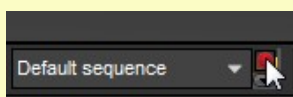


When you **Exit** this screen you will be able to **save the images**.



You have the possibility to **Save All** the images.

If you are not happy with the quality of the image and you want to re-acquire the image in the **same** Status Mount box, you have the ability to **STOP** the sequence.



Click the **Stop** icon to stop the sequence and to re-acquire the image.

If you want to continue, click on the **Stop** icon and when you acquire the next image it will appear in the following Status Mount box.

6.4.3 Working with the Status Full Print

Upon making changes on the Full Status Mount, please rebuild status first within de Full Status Print. Do not forget to save the preset file prior to see the changes in the Full Status Print.

One of the advantages of working with the status mount is the ability to use the **Status Full Print**. This option will show the images in the Status mount and can be used to discuss treatment plans.

Benefits of this options :

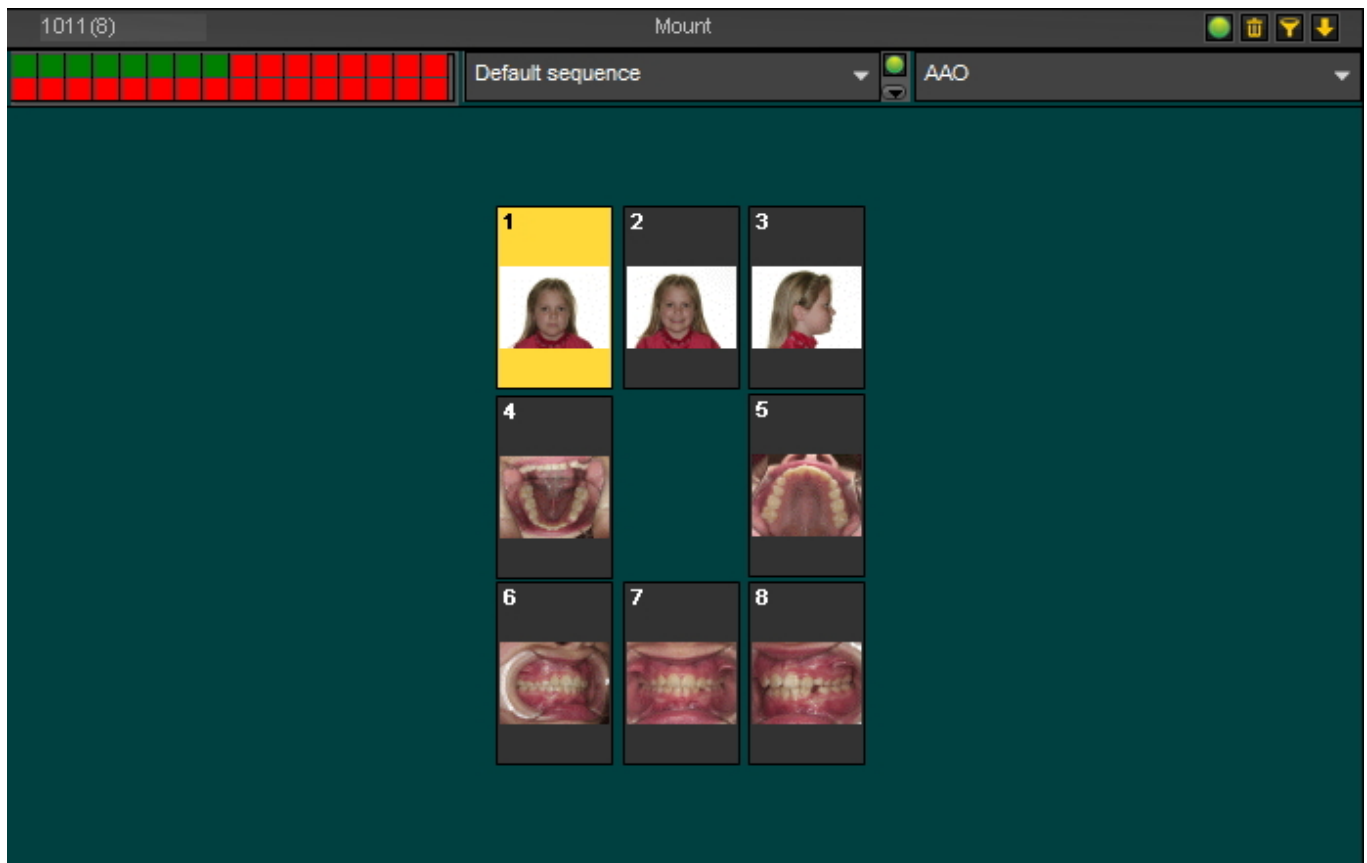
- **Share** the images in a structured way with your patients and other dental professionals
- **Organize** the images in the Full Status
- **Save the history** of the patient in a structured way in the image library
- **Print** the Full Status and give to your patient and/or dental professional

The layout of the Status Full Print is linked to the **active status mount**. Verify the active status mount by



clicking on the Status Mount icon

The **active status** mount is displayed.



At this moment you have the ability to change the status mount or to **drag and drop** other images on the status mount place holders. To understand how the status mount works, please read the article **Working with the status mount (Section 6.4)**.

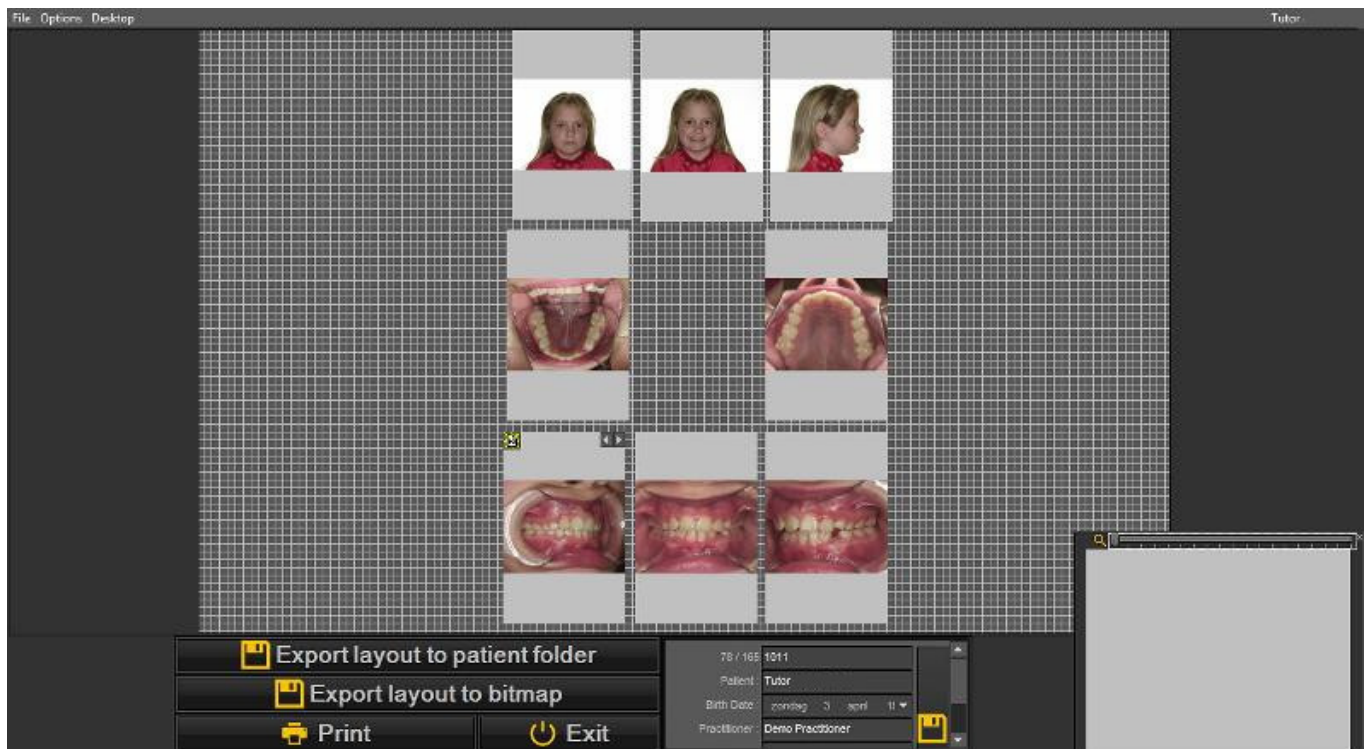



Once you are sure about the layout, choose the **Status Full Print icon** :

The Status Full print screen will open. You will see the status mount place holders with the images.

From this screen you will be able to :

- **Export** the layout to the **patient folder**
- **Export** layout to **bitmap** - the bitmap can later be mailed to the patient or dental professional
- **Print**

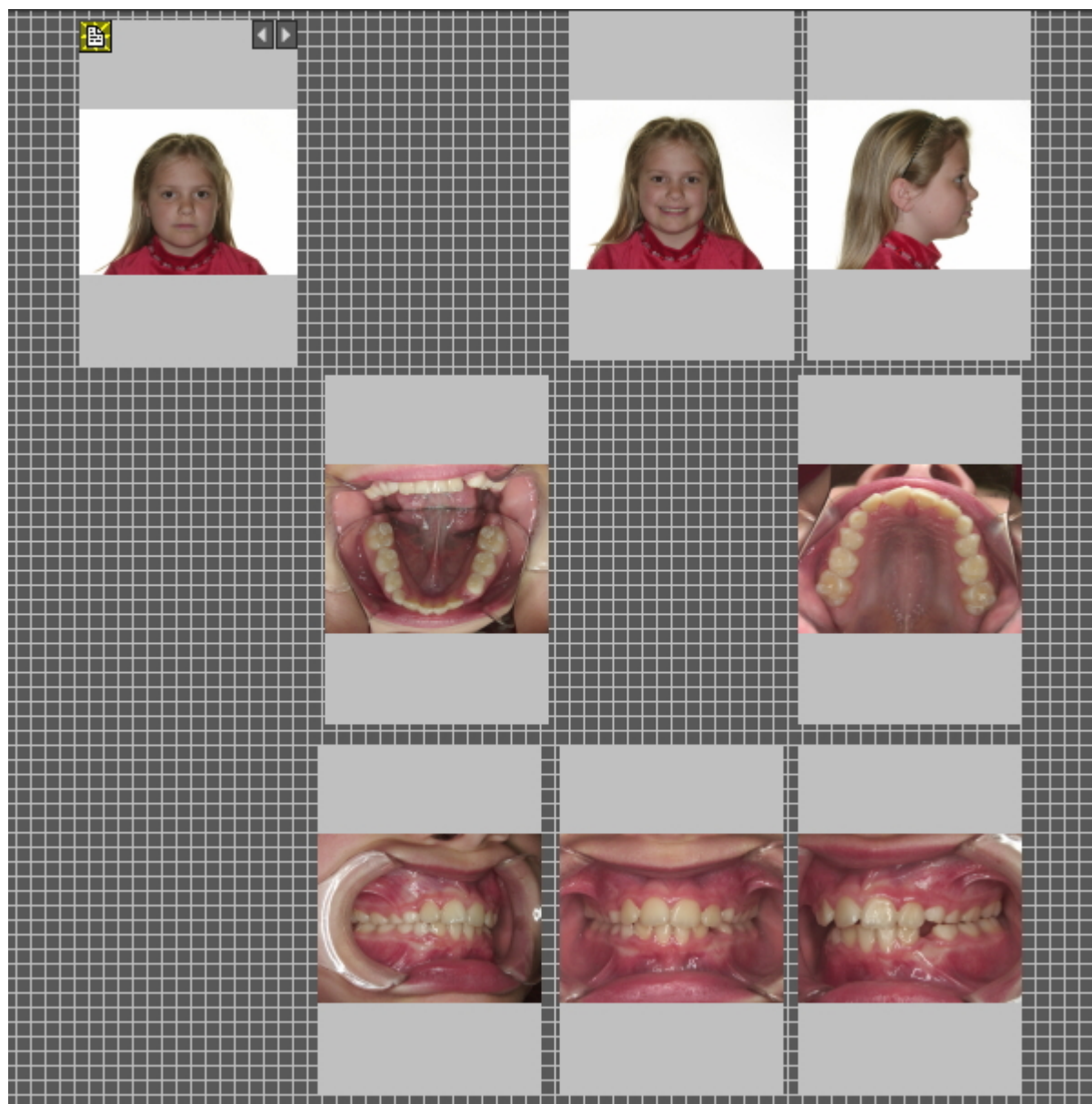


 In this configuration screen you will be able to move the status mount place holders to another location, add your **company logo**, add **patient information**. This information will then appear on the print out or bitmap that is exported.

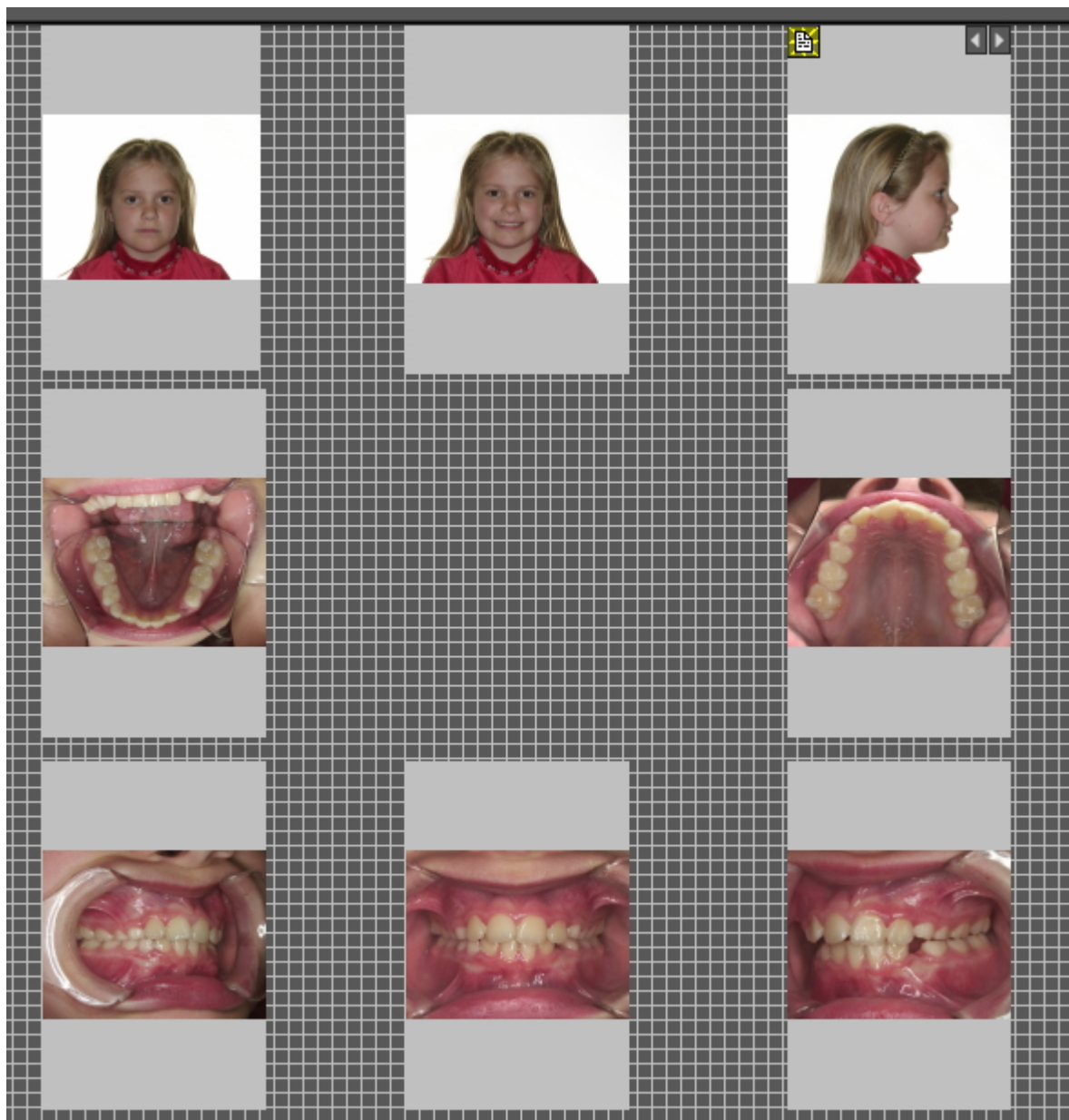
1. Manipulation of the status mount place holder

It is possible to tweak the place holders and to modify the **position** of the image in the place holder.

To move a place holder to another location drag and drop the place holder by pressing the **CTRL key** and **moving** the place holder.



In this **example** we will move the status mount place holders, so there is a bit more space between the different pictures. I would like to add my company information later on.



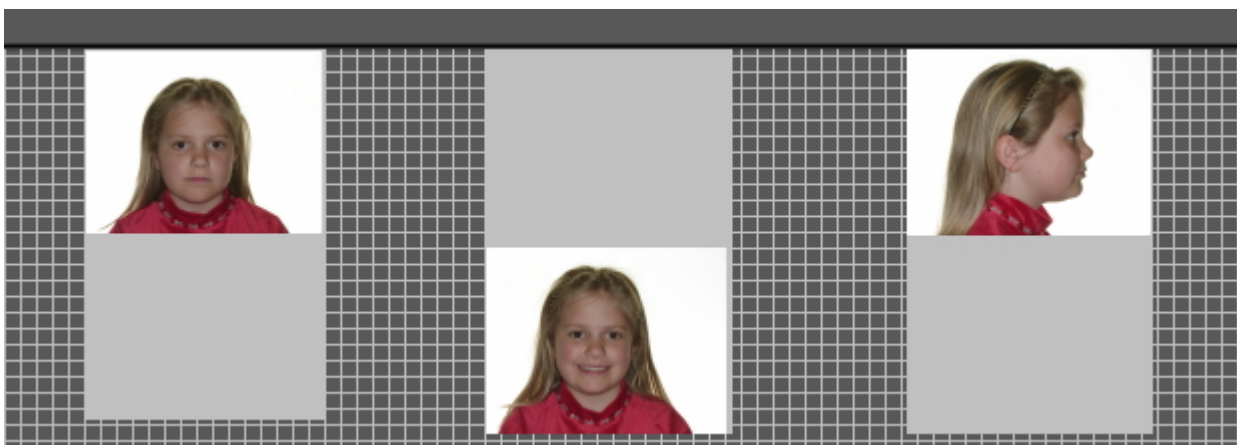
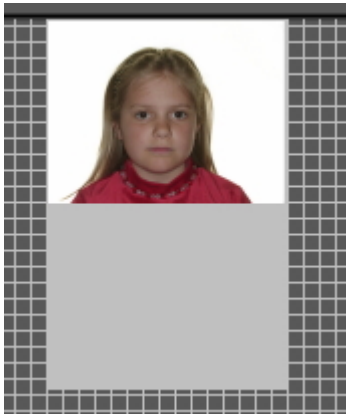
Within the status place holders, you will be able to move the images.



Select a placeholder (by clicking on the place holder).

Press and hold the right mouse button and move the image in the placeholder.

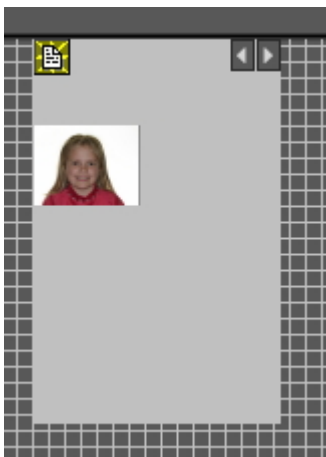
In this example I have move the images in the above place holders.



Maybe you would like to **magnify** the image in the place holder.

To do this, scroll with the **mouse wheel up and down**.

Scrolling UP will make the image **smaller**.



Scrolling DOWN will make the image **larger**.



💡 Combine this with positioning the image correctly in the place holder. In this way the image will fill the complete place holder.

2. Add company logo and patient information

In this topic we will explain how to add the company logo and patient information to the Status full print.

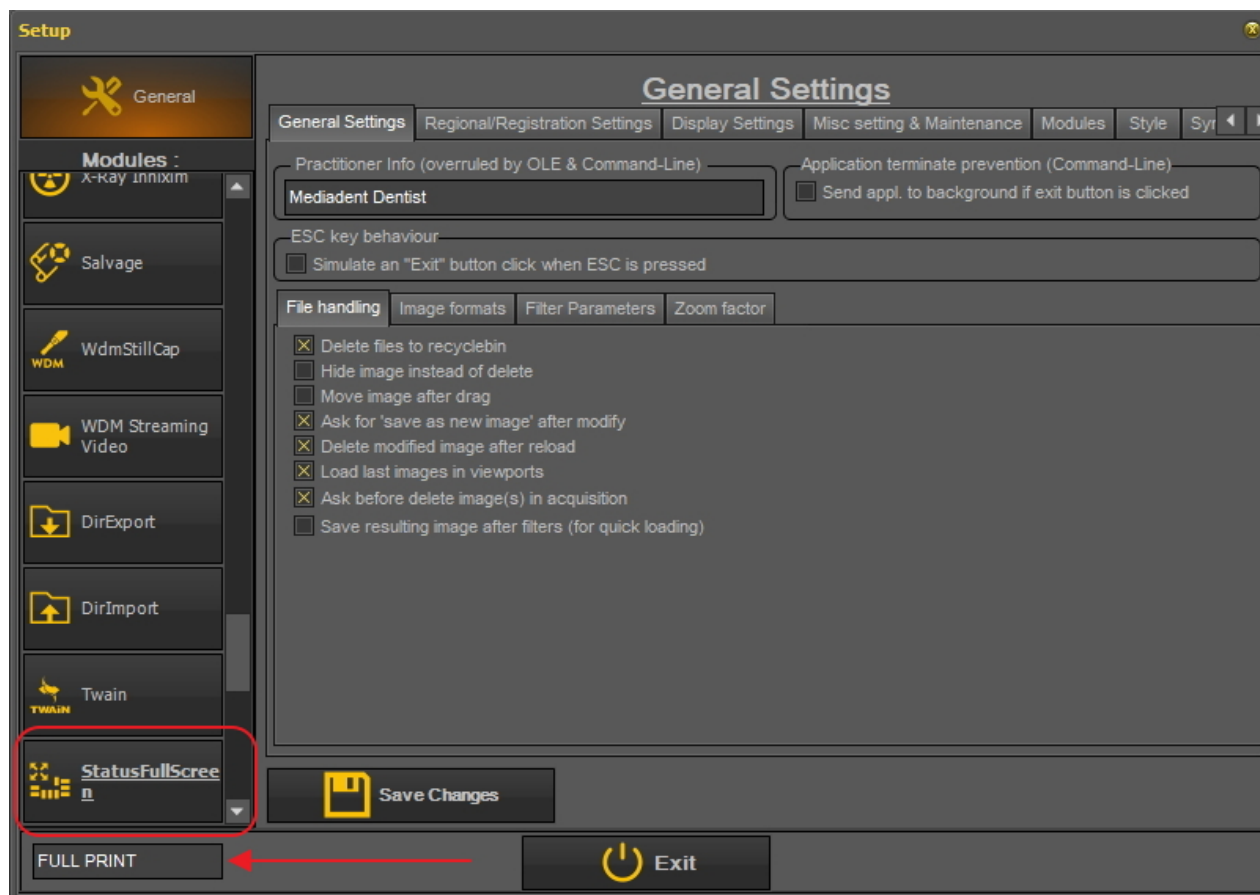
Benefits:

The aim of the Status full print option is to share the images with your patients and other dental professionals, adding your company logo to the status full print with enhance your visibility and will offer the patient and dental professionals additional information about your dental practice.

To add the logo of your dental practice you will need to go through the Setup.

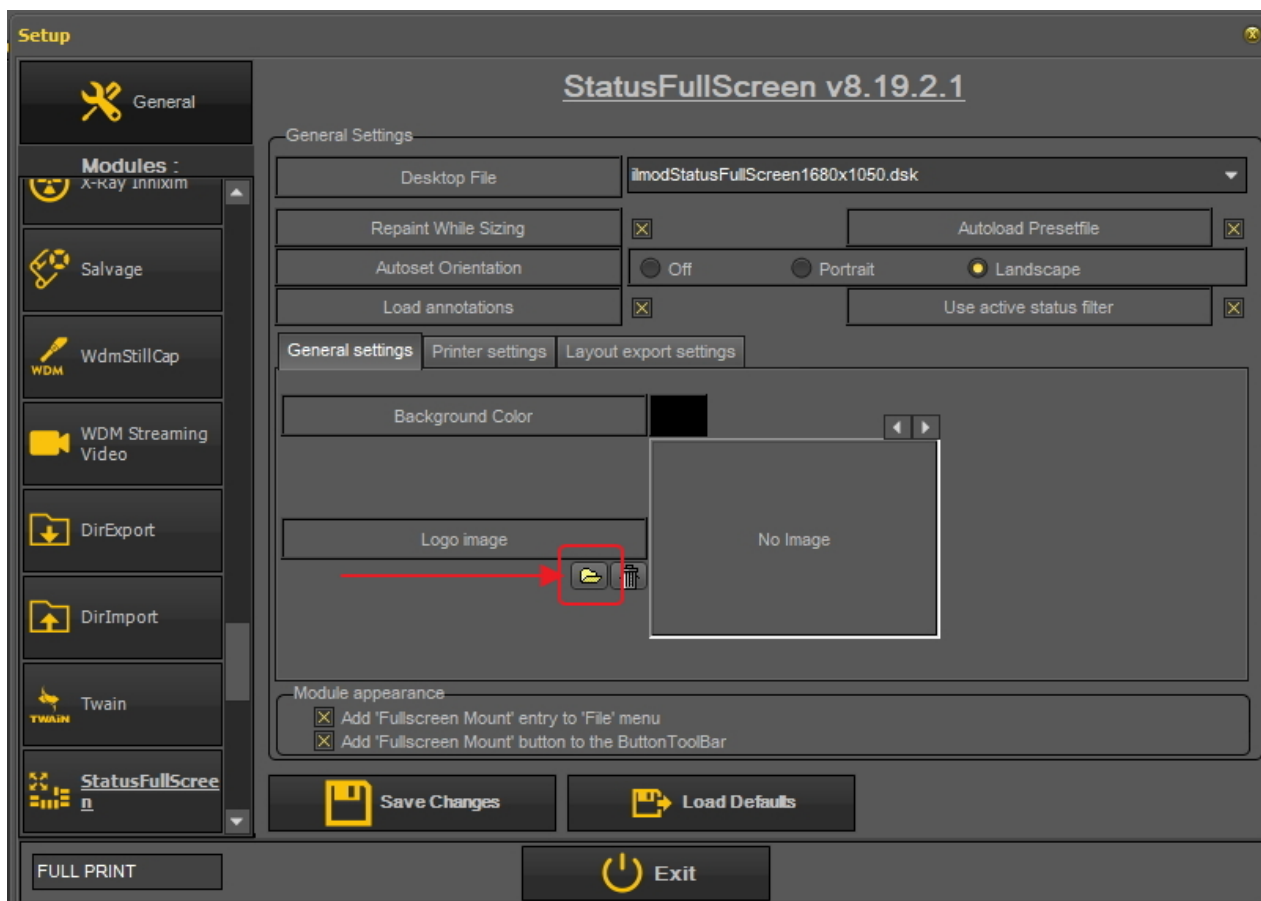
Follow these steps :

1. Choose Options > Setup
2. Type '**Full Status Print**' in the search box

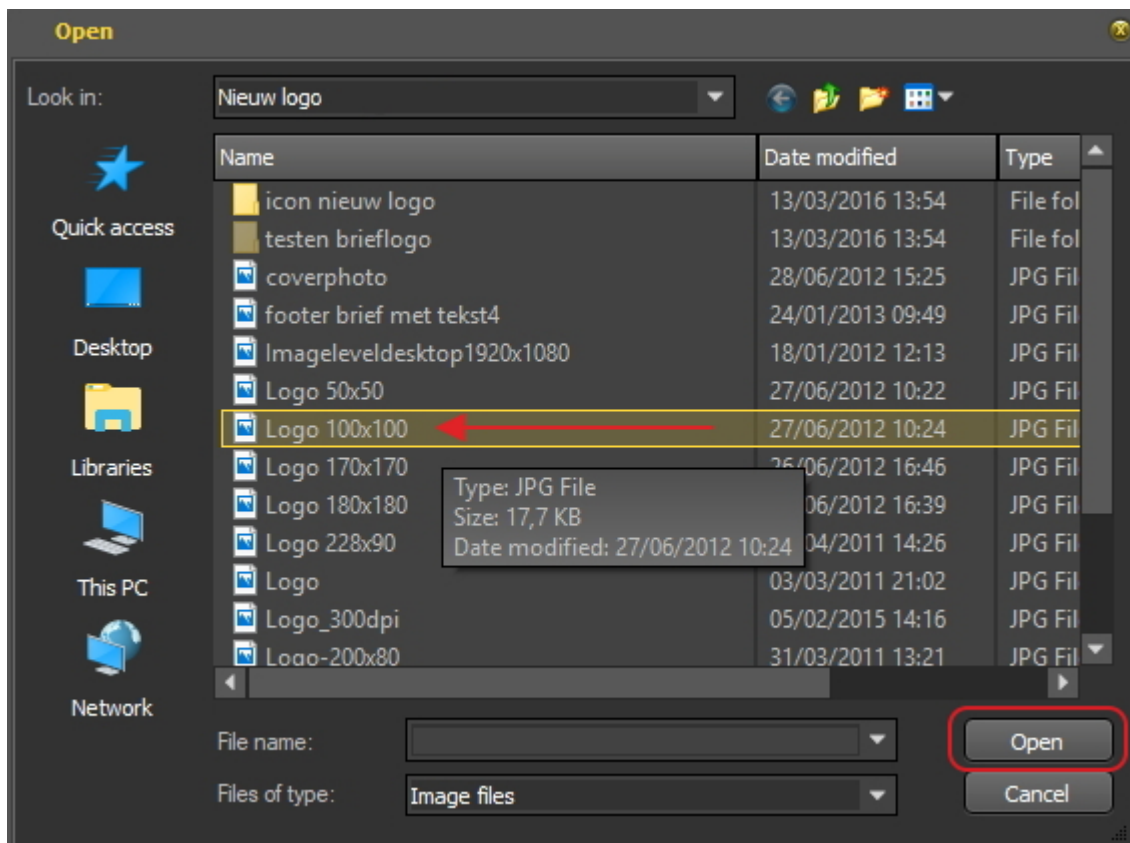


3. Click on the 'StatusFullScreen' module box

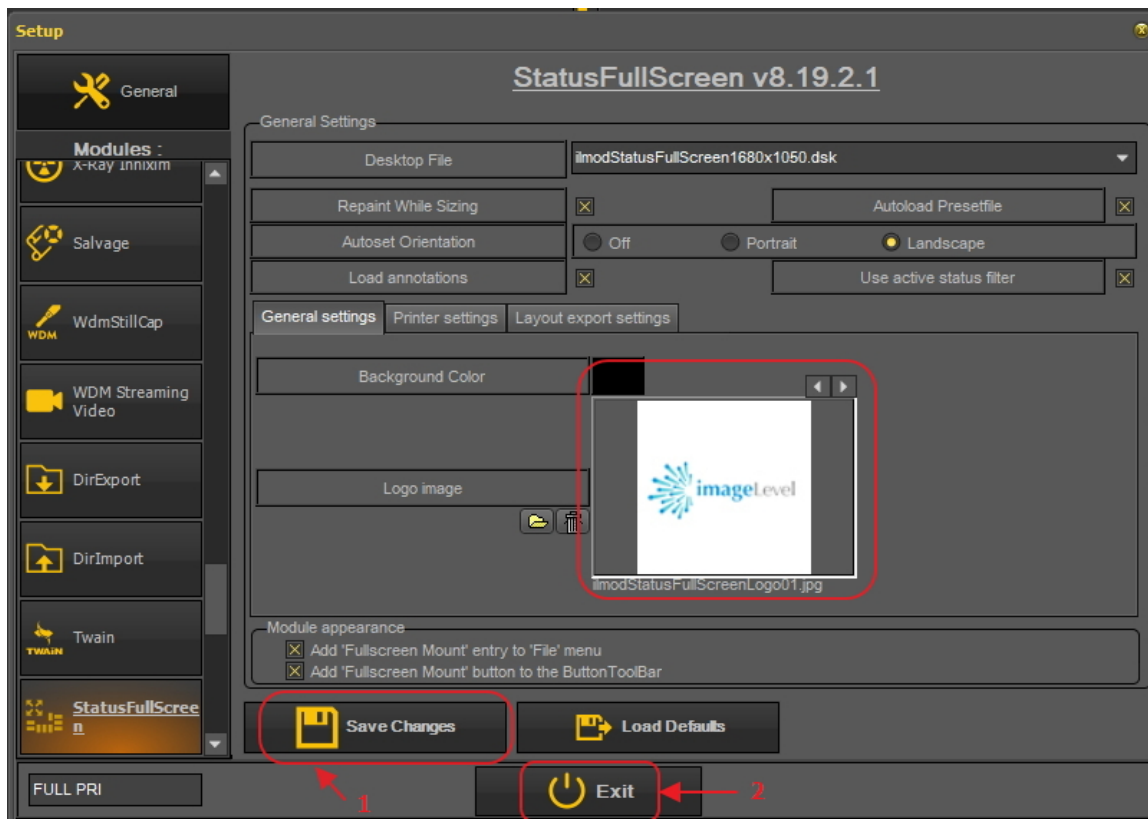
4. The setup of the StatusFullScreen module will open



5. Click on the icon to open the File Explorer and select the file with your logo.
Choose **'Open'** to select.



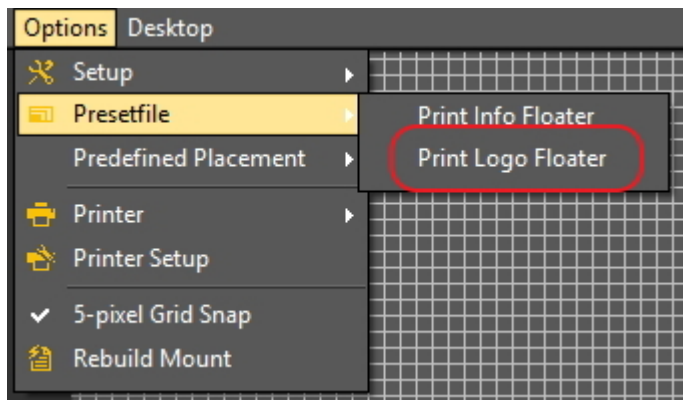
6. Once the logo is loaded into the setup screen.
Choose '**Save Changes**' and '**Exit**' the screen.



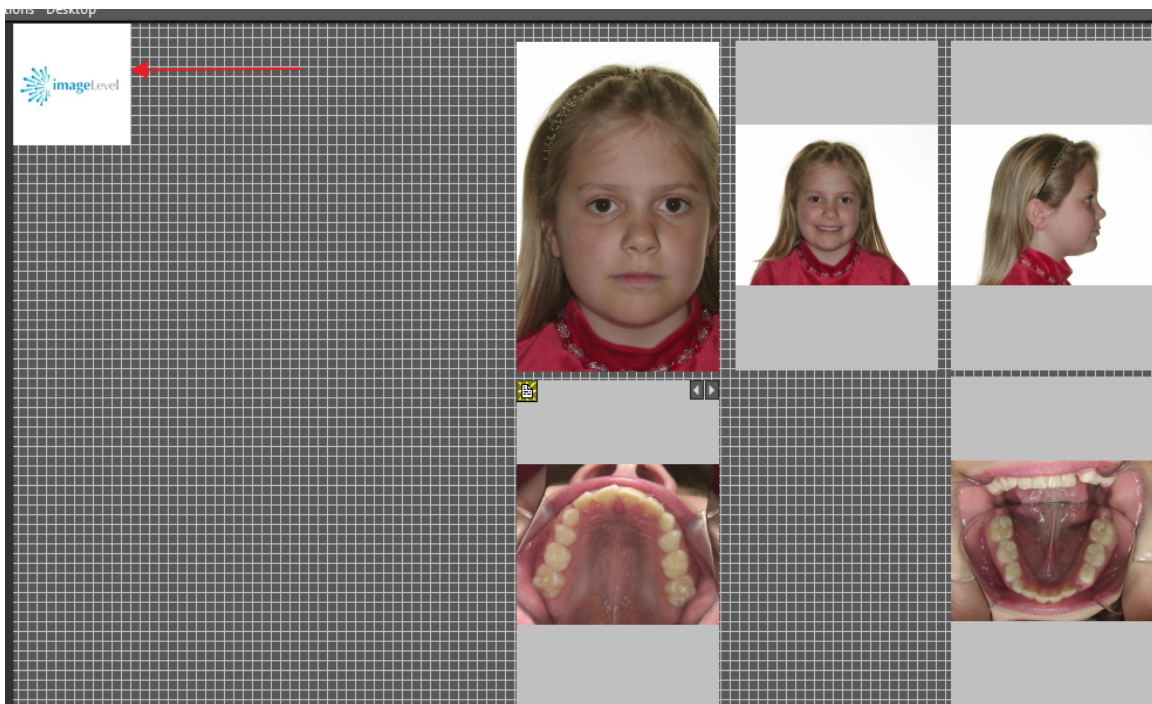
7. Go to the 'Full Screen Status' print



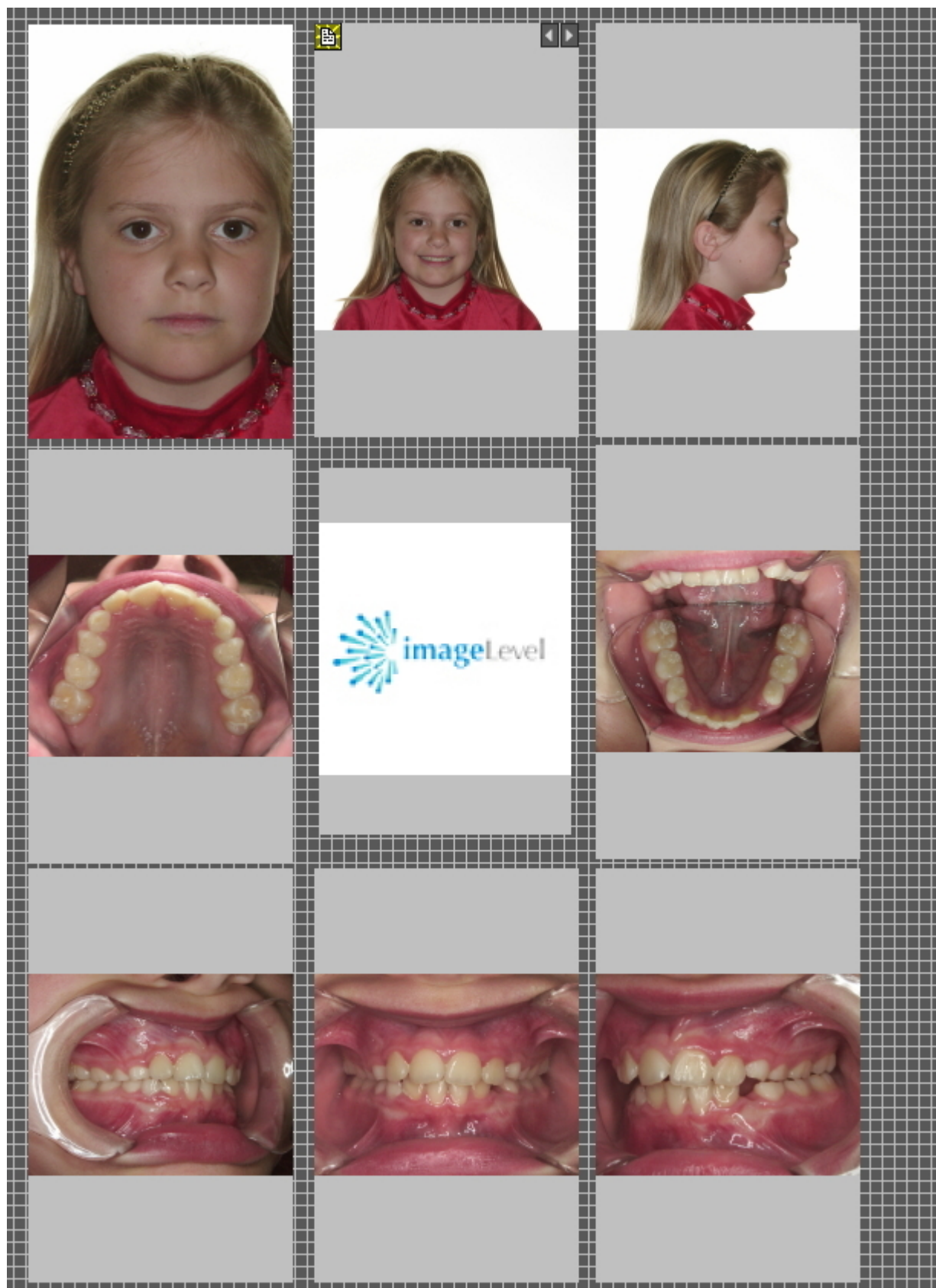
8. Now you will have to add the logo to the 'Full Screen Status' print.
Choose **Options > Presentfile** and select '**Print Logo Floater**'.



This will display the logo.



Move the logo to the correct position. Use the **Ctrl button** and drag and drop the logo in place.



This view can then be **printed** or exported to disk or the **patient folder**.

6.5 Working with the image library

6.5.1 Overview of the image properties

The Image properties can give you some interesting information about the image. It will show you different tags (keywords ...) that are associated with your image.

To get a better understanding of the extra information and keywords you can associate to an image, read the article **Specify Extra Info and Keywords (Section 6.5.2)**.

Not only when **saving** an image you can associate **Extra Information and Keywords** with an image also via the Image Properties you can **modify/add** the Extra Information or Keywords.

In this article you will see how to show the **Image Properties** and how you can **associate** a keyword to an image.


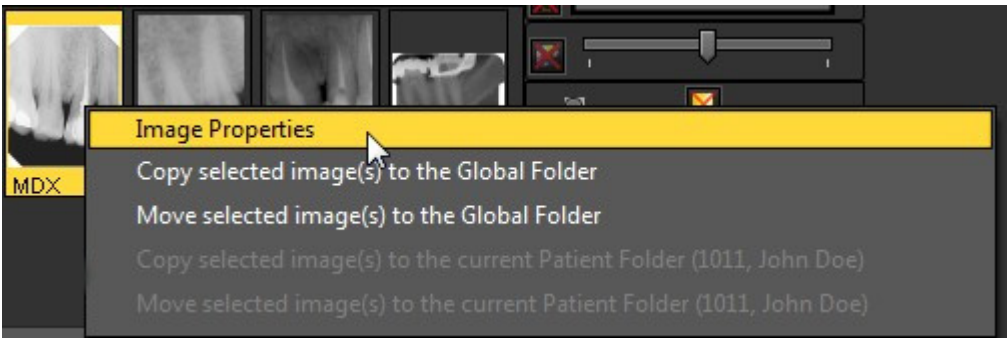
Action	Explanation
1. Go to the Image Library and select an image. 	To show the Image Properties you have to select an image in the Image Library.
2. Click with the RIGHT mouse button on the image. 	Important is to click with the RIGHT mouse button, a drop down menu will appear where you can select the Image Properties.
3. In the menu choose Image Properties .	Read

Image Properties

Extra Info | Keywords

Name : MDX

Info : ▼

U (kV) : 65

I (mA) : 8

t (s) : 0.16

DAP (mGycm²) :

User : ▼

Grade : ▼

Image Type : ▼

Teeth : 14-11

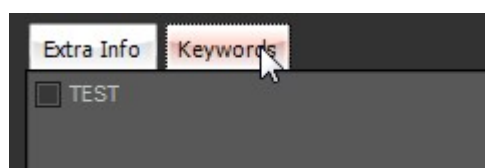
Comments :

the article **'Specify Extra Info and Keywords' (Section 6.5.2)** to learn more about the different options in this dialog box.

Within the Image properties dialog box, you may also change the values or add keywords.

Example: Associate the keyword 'TEST' to an image

4. Select the tab **'Keywords'**.



5. Tick the **'TEST'** keyword.



In this case I will associate the keyword **'TEST'** to the image for later reference.

6. **Save** the Image properties.



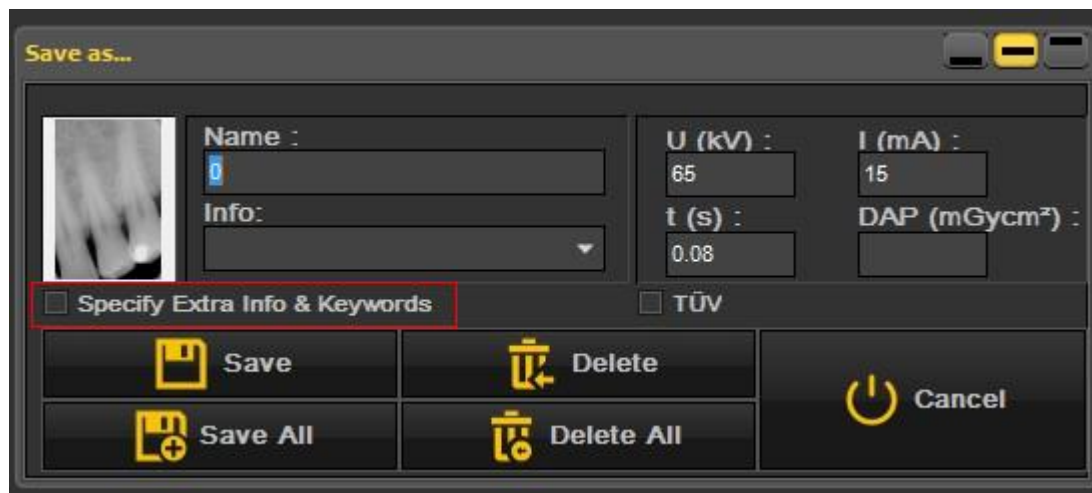
It is clear that you can define which keywords can be associated. You will learn about this in the article **Display Settings (Section 10.4)**.

6.5.2 Overview of the specific Extra Info and Keywords

You can **add extra information** when saving an image.

The advantage of adding extra information is that when searching for images, you can easily **search/filter** on the extra information you have added to the image.

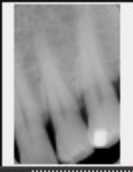
To add 'Extra Info & Keywords' to the images during **saving**, you need to check the option '**Specify Extra Info & Keywords**'.



The screen will expand and you will see **2 tabs**

- Extra Info
- Keywords

Save as...



Name :

0

Info:

U (kV) :

65

I (mA) :

15

t (s) :

0.08

DAP (mGycm²) :

☒ Specify Extra Info & Keywords

☐ TÜV

Extra Info

Keywords

User :


Grade :

Image Type :


IO;XRAY;


Teeth :


0





Comments :

 Save

 Delete

 Cancel


 Save All

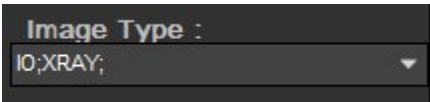

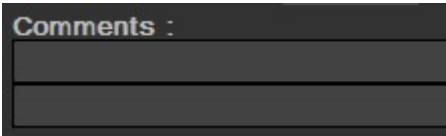
 Delete All

1. Extra Info field

You are free to use the 'Extra Info' fields at your convenience. The interpretation of the fields depends on the way you want to classify the images. If you want to search on certain keywords, you can use these keywords in the 'Extra Info' fields.

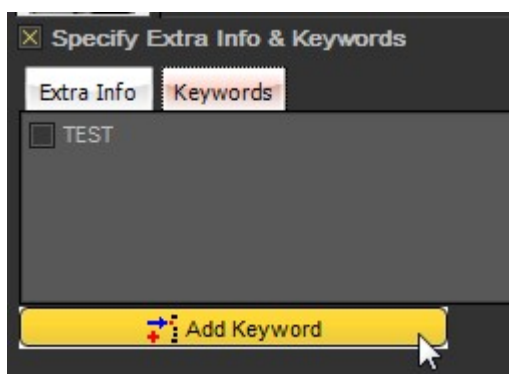
On the tab 'Extra Info' you can add:

<div><div>User</div><div><div>User :</div><div></div></div></div>	<div> You could use the 'User' field to indicate for example the dentist who took the image. In the setup of Mediadent you can determine the users list. See the topic Mediadent Setup:Display Settings.</div>
<div><div>Grade</div><div><div>Grade :</div><div></div></div></div>	<div><p>You could use this field as a kind of classification for the images. Standard the grades are A, B and C.</p><p>This can be adapted via the Mediadent Setup:Display Settings.</p></div>
<div><div>Image Type</div></div>	<div><p>Here you can indicate the type of</p></div>

	<p>the image. There are a number of presets already available when the product is installed.</p> <p>This can be adapted via the Mediadent Setup:Display Settings.</p>
<p>Teeth</p> 	<p>With this Info field you can indicate the teeth or tooth that is associated with the image.</p>
<p>Comments</p> 	<p>Free comment field you can use to add extra information about the image.</p>

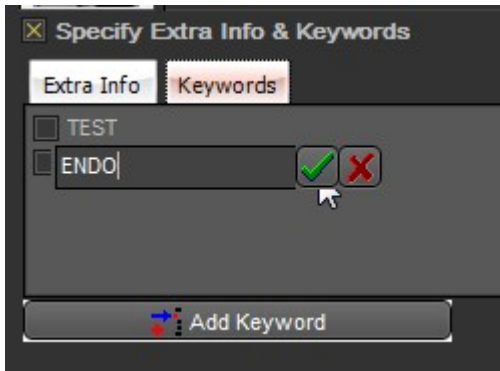
2. Keywords

The keywords tab allows you to add **extra keywords** to the image. The aim of these keywords is to be able to **search** on the keywords and find that associated images.



Follow these steps to add a keyword:


1. Type a **keyword** in the box. In this example **ENDO** is the keyword.

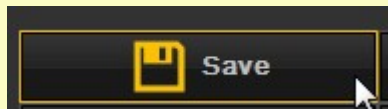


2. **Click** to confirm.

The keyword **ENDO** is now associated to the image.

It means you can now **search** for the keyword **ENDO** and find the associated image.

 Always **SAVE** the image after adding **Extra Info** or **Keywords**.



6.5.3 Overview of the Image library folder controls

The Image library folder controls allows you to quickly do a number of things:

- Delete images
- Directly send images
- Search for particular images in the library
- Sort the images in the Image library



Select the image and click on the delete icon.



Select the image or images you want to send and click on the send item. This short video explains how to send an image directly from the Image Library : [Click here](#)

Also read the following topic : **How to send an image by e-mail (Section 7.6.1)**



Searching for specific images in the image library? Read this article : **How to search for images (Section 7.3.3)**



See your images in a particular order. Read the article : **Change the order of the images (on-line documentation)**

6.5.4 Working with the image library

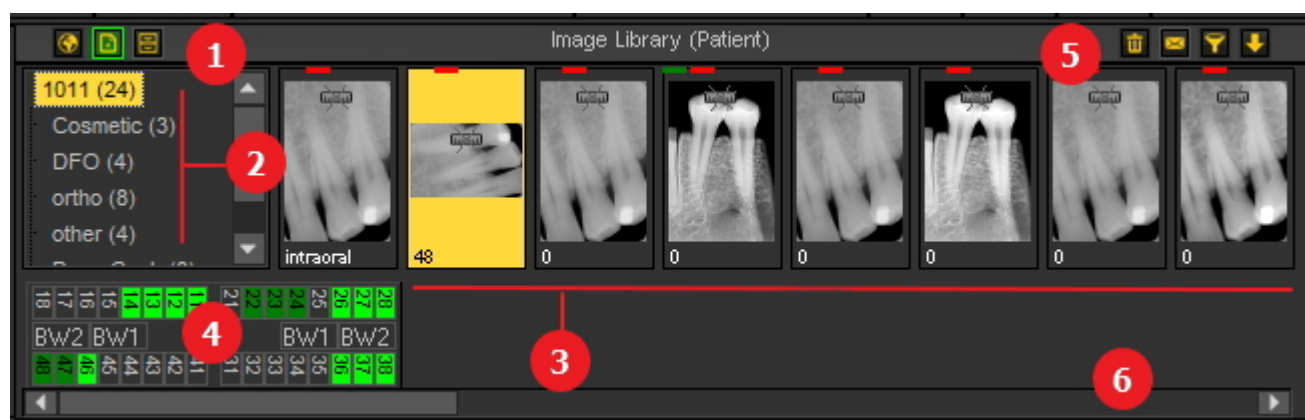
In this section we will explain the usage of the **Image Library**.

The Image Library will show the **images** taken for the selected **patient**.

In this article we will give you an overview of the **Image Library elements**.

1. Overview of the Image Library elements

This Image Library:



1	The Global Image Library The Patient Image Library Learn more about the differences in the topic Global and patient library (Section 12.4) The Archive Library. More information on how to use and setup the Archive Library, read this topic How to archive images in Mediadent (Section 4.10) .
2	The sub-directories or folders contains the images of the patients. For better organization of the images you can create new folders .
3	You will see the images taken for that patient, depending on the folder you have selected.
4	Teeth scheme will show you which images are taken for that particular patient. When saving an image you will be able to associate teeth or tooth.
5	Folder or directory controls : You will be able to delete images, send images via your installed e-mail application, search for images and sort image in the Image Library. For more explanation, read this article : Overview of the Image library folder controls (Section 6.5.3)

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Scroll bar : If you have more images in the folder than can be shown on the screen, you can **scroll** to the right or left to see the images.

The small ruler on the image is an indication that the image is **NOT calibrated**.



2. Structure of the patients library

The patient's directory contains the images you have taken.

The **root directory** is a number, in this example 1011.

Between brackets you see the number of images in the subdirectory or folder. In this case **(24)** means you have 24 images in that folder.



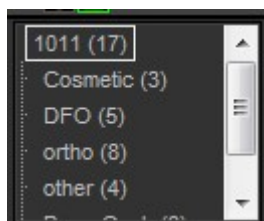
You can categorize the images in **subfolders** for example by **type**.

In this example you see several subdirectories :

- Cosmetic (4) : with 4 images
- D.F.O. (5) : with 5 images
- Ortho (8) : with 8 images
- other (4) : with 4 images
- Pano-Ceph (8) : with 8 images
- Video (3) : with 3 images

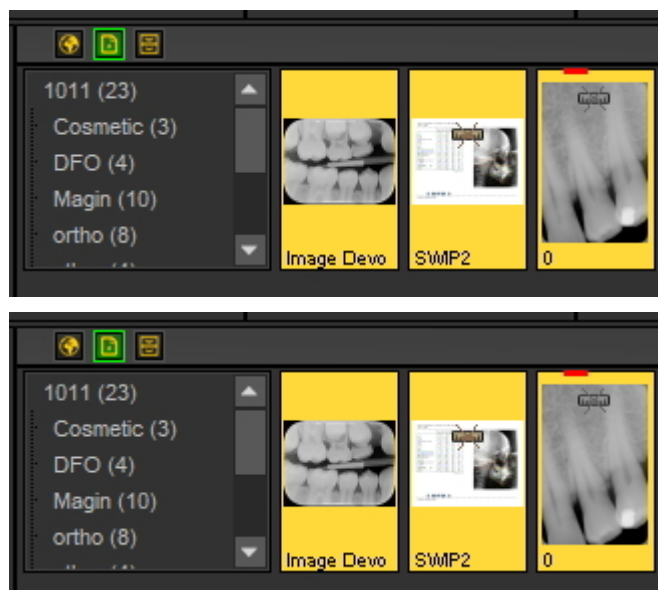
3. Select a folder

Click on the **folder** to select.



4. Selecting multiple images





To select multiple images, click on the first image and press the **shift key**. With the shift key pressed, select additional images.



4. Legend of the images (colored bars/lines on top of images)

You might notice **little colored lines or bars** on the top of an image.

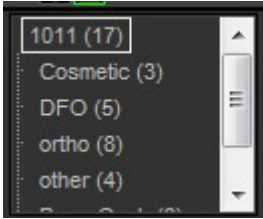
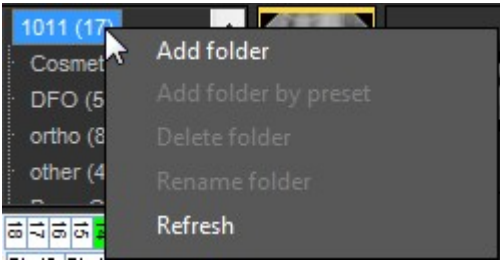



Every color has its own meaning. In this table you will get an explanation of the different lines or bars.


	<p>The little green line on top of the image is an indication that there are annotations for that image.</p> <p>HDX is the name of the picture. You will give this name when you save the image.</p>
	<p>The little red line on top of the image is an indication that the actual image is the original image.</p>
	<p>The yellow line indicates that the image has been modified. If you have modified the contrast/brightness of the image a yellow line will indicate this.</p>
	<p>The little blue line on top of the image is an indication that there are D.F.O. analysis for that image.</p>



The small symbol on the image means that the image is **NOT calibrated**. To learn how to calibrate an image, read this article : **How to calibrate an image (Section 7.4.2)**.

5. Create a new subdirectory or subfolder

Action	Explanation
1. To create a new subdirectory you first have to select the root directory by clicking on it.	For example : Click on 1011 (24) 
2. Click with the Right mouse button on the root directory to obtain a menu .	
	
3. Choose Add folder	
4. Give the subdirectory a name .	For example : Example
	
5. Click  to confirm.	
	The new subdirectory is created and will appear in the list.

 You have the possibility to automatically create the same structure for all the patients. This means you will have the same sub-directories for every patient. You will find the explanation in the Mediadent

Setup : [Display Settings](#)

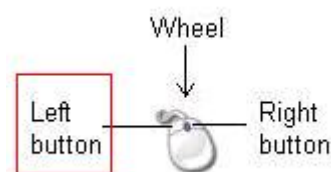
6. Move or Copy an image to another folder

MOVE AND COPY

Click on the image with **left** mouse button, **HOLD** and **DRAG** the image to another subdirectory

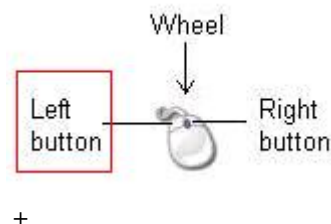


You will move a copy of the image to another subdirectory by dragging and dropping the image with you left mouse button.




MOVE ONLY

Click on the image with the **left** mouse button, **HOLD**, press the **SHIFT** key and **DRAG** the image to another subdirectory.

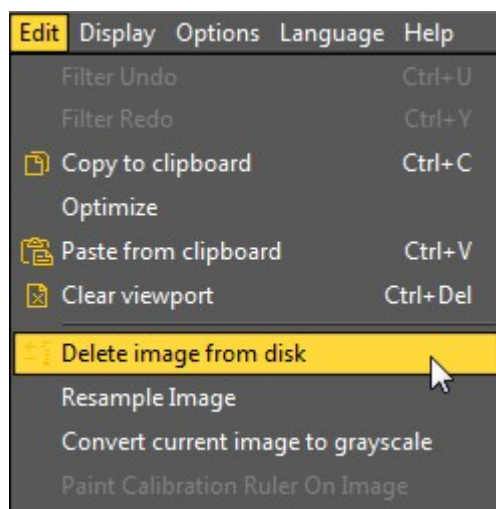


7. Deleting images

There are **2 ways** to delete an image.

Action	Explanation
<ol style="list-style-type: none"> 1. Select the image you want to delete 2. Drag and drop the image on the recycle bin icon in the image library  <ol style="list-style-type: none"> 3. Choose OK in the warning dialog box to confirm 	<p>You drag and drop the image while pressing and holding the LEFT mouse button to move the image to the recycle bin.</p>
<ol style="list-style-type: none"> 1. Load the image you want to delete in the Viewport 2. In the menu Edit>Delete Image 	<p>This will delete the image permanently.</p> <p>You can avoid this by selecting the option 'Delete files to recycle bin' in the Setup of Mediadent.</p>

from disk



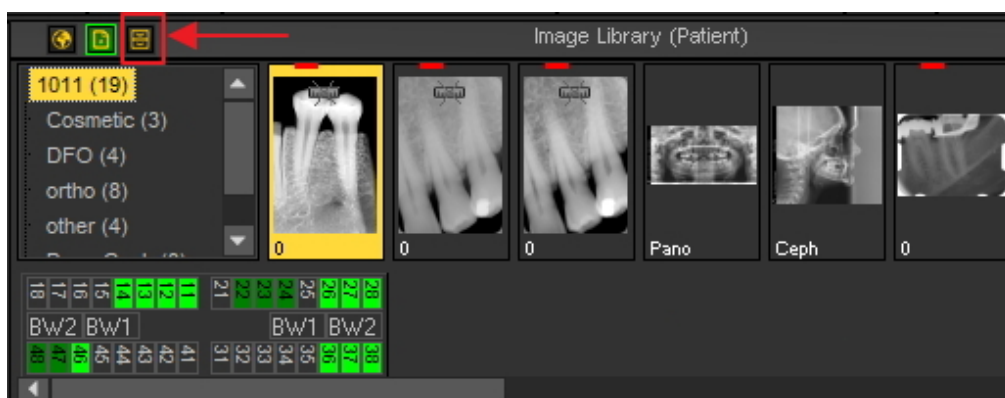
3. Click **OK** to confirm

6.5.5 How to archive images in Mediadent

Based on end user feedback, we have added an **archiving tool** to the image library. This will give you the opportunity to **organize** the image library of the patient better.

Old images can be send to the archive folder of your choice. This folder is always available for the image library folder.

In this topic you will see how to **setup** the archive folder and **how to use the archive folder** from the patient's image library.



1. How to setup the archive folder

In the setup of Mediadent you will determine **where the location** is of the archive folder.

In this chapter we will explain how to setup an archive folder and how to **remove an archive folder**.

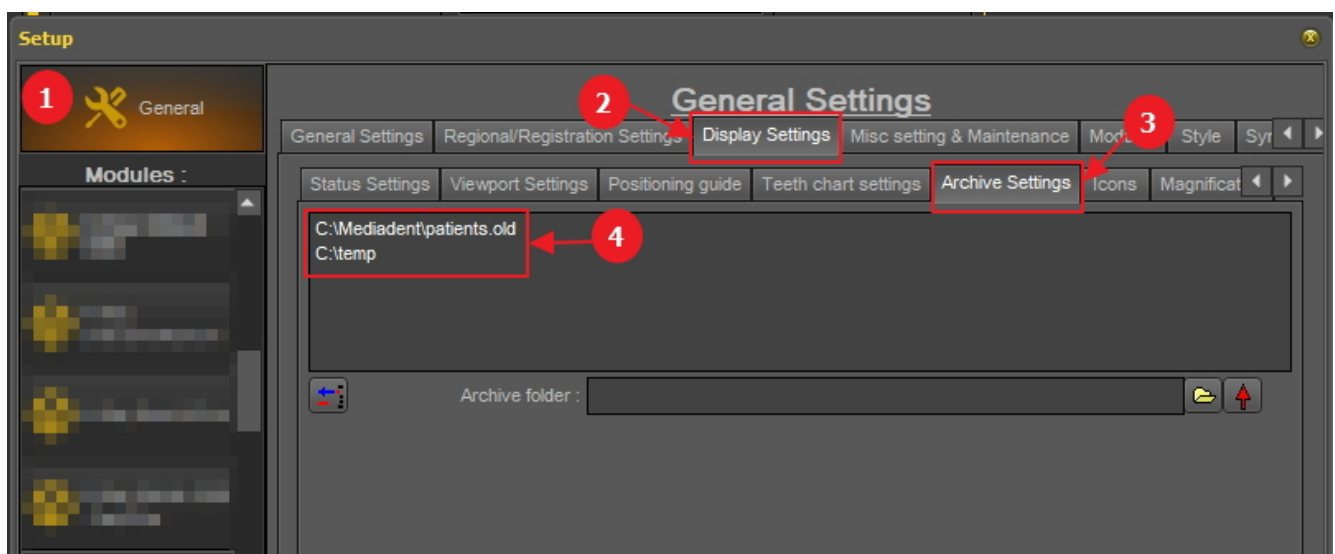
1. Setup the archive folder

Follow the steps to determine the location of the archive folder :

1. Choose **Options > Setup**

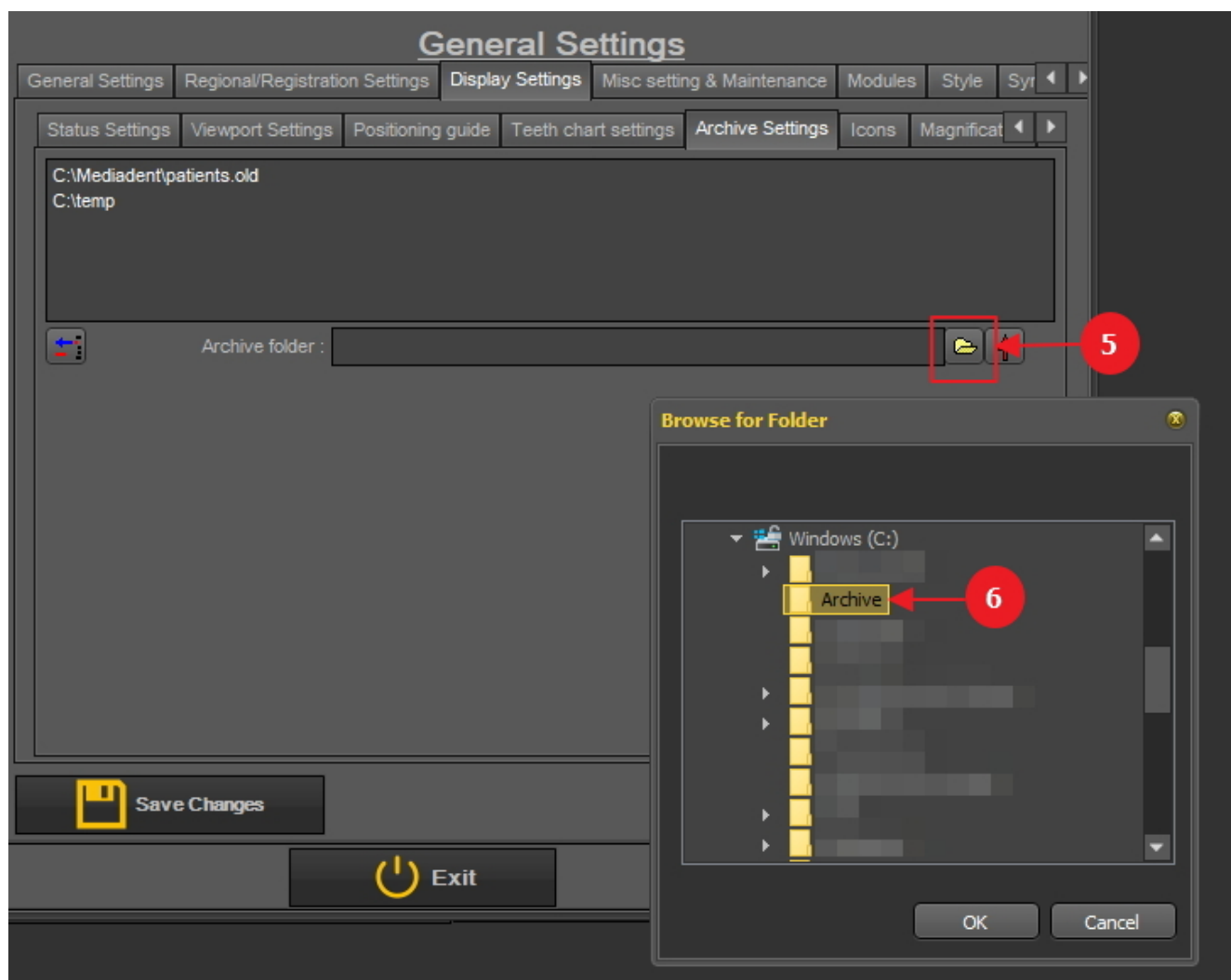
In **General Settings** ¹, choose the tab **Display settings** ²

In Display Settings choose tab **Archive Settings** ³

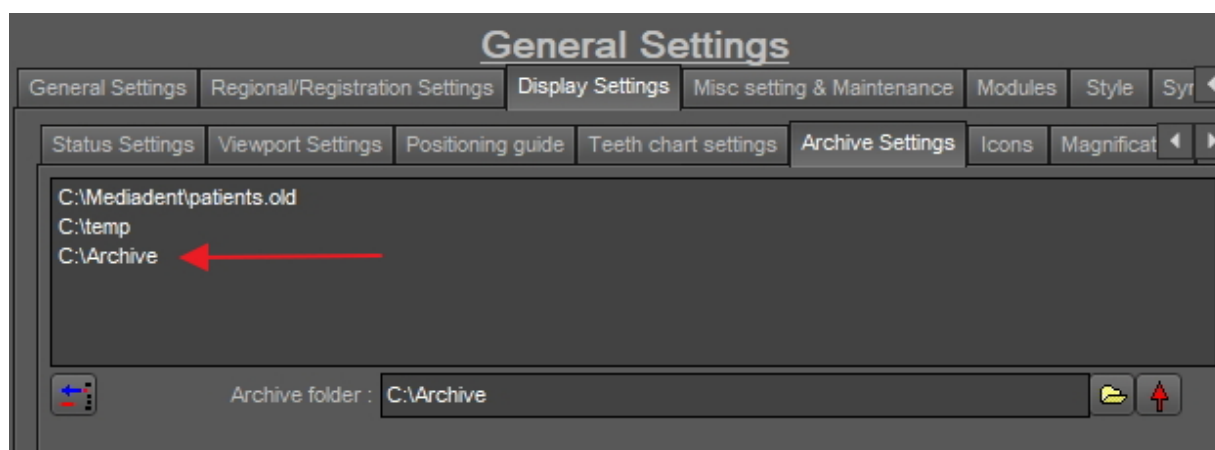



Determine the **location** ⁴ of your archive. You can choose multi locations.

2. To choose the location click on the **folder icon** ⁵, the file explorer will open and you can choose the archive folder ⁶.



3. The folder is added to the list of archive folders.



 Do not forget to '**Save Changes**' before exiting the setup.

2. Remove an archive folder

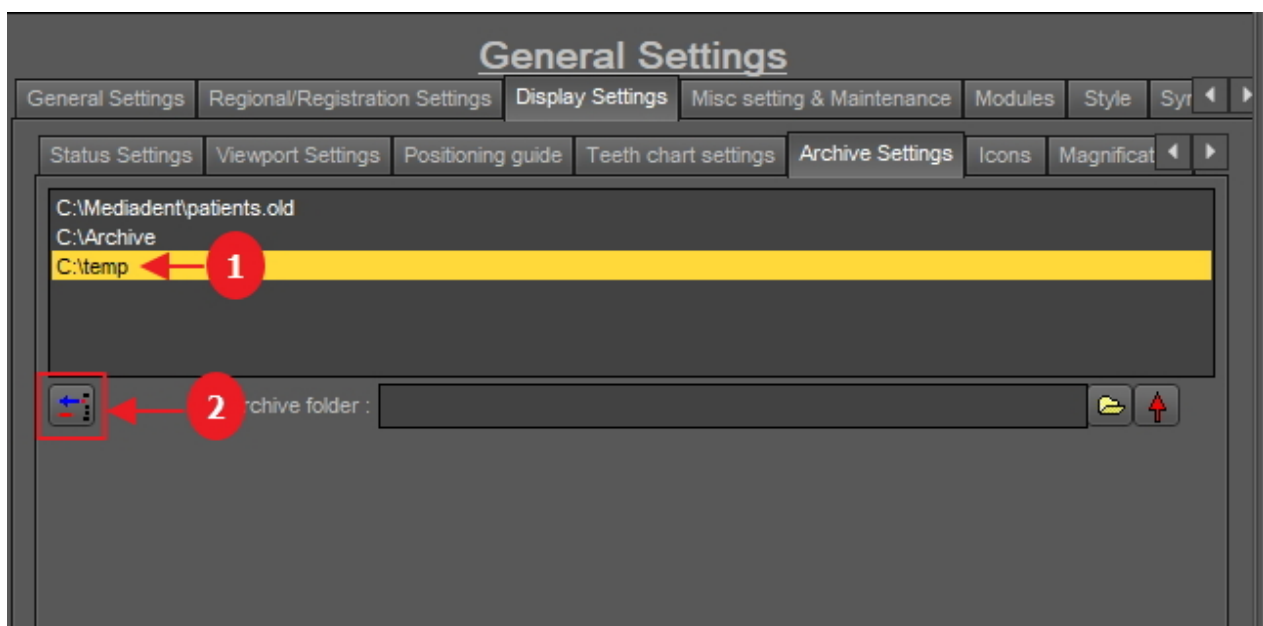
You may always remove an archive folder. This does not mean that the images that are stored in the archive folder will be deleted. It is just a way to remove the folder from the list of available locations.

So the images will still be available at this location, but the location will no longer be available for the end user to choose from.

1. Choose **Options > Setup**


In **General Settings**, choose the tab **Display settings**

In Display Settings choose tab **Archive Settings**



2. Select the folder you want to remove from the list of available archive locations ¹. In this example we choose 'c:\temp'.

3. Click on the icon ² to remove the entry from the list.

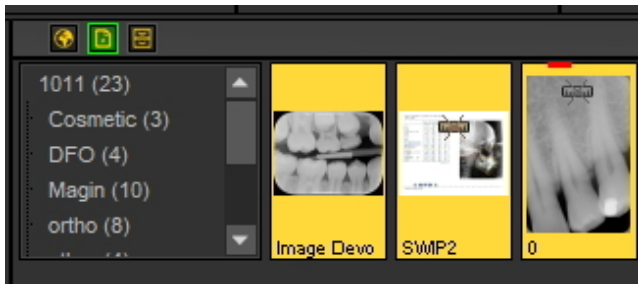
 Do not forget to '**Save Changes**' before exiting the setup.

2. How to send an image to the archive folder

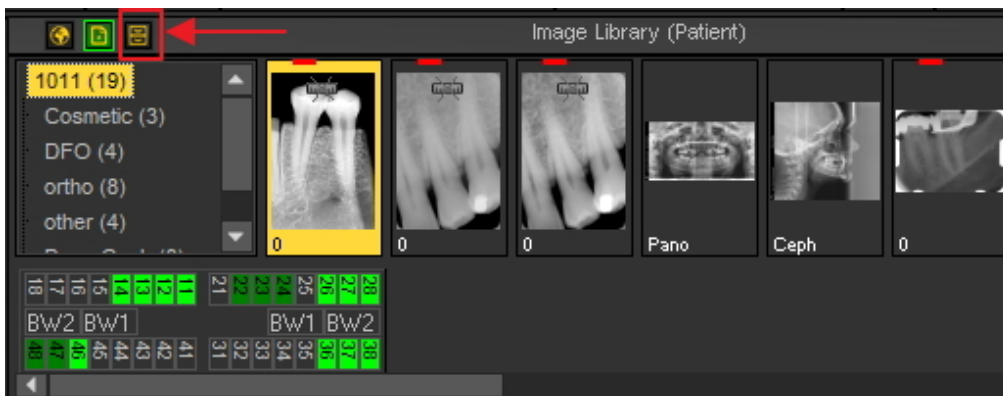
Sending an image to the archive folder is very easy!

Select 1 or more images.

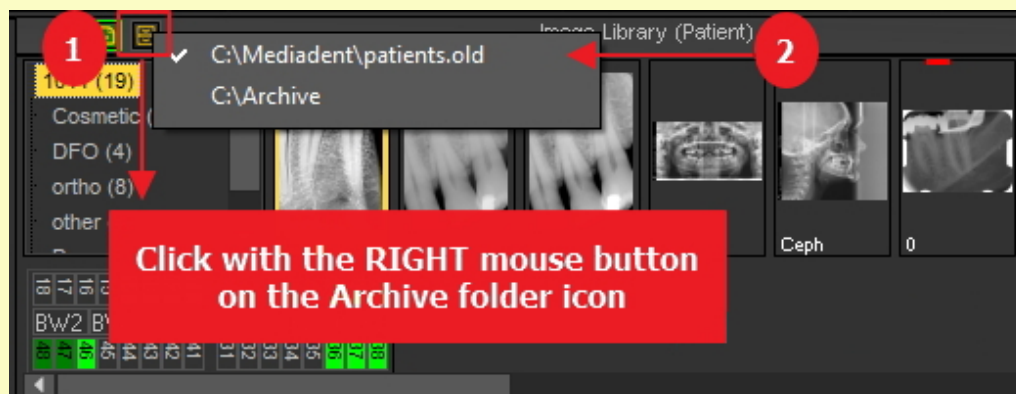
To select multiple images, click on the first image and press the **shift key**. With the shift key pressed, select additional images.



Once you have selected the image(s) you want to archive, you can click on the **archive icon**.



💡 If you have created a list of locations where the images can be archived : click with the right mouse button **1** on the archive icon and select the locations **2** of your choice.



6.5.6 Specify default image name

It is possible to change the default name of the image.

You will be able to save time saving images when you choose to use a default name per X-ray device.

For example, if you take a panoramic image, you can choose to have PAN as the default name of the image.

If you take an intra-oral image, you can choose to have IO as the default name.

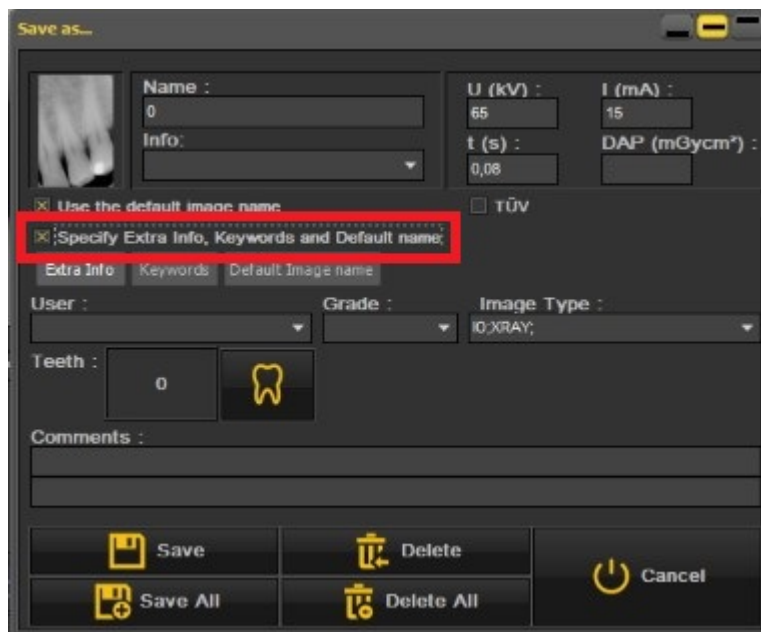
In this example we will use the demo sensor and will give it the default name 'demosensor'.

This means that every time you take an image, the name 'demosensor' will be used to save the image.

In the following steps you will see how to set this up.

1. Take an image (in this case we will use the demo sensor)
2. Click on grab
3. Click on exit
4. The dialog box to save the image appears
In this dialog box, you will see the option :

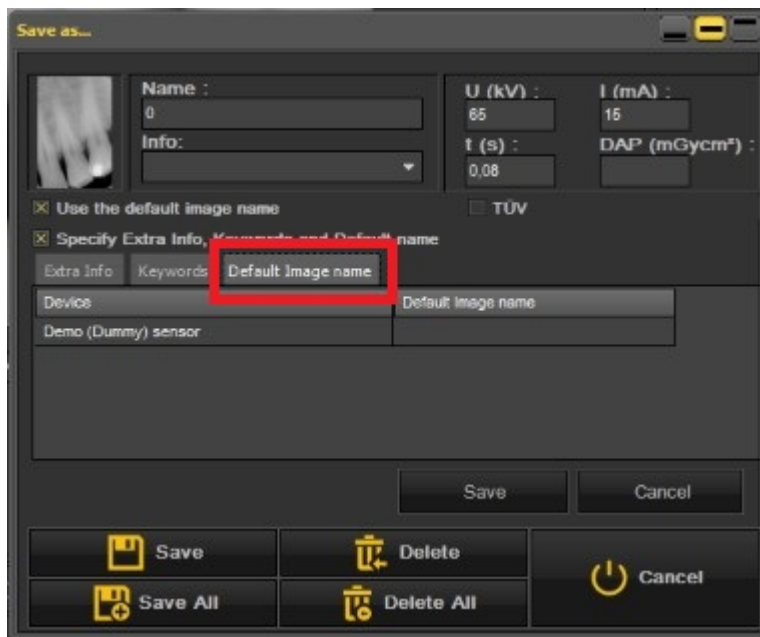
'Specify Extra info, Keywords and Default name'



5. Select this option

Once this option is active, you have 3 options you can choose from

- Extra info and Keywords : discover the possibilities : **Overview of the specific Extra Info and Keywords (Section 6.5.2)**
- **Default Image name : click on this option**



Here you can fill in the 'Default Image name' – once you have entered a default name for this X-ray device.

This name will be used when saving an image taken with this X-ray device.



In this example we have chosen for '**demosensor**' as the default name.

Some examples can be 'PAN' for panoramic images, 'CEPH' for cephalometric images, 'IO' for intra oral images'

For confirm this option, choose to **Save** this.

The result will be that everytime you take an image with the Demo sensor, the default name 'demo sensor' will be used.



6.6 Working with Mediadent Modules

6.6.1 Working with the reporter module

The reporter module is an additional module that allows you to create **standard** letters that can be used to send to patients / doctors / hospitals ...

It is a module that is sold separately. You can always **contact us (Section 13)** for more information about this module.

Advantages of working with the Reporter module:

- It is a practical module, because it offers standard **word processor capabilities** without leaving Mediadent.
- All the related **communication** is stored in the **patient's file**. This makes it easy to follow up the patient's history. Some examples of communication are referral letters, documents for insurance, invitations for consultations etc ...
- The **standard document** you create in Mediadent contains fixed text that can be re-used for all your patients. The standard document can contain your logo, your address and some standard text that is specific to that document. This standard document is called a **template** in Mediadent. The advantage is that you don't have to re-type the fixed text, but just fill in the variable text like for example the diagnoses of your patient. It can also contain information that is stored in your Patient Management System like the patient's name, date of birth, address etc ...

We will explain later how you can include this information in your standard letters (Topic 4: How to integrate fields from your Patient Management System into your templates).

In this article you will get a better understanding of the Report module in the **first topic** 'Overview of the Report Module'. In the **second topic** you will learn the basics of working with the Report module. In the **third topic** you will learn how to create a standard document or template in the Reporter module.



The **Reporter module** is loaded by clicking on the Reporter icon in the icon set

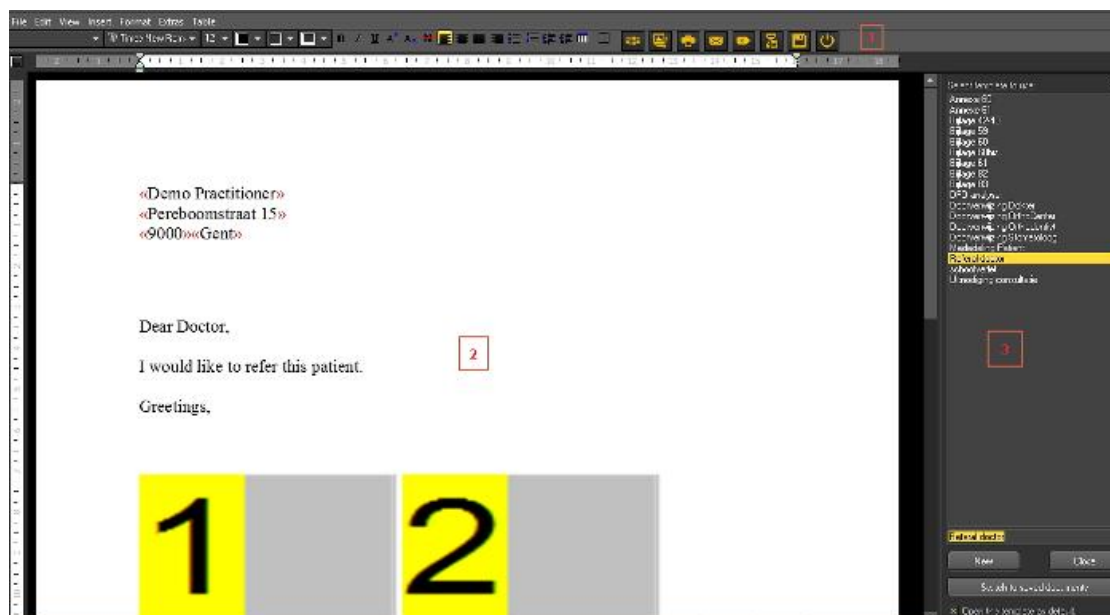
-or-

Choose **File>Reporter** in the Mediadent menu.



If the icon has a **glow** it means there are already documents available in the Reporter module for this patient.

1. Overview of the Report Module



The **Report Module** offers basic **word processor** capabilities within Mediagent for the purpose of writing letters, referrals etc..

The **menu** contains the most functionality you will find in a word processor (Word Processor icons).

We will explain the topics which are unique to the Reporter Module, we will not explain the basic word processor functionality in great detail.

The icon bar contains traditional word processor icons such as font type, font size, font color, bold, italic, underline ... and typical icons related to the Report Module.

Word processor icons :

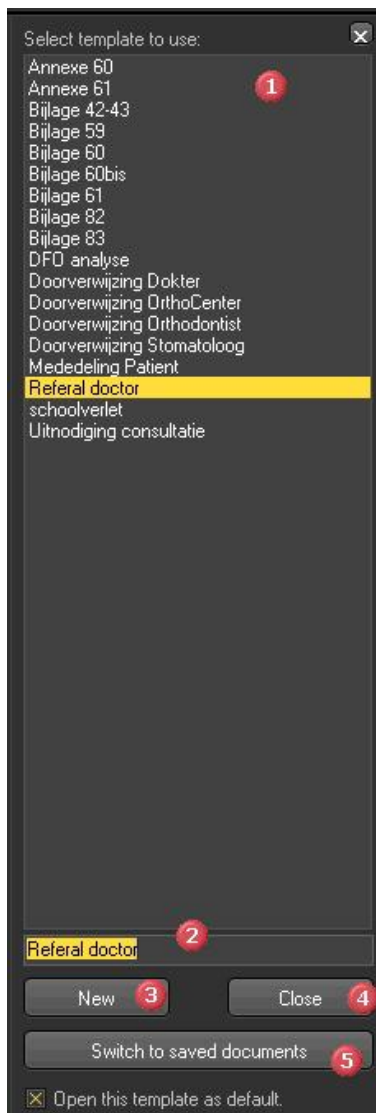


Report Module icons:



The middle part of the screen is the standard document or template with the **fixed text**.

On the right hand side you will see a **Task pane**. This pane contains a list of standard documents or templates you can choose from.



	This is the list of standard documents or templates .
	Name of the template that will be used to name the document.
	The New button will create a blank document . You can use this button if you want to create a document without using a template.
	The Close button will close the Task pane
	Switch to saved documents will present a list with the documents that were already create for this patient.

💡 If you want the Report Module to open with a **particular template**, you can **select** the template and check the option '**Open this template as default**'.

2. Overview of the Report module icons



	The Status Mount will appear and you will be able to add images from the Status Mount in your documents.
	The Image Library will appear and you will be able to add images from the Image Library in your documents.
	You will print the document, this icon is the equivalent of the Quick print and will print the document to the standard printer.
	Sent the document as an attachment to an e-mail . It is clear that you need an e-mail application that allows you to sent e-mails.
	This icon will allow you to create a new document based on the selected template.
	This icon will allow you to open a previous created document related to this patient.
	By clicking this icon you will save the document.

This icon will **Exit** the Reporter Module.

3. Working with the Report Module


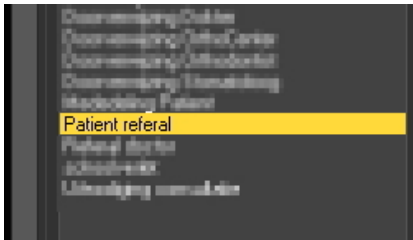

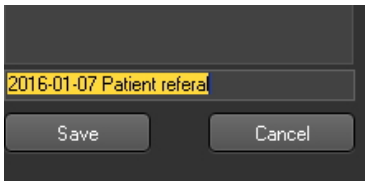
In this topic we will explain how to work with the **Reporter Module**.

We will first explain how to create a document based on existing templates. We will also show what the **different possibilities** are to modify the documents, like adding pictures from Mediadent but also from outside Mediadent.

The **Auto Text** feature of the reporter is a real time saver! It will allow you to create a list of abbreviations that are automatically replaced in your documents. For example you will be able to add technical terminology to this list.

Of course you want to **share** these documents with your patients or colleagues in the last topic we will discuss how you can sent the document by e-mail, print the document or save the document as PDF.


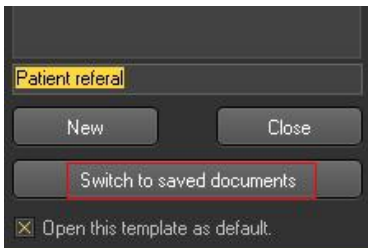


3.1. Create a new document based on a template

Action	Explanation
<p>Launch the Reporter Module by clicking on the icon </p> <p>or</p> <p>Choose File > Reporter in the Mediadent menu</p>	
<p>To use one of the templates in the Reporter Module just select one of the templates in the list.</p> 	<p>I would like to use the patient referral template.</p> <div>  In the middle of the screen the document will appear with the fixed text. You can now add comments to the document like the diagnosis or any remarks about this patient. </div>
<p>Give your document a name</p>  <p>and click the Save button.</p> <p>Choose Yes to confirm to save the changes.</p>	<p>Always save the document when you make changes.</p> <p>Once you have given the document a name, it will appear in the saved documents list.</p> <p>For your convenience the creation date of the document is added to the name of the document.</p>

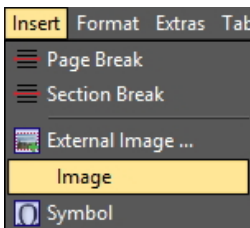
3.2. Modifying an existing document




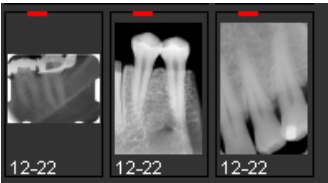
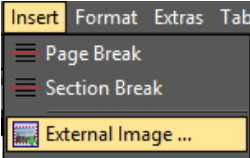
Once you have created a document for a particular patient, you may want to modify the existing text.

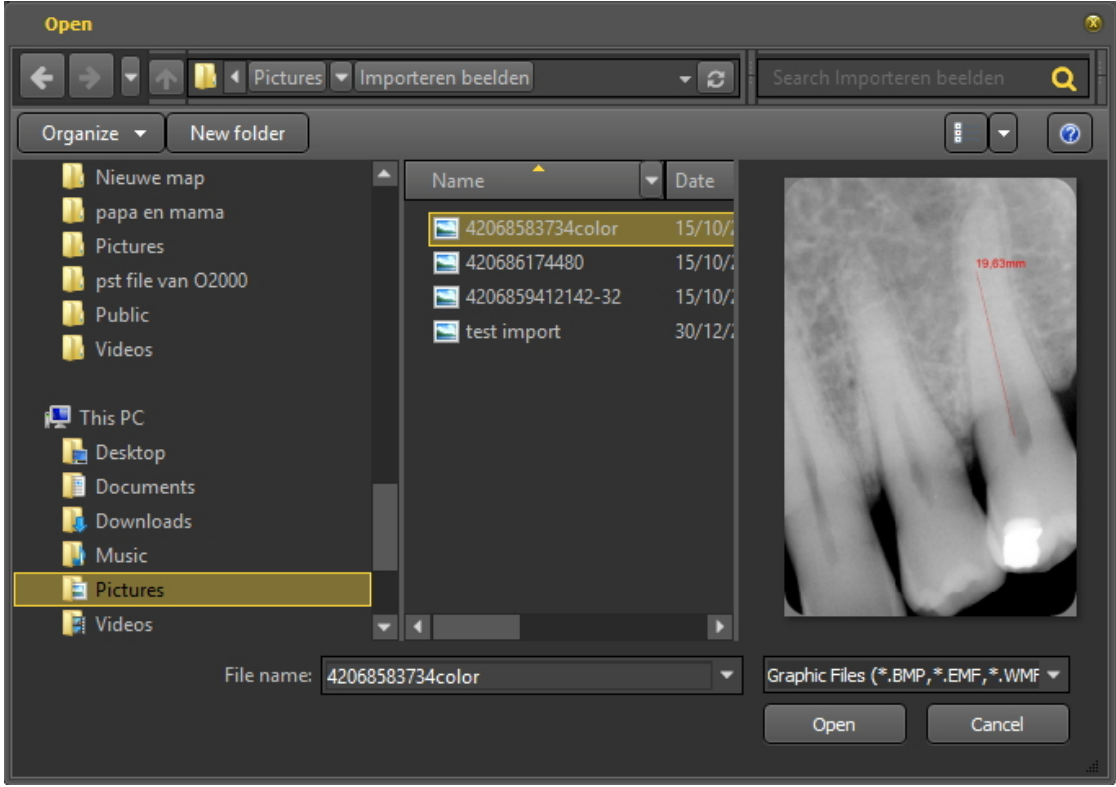


Action	Explanation
Launch the Reporter Module by	On the right side of the screen you will see a Task pane. The task pane contains a list of

<p>clicking on the icon</p>  <p>or</p> <p>Choose File > Reporter in the Mediadent menu</p>	<p>templates you can choose from to create a new document for that particular patient.</p> <p>At the bottom of the Task pane you will get the opportunity to switch to the saved documents.</p>
<p>Click on the button 'Switch to saved documents'</p>  <p>Choose the document from the list of saved documents.</p> <p>Make the modifications.</p> <p>Save the document.</p>	<p>You will see a list of all the related documents created for that particular patient.</p> <div> <p> Saving the document will overwrite the existing letter.</p> <p>If you want to prevent the document from being overwritten, you can choose File > Save As from the Reporter module menu and give the document another name.</p> </div>
<p>To create a new document based on a template</p> <p>Click on the button 'Switch to templates'</p> 	<p>You will get the list with the templates to choose from.</p>

3.3. Adding images to your document

Action	Explanation
<p>You can add 2 types of images to your documents</p> <ol style="list-style-type: none"> Images from the patient's Image Library Images outside of Mediadent 	
1. Adding an image from the Image Library to a document	
<p>To add an image from the patient's Image Library, position your cursor in the document where you want to add the image.</p> <p>Choose Insert > Image</p> 	

	<p>You will see a box appearing in the document with a number in it, this is the placeholder* and indicates the position of the image.</p> <p>*The placeholder is a grey box with a number in it.</p>
<p>To add a picture from the patient, call the patient's library by clicking on the icon in the Report module icon bar.</p> 	<p>You can also choose to use the Status Mount  to select images from.</p>
<p>Double click on the image in the Image Library to insert the image in the document.</p> 	<p>The Image Library will appear.</p> <p>When double clicking on the image you will see that the placeholder is replaced by the image.</p>
2. Adding an image outside of Mediadent	
<p>Maybe you want to add pictures which are not stored in the Image Library.</p> <p>You can integrate .BMP, .WMF,.JPG,.GIF and .PNG files in your communication</p>	
<p>In the Reporter Menu choose Insert>External Image</p> 	<p>Position the cursor in the document where you want to add the external image.</p>

		Select the image/picture.
		Maybe the image is to big to fit on the first page, then resize the image accordingly.
<p>Give your document a name</p>  <p>and click the Save button.</p> <p>Choose Yes to confirm to save the changes.</p>		<p>Always save the document when you make changes.</p> <p>Once you have given the document a name, it will appear in the saved documents list.</p>

3.4. Using the Auto Text feature

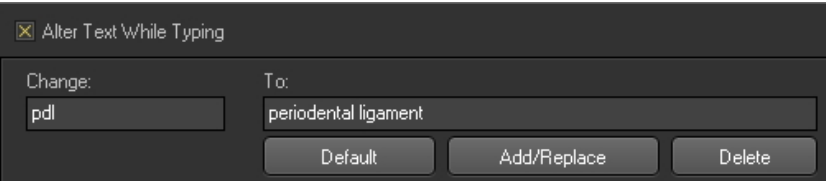
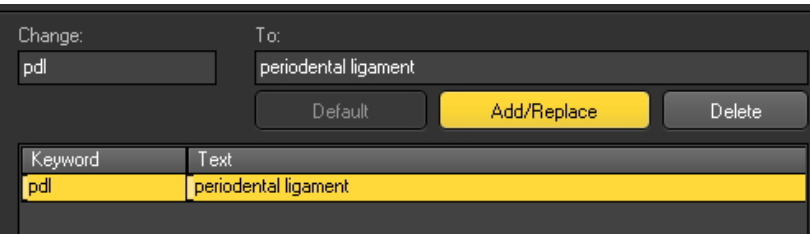
The AutoText feature is very practical because it can provides you with a list of texts you can re-use. It is based on the AutoText feature of a standard word processor. The principle is that you type in an abbreviation that is replaced with the complete text.

For example you type **dc** in your document and **dental caries** will automatically appear in the document.

You can create your own list with abbreviations and full text to make it easy for you to create your documents.

In the example we will show how to create an Auto Text for periodontal ligament.


Action	Explanation
To activate the Auto Text feature, choose Extras > AutoText 	The 'Auto Text Completion' dialog box appears.


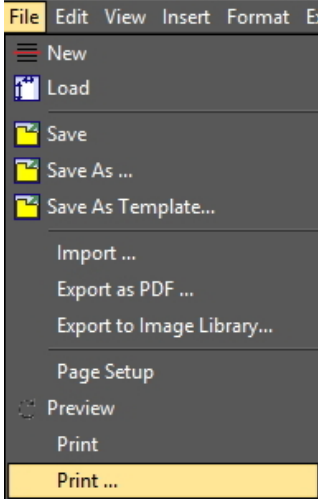

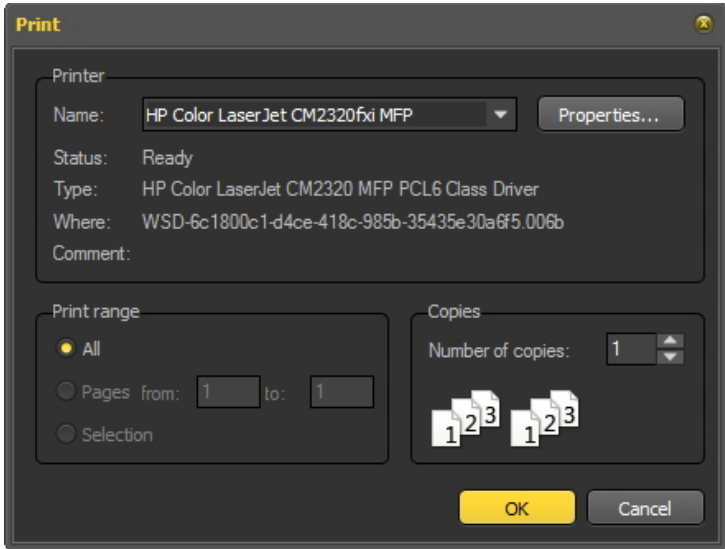
<p>Type pdl in the Change: field and periodontal ligament in the To: field.</p> 	<p>Since the box 'Alter Text While Typing' is checked, everytime you type one of the abbreviations in the list, it will be replaced by the full text.</p>
<p>Choose Add/Replace</p> 	<p>The Auto Text will appear in the list and is ready for use.</p>
<p>In your document, type 'pdl'</p> <p>I would like to refer this patient. pdl Greetings,</p>	<p>So when you type 'pdl' in your document, it will be replaced by the text 'periodontal ligament'.</p>
<p>Dear Doctor,</p> <p>I would like to refer this patient. periodontal ligament </p>	<p>After you hit the space bar, the text will be replaced.</p> <p>You will save a lot of time once you have created your own list with abbreviations.</p>

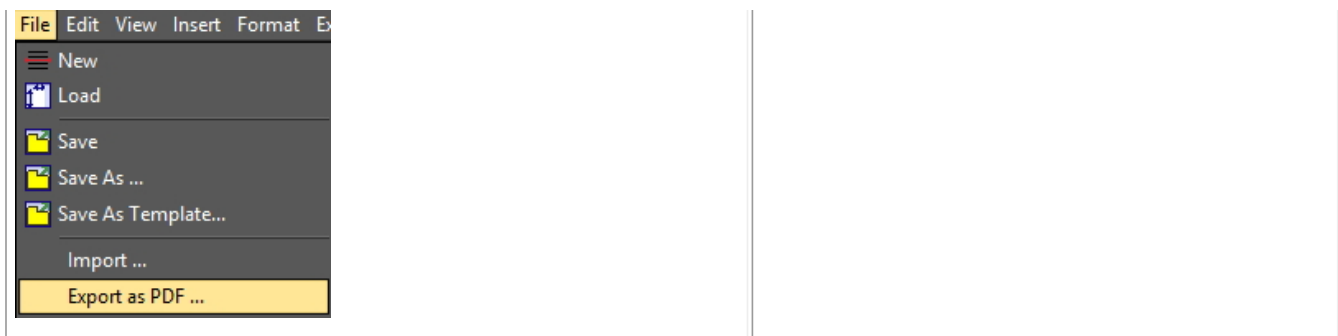
3.5. Different ways to share your document

There are **different ways** to share your documents:

- You can send them by e-mail
- Print your document and send it by mail
- Save the document as a PDF file and copy it to another computer

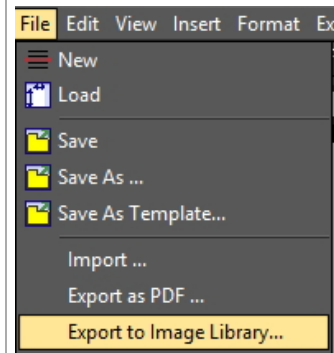
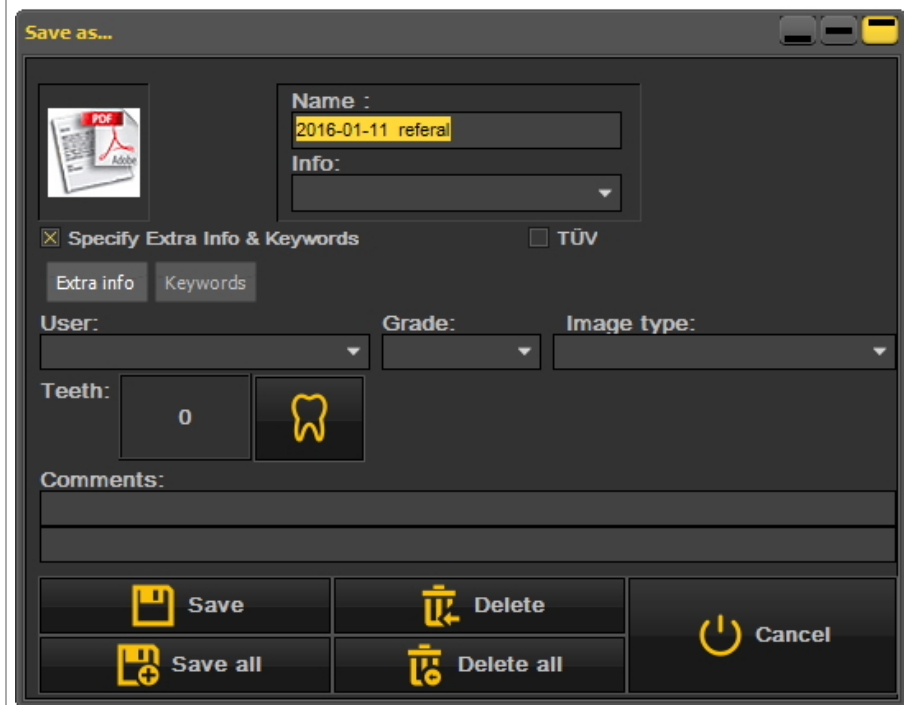
Action	Explanation
<p>1. Sent the document by e-mail</p>	
<p>Click on the e-mail icon in the Reporter module icon bar or choose File > Mail To in the Reporter module menu</p> 	<p>Make sure your e-mail program is correctly working.</p>
<p>Fill in the recipient's name and send the message</p>	<p>You will notice the document is automatically attached and converted to a PDF file.</p> <p>You just need to fill in the recipient's name and send the message.</p>
<p>2. Print the document</p>	

<p>Select the document you want to print.</p> <p>Click on the print icon  in the Reporter Module icon bar</p> <p>or</p> <p>choose File > Print</p>	<p>These options will print the document to the standard printer.</p>
<p>If you want to select another printer than the standard printer, choose File > Print ...</p> 	<p>When you choose this options, you will get the printer dialog box so you can change the printer settings.</p> <div><p> Before printing, you can always get a preview of your document by choosing File > Preview.</p></div>
<p>Changing the Paper Size, margins, orientation of the document can be done via the option</p> <p>File > Page Setup</p> 	<p>Dialog box to change the page settings.</p>
<p>3. Save the document as PDF</p>	
<p>Select the letter you want to save as PDF.</p> <p>Choose File > Export as PDF in the Reporter menu</p>	<p>If you want to share your document and you don't want anybody to change it afterwards or your recipient does not have Word, you have the possibility to save your document in pdf format.</p>



3.6. Show documents in the patients Image Library

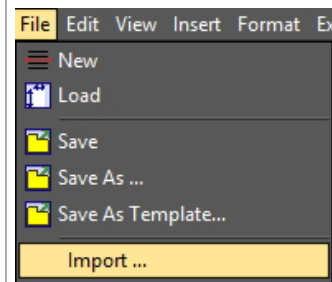
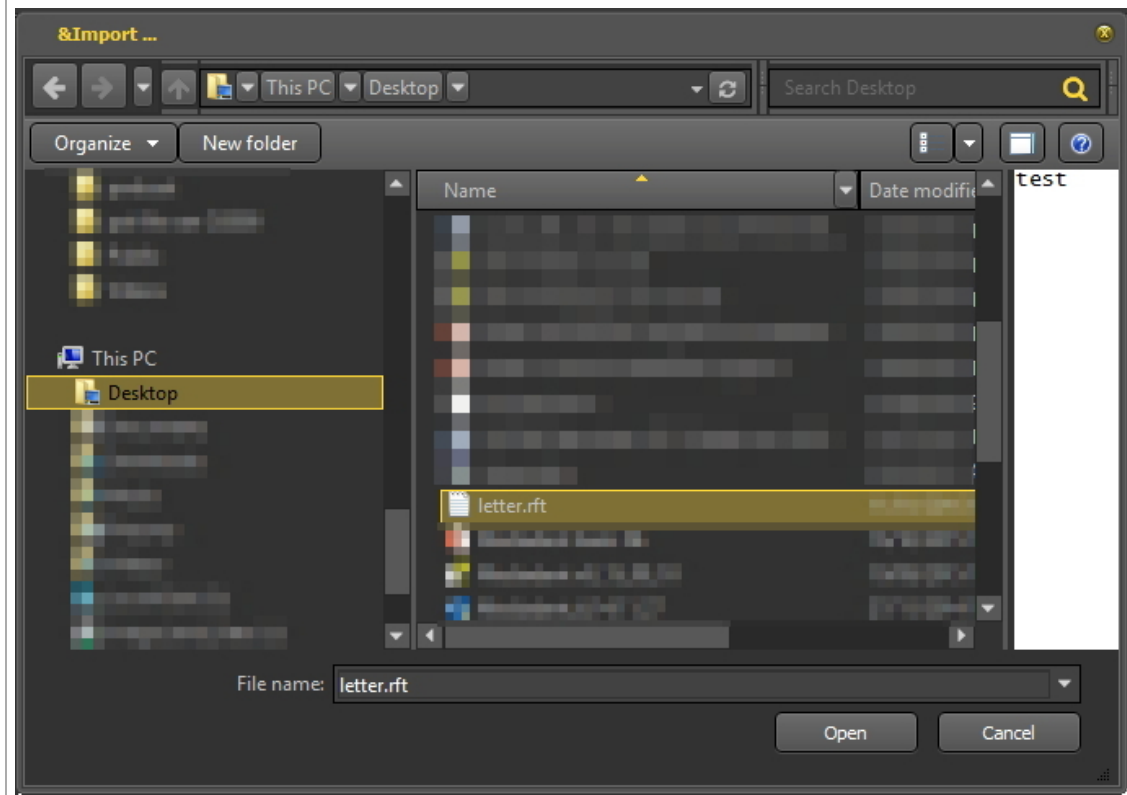

If you want the document to appear together with your images in the Image Library you can choose to export the document to the Image Library.

Action	Explanation
<p>Select the document you want to export to the Image Library.</p> <p>Choose File > Export to Image Library ... in the Reporter module menu</p> 	
<p>Give the document a name</p>  <p>Choose the Save button</p>	<p>You will need to give the document a name.</p> <p>This image will appear as a PDF file in</p>

	the Image Library.
---	--------------------

3.7. Importing existing documents

If you have already created documents, you will be able to import them in the Report Module.

Action	Explanation
<p>Choose the option File > Import from the Reporter module menu.</p> 	Files in RTF format (Rich Text Format) can be imported into the Reporter module.
<p>Choose the file you want to import.</p> 	
<p>Click on the Save icon in the icon bar.</p>  <p>Give the imported document a name.</p>	The document will appear in the Reporter module . You will need to

	save the document and give it a name .
	The new imported document will appear in the list of Saved document for this patient .

4. Creating templates in the Report Module

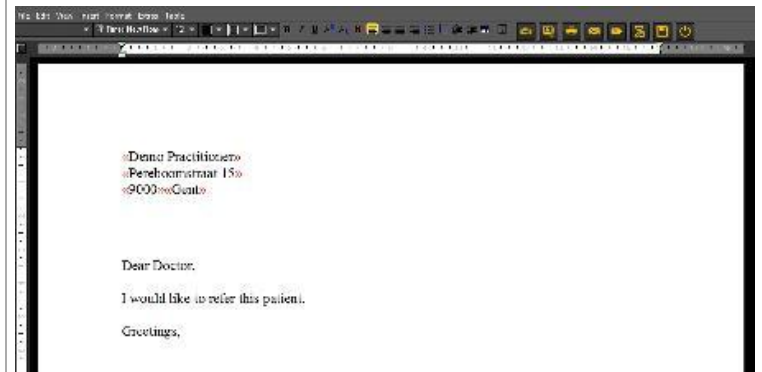
Type your Drop Down Section text here.

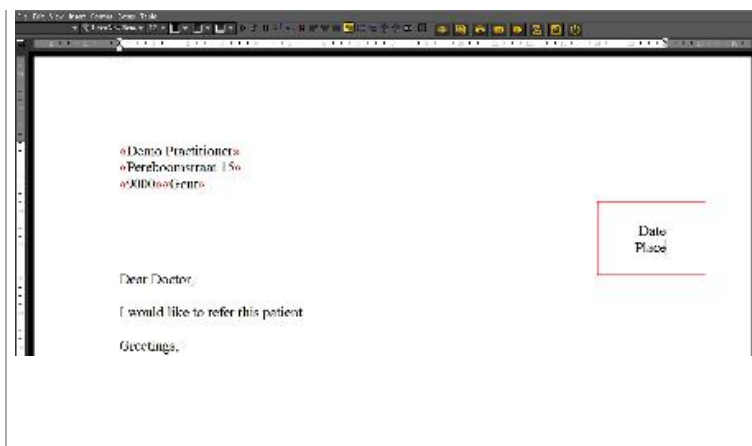
In this **more advanced topic** we will explain how to create and modify a template in the Report Module.

A template contains the fixed text that can be re-used in your communications. The templates can contain your logo, address information, paragraphs of text ...

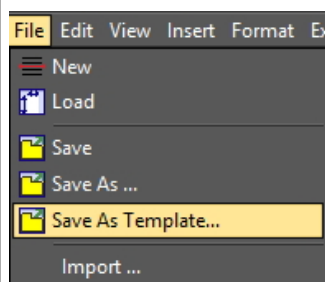
Sometimes you would like to modify an existing template, for example when you have moved or a telephone number changes etc ...

1. To modify an existing template follow these steps

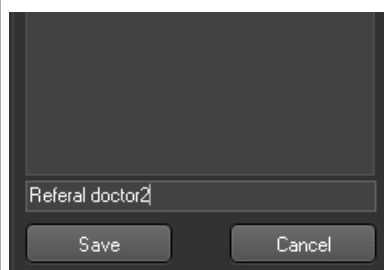
Action	Explanation
Open the Reporter module	
Open the template you want to modify 	You can select one of the documents in the reporter. These documents are based on templates that you can modify.
	Make the necessary modifications.



Choose **File>Save As Template** in the Mediadent menu



Type in the name of the new template



Click the **Save** button

The template will appear in the Task pane on the right hand side.

6.7 Working with the Video Still Capture module

6.7.1 Working with the Video Still Capture module

Verify if the camera you want to use is **WDM or VFW compatible**. Some cameras can also be TWAIN devices.

These are all standards and it's important to understand what standards are supported before configuring the camera in Mediadent. This information can be found in the manual of the camera. Normally with the camera, a CD is delivered with the necessary software to get the camera working under Windows. Make sure the camera already works on Windows before attempting to configure it under Mediadent.

WDM is a standard and most cameras are compatible with the WDM standard. Some older cameras are Vfw compatible.

If your camera is a TWAIN device it can be configured as such in Mediadent.

In this article we will explain the usage of your camera in Mediadent. Configuring the camera in Mediadent is explained in our technical manual and should be done by a specialist (your dealer).

As mentioned above, you can use your camera via the **VFW StillCap** or the **WDM StillCap** module.

In this module you will be able to take pictures with your camera and store it in the patient's library for later reference.

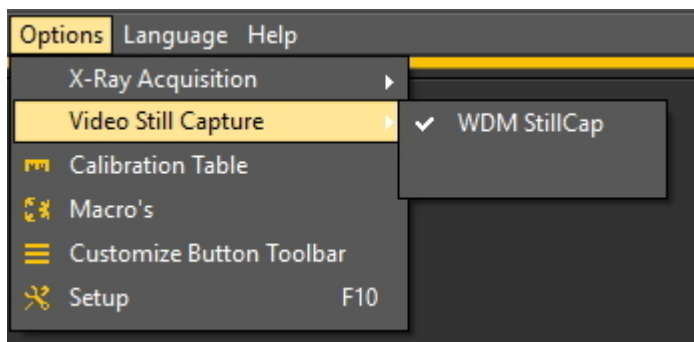
The picture are taken by a wireless intra-oral camera, the **Discovery wireless camera**.



To **open** the WDM StillCap module

1. **Activate** the WDM StillCap via the Mediadent menu

Options>Video Still Capture\WDM StillCap



2. **Open** the module



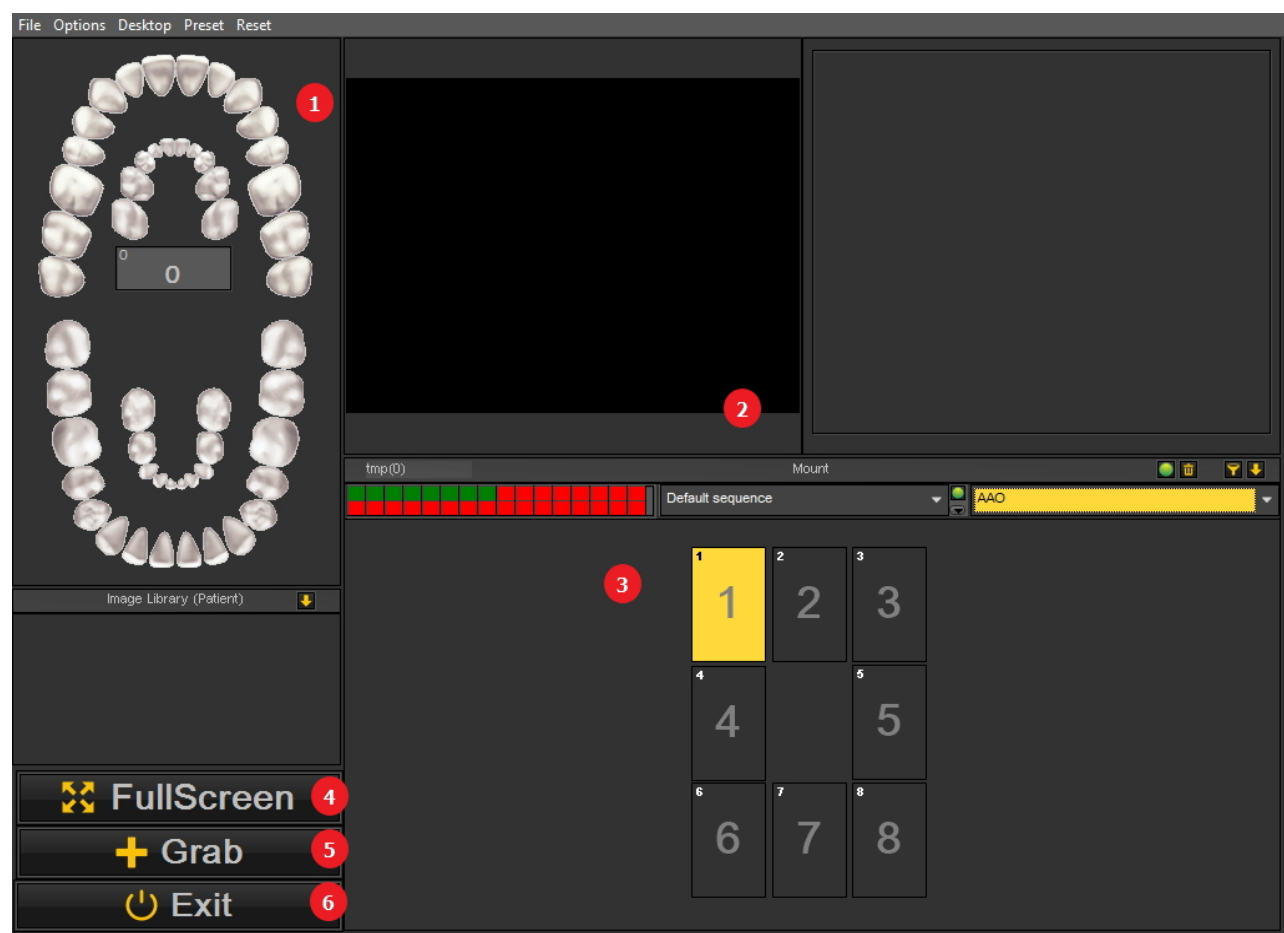
Click on the **icon**

3. The **WDM StillCap screen** opens.

In the following topics you will get an **overview** of the acquisition screen and learn how to **use the camera** in acquisition mode. If you are not happy with your desktop (position of the different screen elements) in acquisition mode, you can always change it. We will also give an **overview of additional options**.

1. The WDM StillCap screen overview

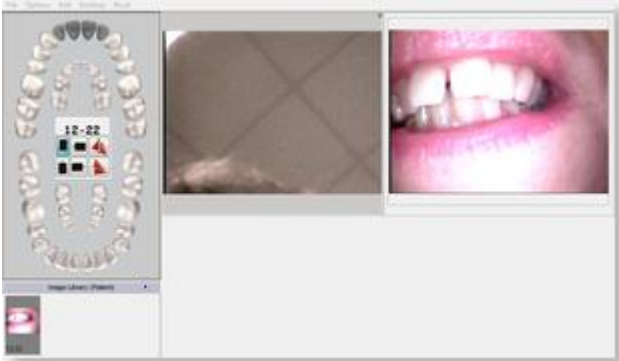
Overview of the screen elements:

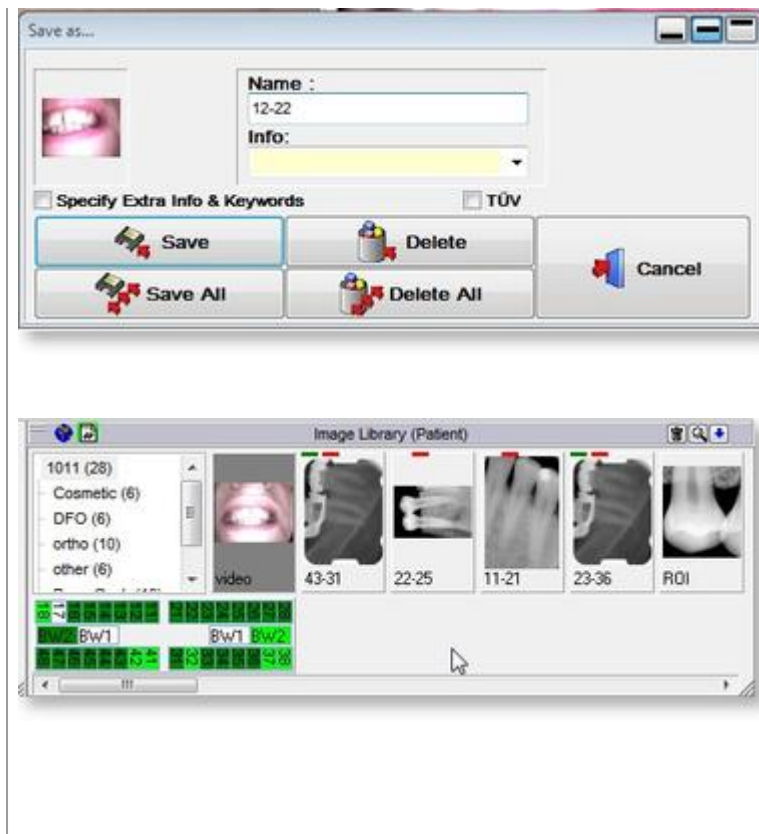


number	function
1	Tooth Scheme
2	Screen showing the images from the camera
3	Status mount
4	Full Screen : will switch to Full screen mode - this will allow you to see more details
5	Grab button: if you are happy with the picture, you can grab it.
6	Exit: will exit the screen and give you the possibility to save the grabbed image.

2. Use of the camera in Mediadent

To use **the teeth scheme** with the camera in the module follow these steps:

Action	Explanation
1. Position the camera in the mouth of the patient	
2. In the teeth scheme , select the teeth to make the association	<p>If you want to use the teeth scheme, you need to deactivate the status. Read further the topic 3. Change the desktop on how to do this.</p> <p>To learn how to work with the teeth scheme, read the article Working with the teeth scheme</p>
3. Click on the Grab button	
	The picture is grabbed and ready to be used in the patient library.
	<p>If you want to take more pictures, you can press the Grab button.</p> <p>Everytime you use the Grab button, you will get a picture. If you are ready, click on the Exit button</p>
4. Press the Exit button to save the images to the image library	
	



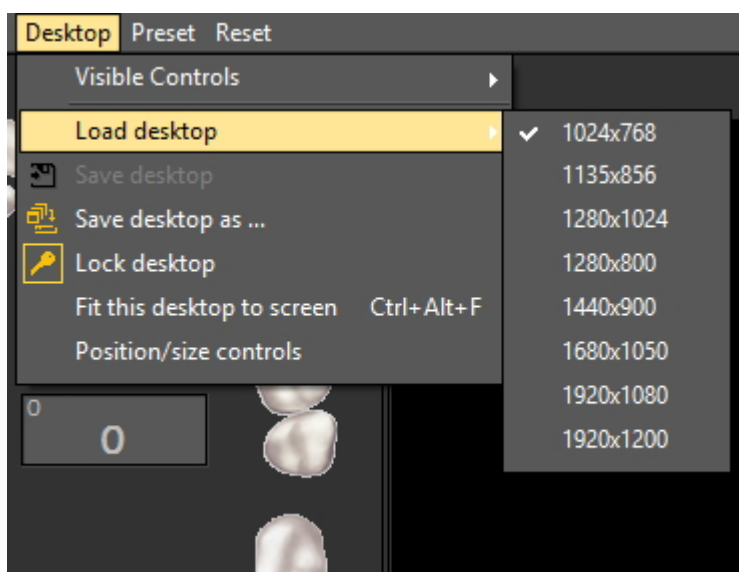
By saving the image it will appear in the **patients library**.

3. Change the desktop

1. Change the overall desktop

If you are not happy with the layout of the desktop in the acquisition screen, you can change the different screen elements in the Mediadent screen.

Choose **Desktop > Load desktop** in the menu



💡 Don't forget that if you want to move the screen elements, always first Unlock the desktop before you can move the screen elements.

Read the article: [Working with desktops](#) for more detailed information.

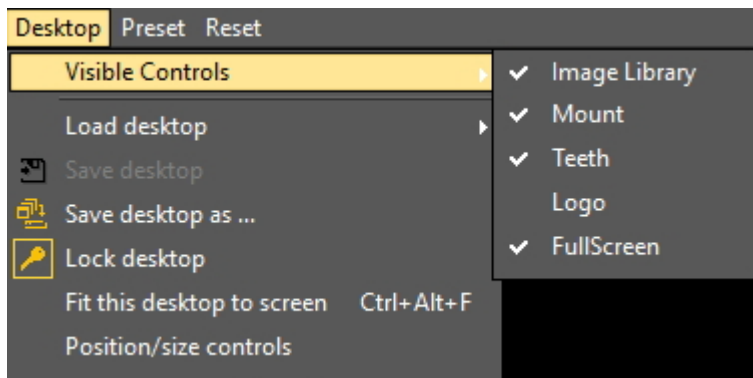
2. Activate/de-activate screen elements


You can activate and de-activate screen elements (Visible controls)

If you find your screen to busy and you would like to de-activate certain screen elements, choose **Desktop** > **Visible controls**

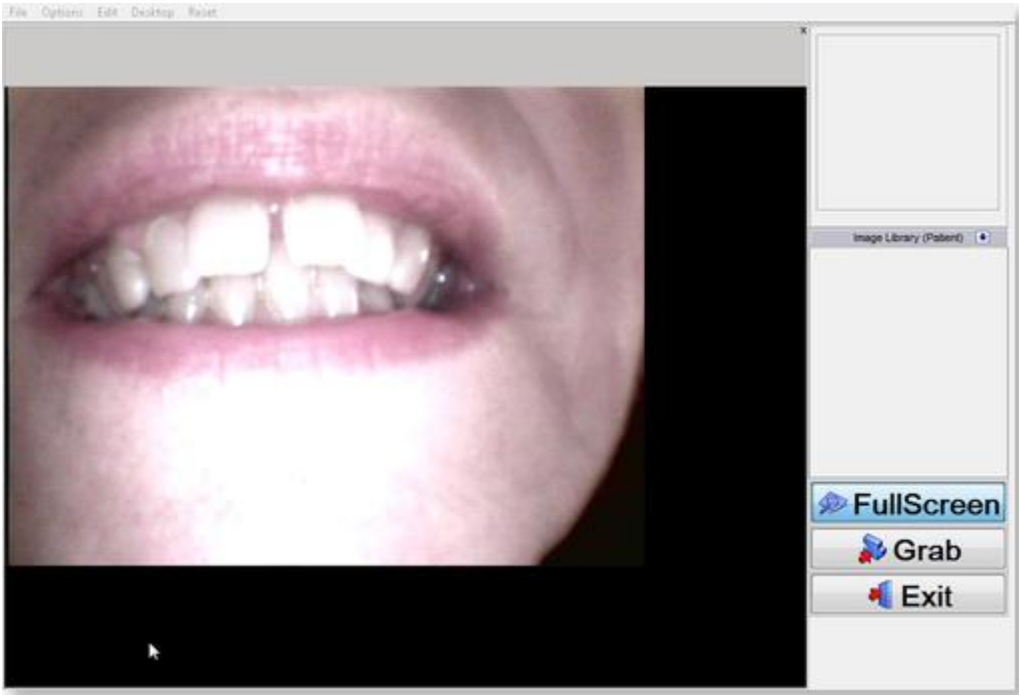
You have the possibility to hide the following elements:

- Image library
- Mount = the Status mount (Read more about the Status mount here: [Working with the status mount in acquisition mode](#))
- Teeth = the Teeth scheme (Read more about the Teeth scheme here: [Working with the teeth scheme](#))
- FullScreen = this view will allow you to see more of the image you want to take



 When the Status Mount is **activated**, the pictures will be displayed in the Status Mount boxes. If there are tooth associations linked to the boxes, you will see this in the teeth scheme.

If you choose for **FullScreen** you will get the following screen:

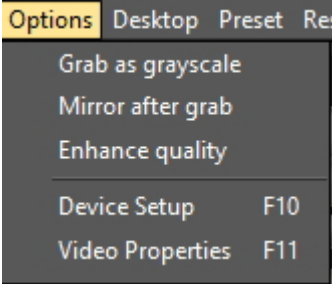



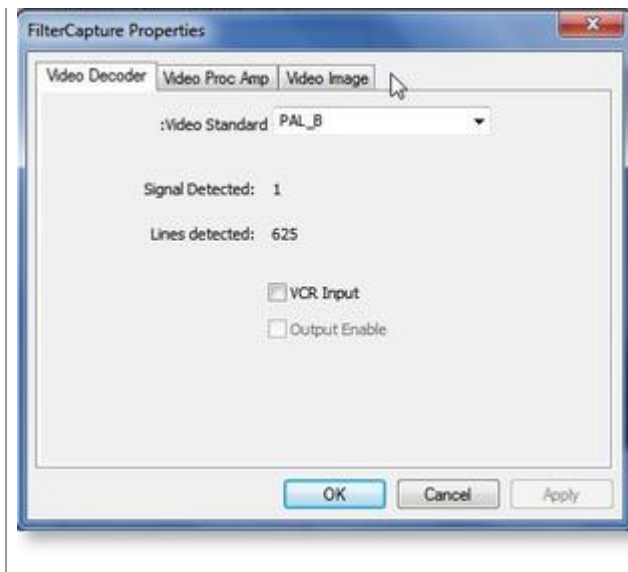
4. Additional options

In the WDM StillCap module you will be able to configure the way Mediadent handles the picture.

You may notice that when you take a picture, the picture is mirrored. You will be able to change that so you get your picture in the original orientation.

You can activate the following **options**:

	<p>Options > Grab as grayscale</p> <p>Pictures will be taken in grayscale</p> <p>Options > Mirror after grab</p> <p>Some camera's mirror the image. You can put the image back in the original orientation.</p> <p>Options>Enhance quality</p> <p>To get a better quality, you can use this option.</p>
<div><div>The Device Setup (F10) is only to be used when configuring the camera in Mediadent. This is explained in our Technical manual. Once it has been configured, there is no need to change the settings in this option.</div></div>	



The **Video properties (F11)** will allow you to apply filters to the image.

On the Video Image tab you can for example change the contrast/brightness ...

The other settings are best kept as they are.

6.8 D.F.O.: General

Dental Facial Orthopedics (D.F.O.) is an optional module within Mediadent.

D.F.O. is a fully integrated module that allows easy analysis to be done on cephalometric images.

A large number of standard analyses are provided inside the D.F.O. module (e.g. Ricketts, Rothjar, Jarabak, and many more).

Thanks to an interactive tutor all points can easily be placed on the cephalometric image, leading to an automatic calculation of your chosen analysis.

D.F.O. also allows for custom made analyses with the analyse editor.

This module can be obtained by contacting your dealer.

For the full manual on D.F.O., go to the help section of the D.F.O. module.

The help section can be consulted by pressing "F1" within D.F.O..

7 How to's

7.1 Overview How to's

Mediadent Screen

How to select more viewports (Section 7.2.1)

How to customize the iconset (Section 7.2.2)

How do I select the ideal desktop (Section 7.2.3)

How do I delete a desktop (Section 7.2.4)

How to change practitioners info (Section 7.2.5)

New tools to create and modify a desktop in Mediadent v8 (Section 4.5)

Change the screen layout in Mediadent (Section 4.2)

Automation

How to create a macro (Section 7.7.1)

Mediadent Image Library

How to move images from one patient to another (Section 7.3.1)

How to find the patients recently accessed (Section 7.3.2)

How to archive images in Mediadent (Section 4.10)

Mediadent Mount

How to create a status mount (Section 7.5.1)

Mediadent Image manipulation

How to activate the negatoscope (Section 7.4.1)

How to calibrate an image (Section 7.4.2)

How to recover a deleted image (Section 7.4.3)

Working with the filter window (Section 4.9)

Mediadent export

How to send an image by e-mail (Section 7.6.1)

How to export multiple pictures of a patient (Section 7.6.2)

How to import images? ('HT12 How to import images' in the on-line documentation)

How to drag and drop an image in an e-mail (on-line documentation)

How to burn a CD with images from Mediadent (Section 7.6.3)

[New: How to send any file from the file explorer to Mediadent](#)

7.2 The Mediadent screen

7.2.1 How to select more viewports

Sometimes it's necessary to analyse different images from one patient. Maybe you want to compare images?

In Mediadent you will use the **Viewports** to load the images into. You can have up to **5** Viewports or analyse 5 different images.

In this example you see that **2 Viewports** are visible with 2 images.



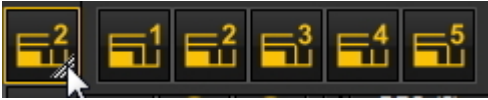
To add Viewports to your Desktop:

Use to the **Viewport icon** in the **Iconset** :



To modify the number of **Viewports** :

PRESS and **HOLD** the **left mouse button** on the icon until the icon **expands**.



Select the number of **Viewports** you would like to see by clicking the corresponding icon (1,2,3,4 or 5).

You can choose up to 5 **Viewports**.

7.2.2 How to customize the iconset

The Iconset is by default displayed on the **bottom** of the screen in the **left hand** corner.

It will give you **fast access** to certain Mediadent functionality. It is also possible to use the Mediadent menu, but often you will need more mouse clicks to get the same result.

The Iconset is **interactive**, it will only show the icons that are relevant.

You will notice that when **no image is loaded** in the Viewport, a number of icons are **grayed out**.



After **loading an image** you will see the Iconset change.

This is the Iconset after loading an image, you see that **all the icons** are now **highlighted**.

The Iconset is interactive and will only activate the icons that are useful.




In this article we will discuss the following topics:

1. Deactivating an icon

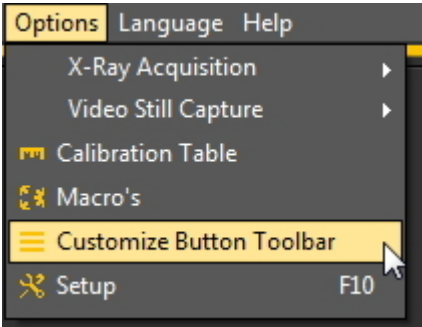
The Iconset can be **customized**: you can **add or remove icons**.

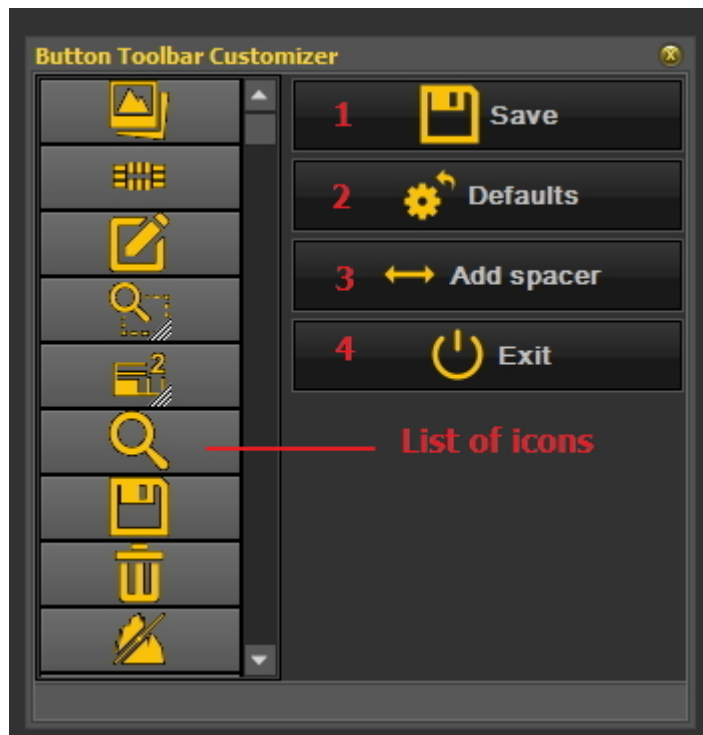
If you find you have **too many icons** in your iconset that you don't use, you can **remove** them.

If, for **example**, you don't have **a Dicom network**, you can decide to **remove** the icon that launches the

Dicom network: 



Action	Explanation
<p>Options>Customize Button Toolbar</p> 	<p>We will activate the Button Toolbar Customize via de Mediadent menu.</p>
	<p>The Button Toolbar Customize will</p>



appear on the screen.

You will see on the **left side**, a **list of the icons** that are active in the Iconset.

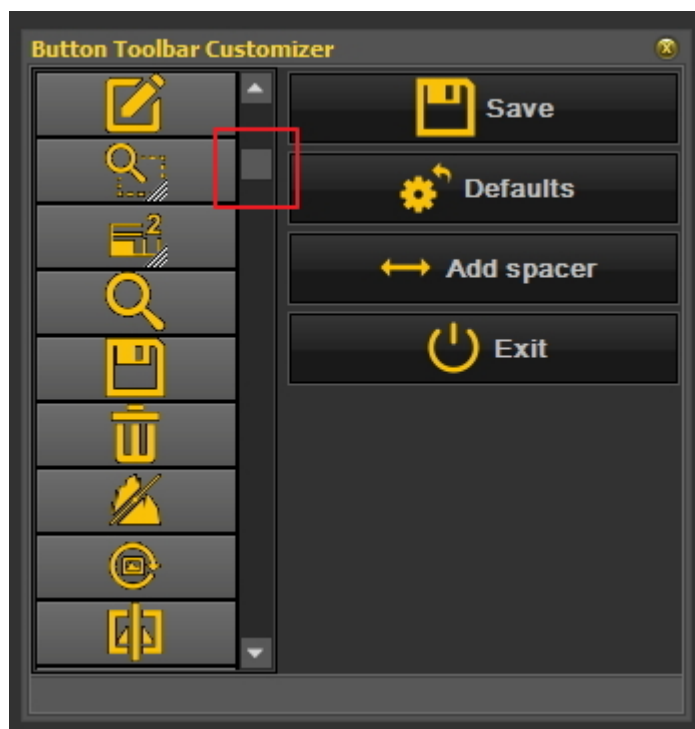
If you see a **diagonal red bar** in the icon, this means that the icon is **not activated** in the Iconset.

The **Save** button will allow you to save the modifications you have made to the Iconset

The **Defaults** button will reset the Iconset to the original settings

The **add spacer** button allows you to add a blank icon. This is used to structure the Iconset.

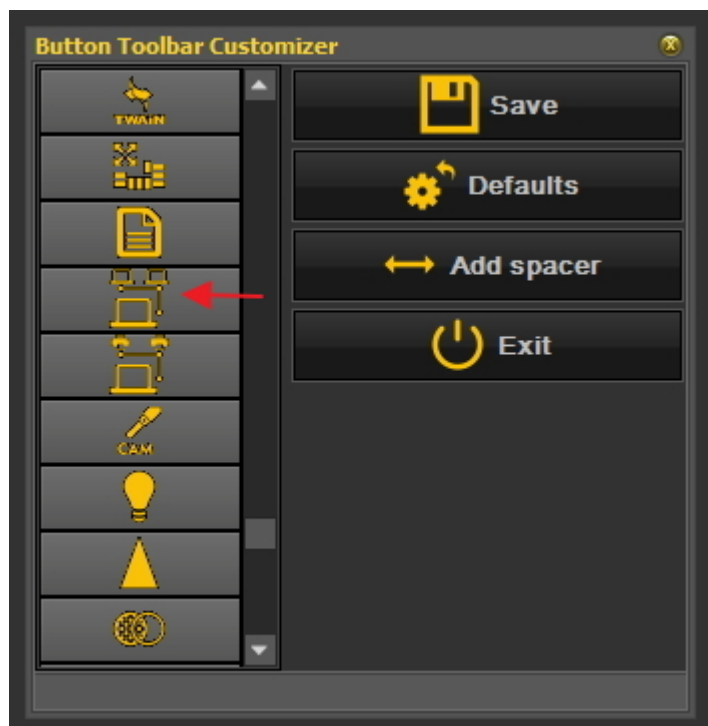
4 The **Exit** button, of course will Exit the screen.



You can use the **scroll bar** to see all the icons that can be placed on the Iconset.

For the **example**, go through the list with the scroll bar and look for the Dicom network icon.

In our **example**, we would like to

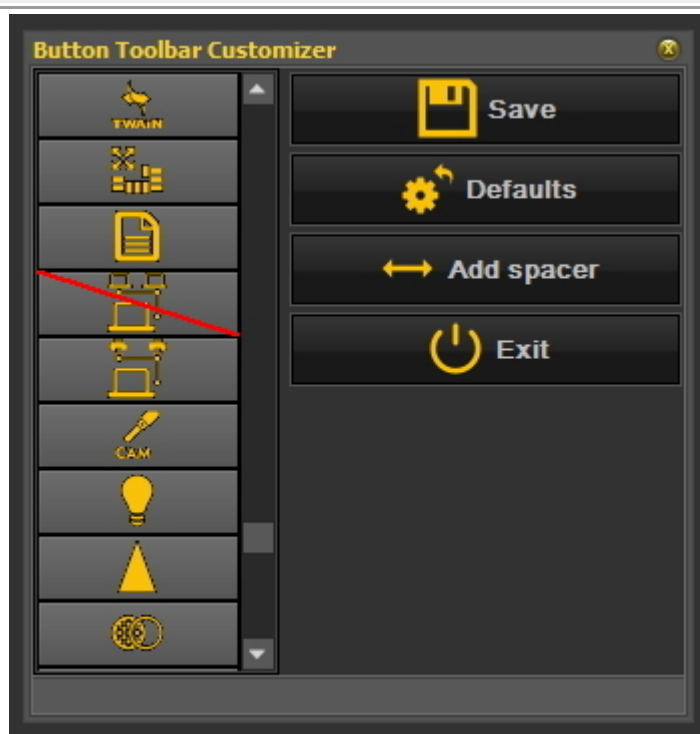


deactivate the icon for the Dicom network.

Make sure you can see the icon in the list



To **deactivate** an icon from the Iconset, click with the **RIGHT** mouse button on the icon.

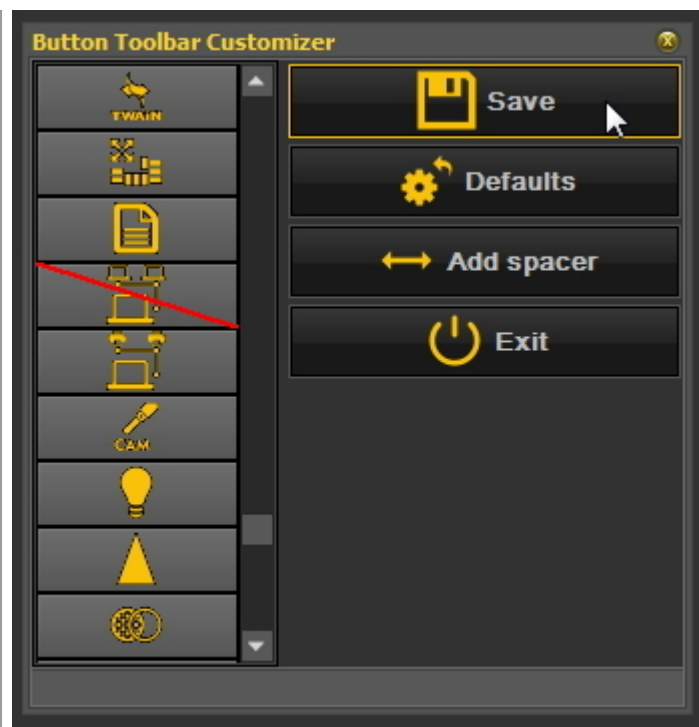


You will see the **red diagonal bar** appearing over the icon.

Press the **Save** button.

Press the **Exit** button.

You need to **Save** your changes before your **Exit** the Button Toolbar Customizer.



Result, you will **no longer see the Dicom**

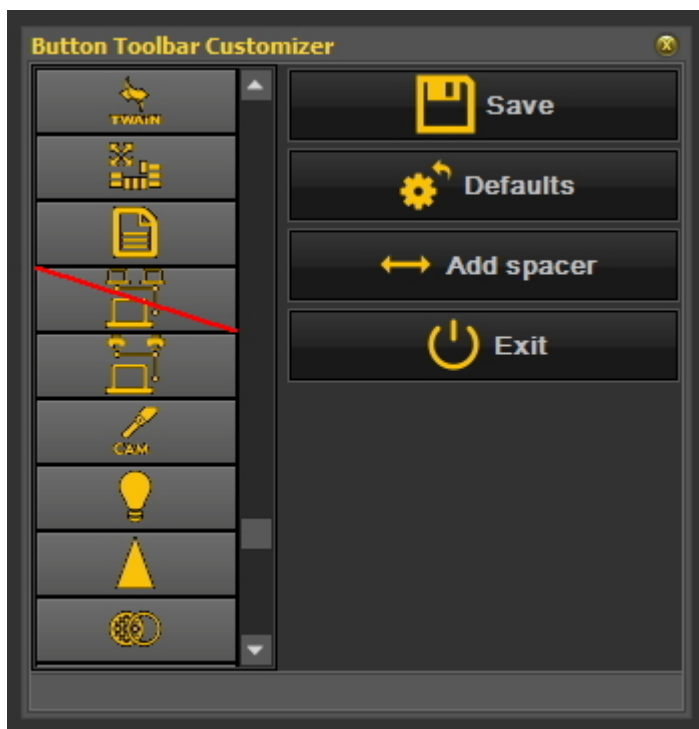
network icon  in the Iconset.

You will only see the Dicom printer icon.

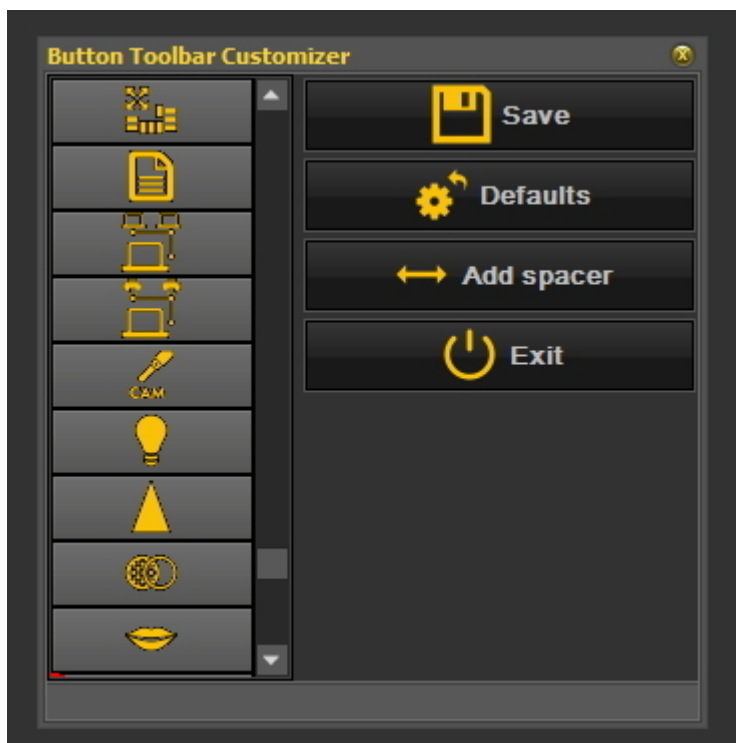
2. Reactivating an icon

To reactivate an icon, you will have to go through the same process.

1. In the Mediadent menu, **Options>Customize Button Toolbar**.
2. **Find** the icon want to activate again. This icon will have a diagonal red bar in it.



3. Press with the **right mouse button** on the icon. The red diagonal red bar will **disappear**.



4. Don't forget to **Save** and **Exit**.



Another usage of the icons is when you have created a macro and you want to activate the macro from an icon in the Iconset. Read the article '**How to create a macro**' (Section 7.7.1).

7.2.3 How do I select the ideal desktop

You have the possibility to select the ideal desktop. The ideal desktop is a desktop that shows all the necessary **Mediadent screen elements** you need for your diagnosis.

Once the desktop is correctly selected there is no need to change it.

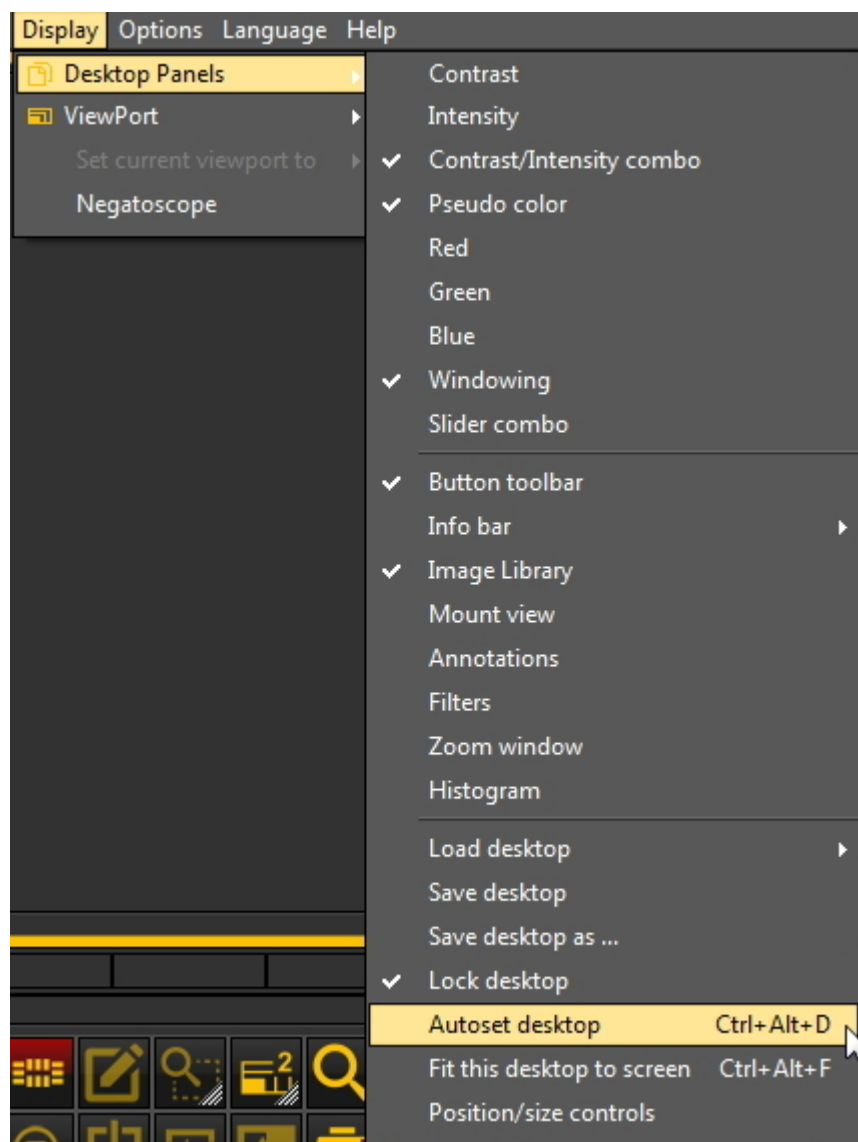
But if you **change** the monitor or PC screen (for example a wider screen) you will need to adapt you desktop.

If you notice that not all the Mediadent elements are displayed on the screen you will need to choose another desktop.

To choose the ideal desktop:

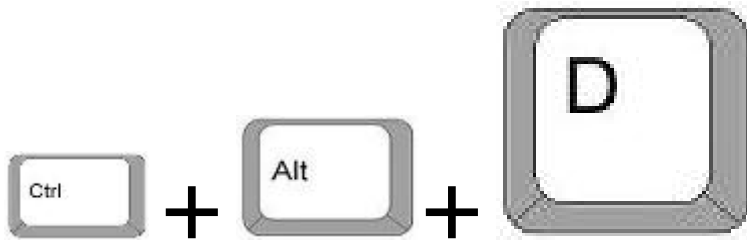
In the **Mediadent menu**, choose


Display>Desktop Panels>Autoset desktop



Or

Choose the **key combination** : ***Ctrl+Alt+D***



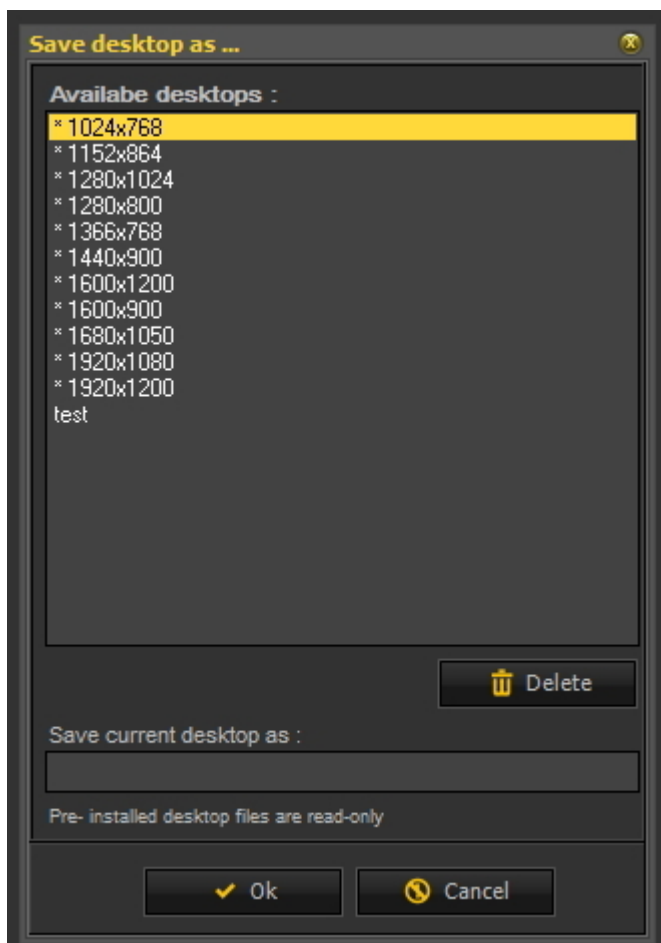
 To correctly use this key combination, you first **press and hold** the **CTRL** key, then **press and hold** the **ALT** key and then **press** the letter **D** on your keyboard.

7.2.4 How do I delete a desktop

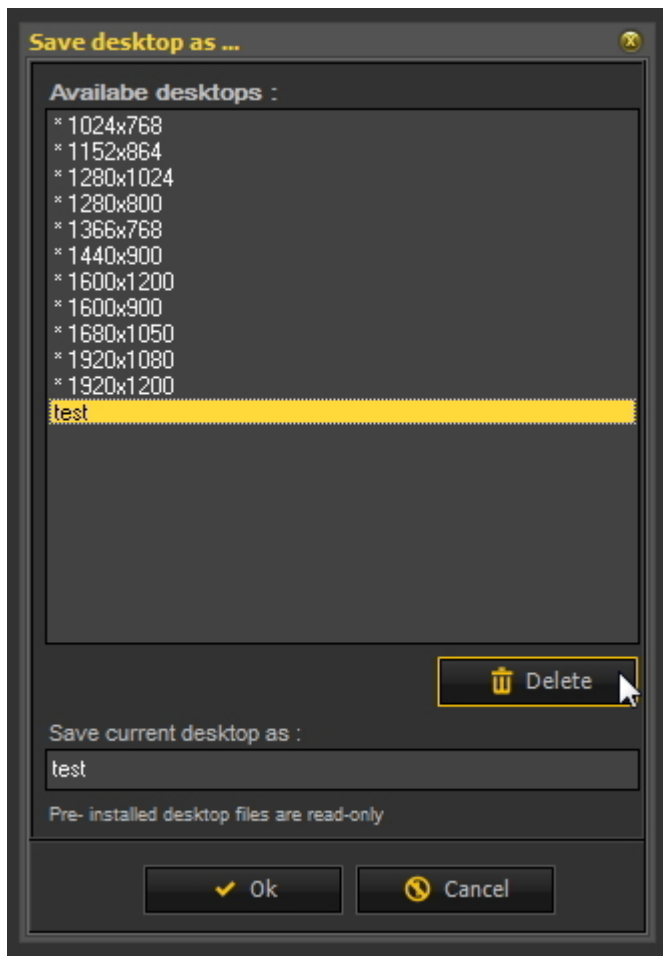
Changing your monitor is often a reason to delete a previous created desktop with another screen configuration.

Follow these **steps** to delete a desktop


1. **Display > Desktop Panels > Save desktop as ...**



2. **Select** the desktop in the list you want to delete. In this example we choose for the desktop **test**.



3. Click the **Delete** button.

 Make sure the desktop you want to delete is not active.

7.2.5 How to change practitioners info

If you have a practice with **several dentists** it can be practical to have the **name** of the practitioner in the **Status bar** of Mediadent.

Read the article: **General Settings (Section 10.2)**, if you want to learn how to configure the practitioner's name.

7.2.6 How to configure the desktop

The **Desktop** is the way in which the different elements of Mediadent are presented on your **screen**.

The advantage is that you can **change the layout of the different screen elements**, reflecting your way of work.


If you want to change the desktop, you will first need to know how to **activate/deactivate certain screen element**.

Once activated you **move** the screen elements or even **re-size** them to fit your needs.

To change the Desktop follow these **steps**:

1. **Activate/Deactivate** screen elements
2. **Unlock** the Desktop
3. **Move or resize** the elements
4. **Lock** the Desktop

5. Save the Desktop

 First read the article **Overview of the Mediament screen elements (on-line documentation)** to get a better understanding of the different screen elements.


1. Activate/deactivate Mediament screen elements



When activating a screen element, the element will be **visible**.


To activate an element

Display > Desktop Panels > select the deactivated element

Remark : make sure the  sign is in front of the option
or **click** on the corresponding **icon** in the Iconset to **activate** the element.

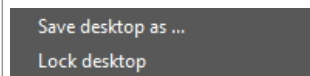


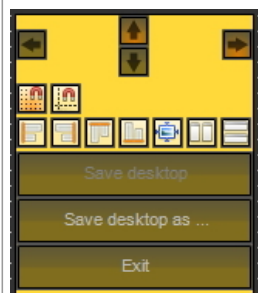
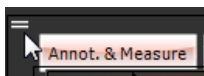


To deactivate an element choose

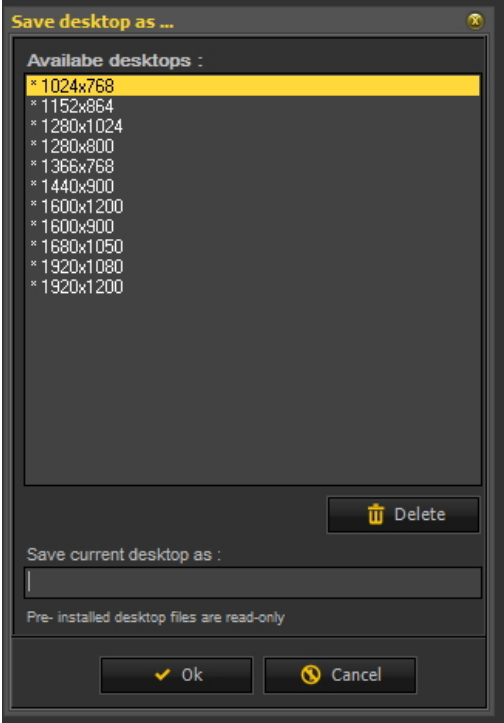
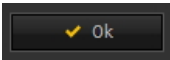
Display > Desktop Panels > select the active element

Remark : make sure the  sign is **NOT** in front of the option
or **click** on the corresponding **icon** in the Icon set to **deactivate** the element.

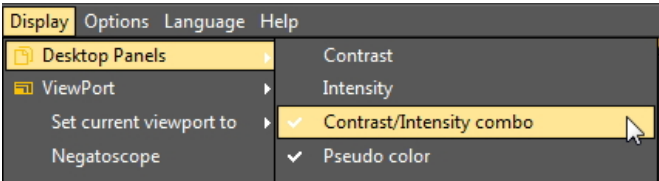

2. Change and Save the Desktop layout


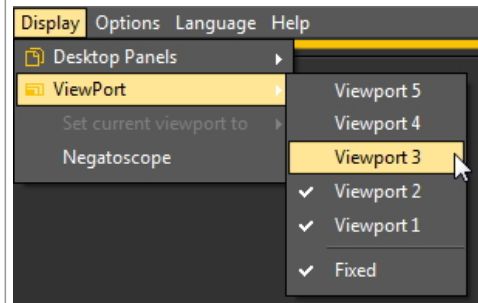
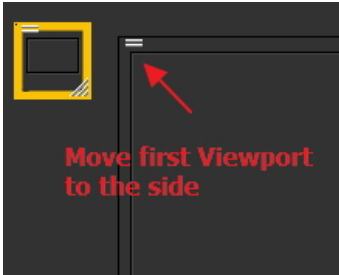
Once you have chosen the screen elements you want to activate. You have the possibility to move them to another location on your screen. Follow these steps to **change** the Desktop and to **save** it.

Action	Explanation
<u>1. Unlock the Desktop</u>	
<p>1. Always Unlock the desktop first</p> <p>Display > Desktop Panels > Lock desktop</p> 	<p>Remark : please make sure the  is not in front of the option.</p> <p>Always unlock the desktop before making changes.</p> <p> You will notice the desktop is Unlocked when there are handles available in the left top corner and the right bottom corner of the screen element.</p>
<u>2. Move and/or resize the Mediament screen elements</u>	
<p>2. The screen elements are free and can be moved to another location on the screen or resized to show all the options.</p> 	<p>Move the screen elements to another location by dragging and dropping the elements via the handles, situated in the left top hand corner of the element.</p>  <p>Resize the screen elements by using the handle in the right bottom corner.</p> 
<u>3. Lock the Desktop</u>	
<p>3. If you are pleased with the result, you must lock the desktop.</p> <p>Display > Desktop Panels > Lock Desktop</p>	<p>Remark : the  sign needs to be in front of the option in the menu.</p>

4. Save the Desktop	
<p><i>Display>Desktop Panels>Save desktop as ...</i></p> 	<p>You will see a list of pre-installed desktops (indicated with *). They cannot be changed.</p> <p>After saving your desktop, you will be able to select it via Display > Desktop Panels>Load Desktop</p>
<p>5. Type in a recognizable desktop name in the 'Save current desktop as :' box.</p> <p>6. Click  to confirm.</p>	

Click on this title to view the examples

Action	Explanation
As described above, unlock the desktop	.
<p>We will deactivate the Contrast/Intensity combo.</p> <p>In the Mediadent menu choose</p> <p>Display > Desktop Panels > deselect one of the elements</p> 	<p>Remark : please make sure the  is not in front of the Contrast/Intensity combo option.</p>
<p>For example : Contrast/Intensity combo</p> <p>The screen element is gone.</p>	

	
<p>Adding an additional Viewport</p> <p>In the Mediadent menu choose Display > ViewPort and select the Viewport you want to activate.</p> <p>In this example we would like to see 3 Viewports.</p> 	<p>Be aware that the Viewports that are activated will appear under the existing Viewports. If your desktop is Unlocked you will be able to move the Viewports to another location and you will see the newly activated Viewports appearing.</p> <p>In this example the Viewport 3 was under the Viewport 1. By moving the Viewport 1 you will see the Viewport 3.</p> 
<p>You can now position the 3 Viewports. See the following article New tools to create and modify a desktop in Mediadent v8 (Section 4.5).</p>	
<p>As described earlier, lock the desktop and save it.</p>	<p>.</p>

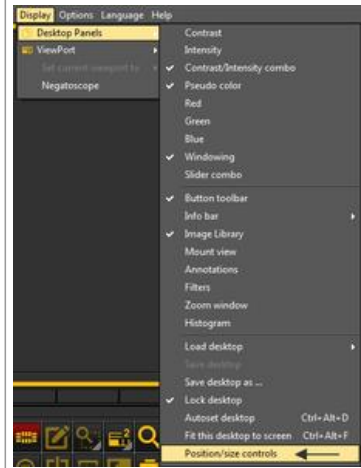
3. New additional tools to create or modify a desktop

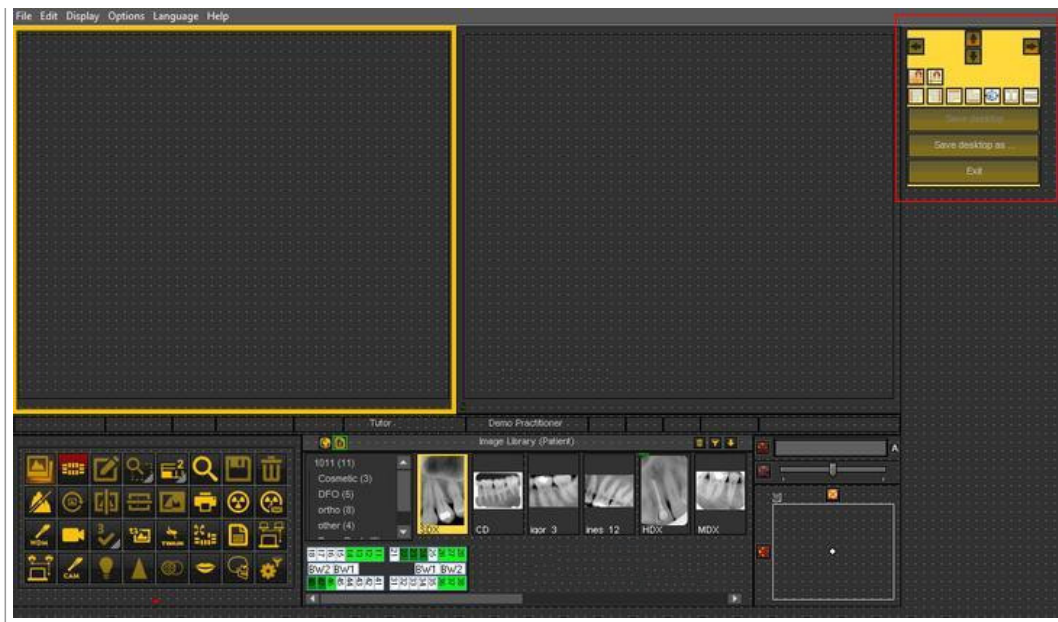
In this latest versions a lot has been added to improve the creation of desktops in the program.

To understand what a desktop is, read this article first : **A desktop (Section 12.2)**

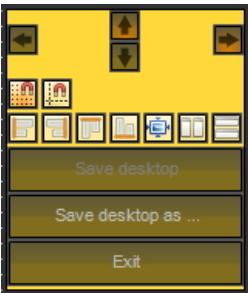
In this section, we will explain the additional tools you have to modify the desktop.

1. Activate the desktop panel options

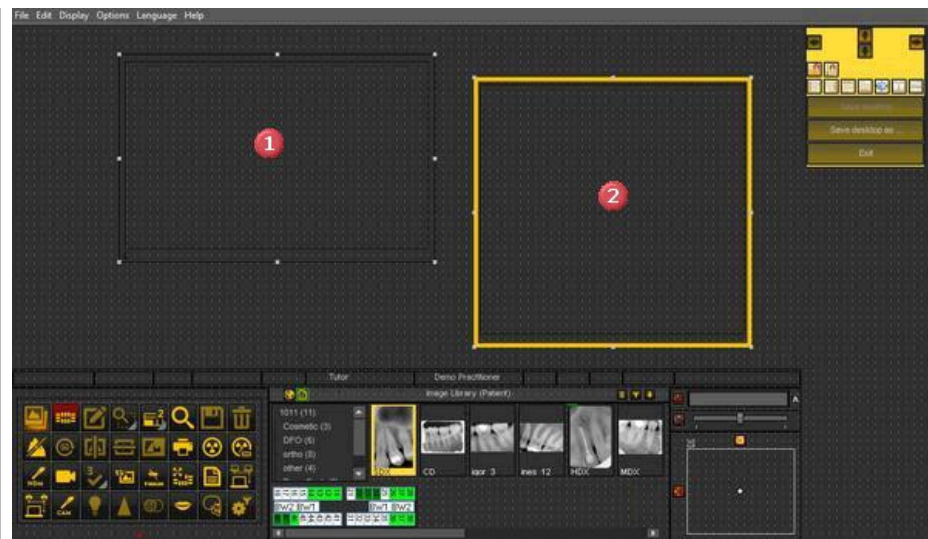
<p>In the menu, choose Display > Desktop Panels > Position/size controls</p> 



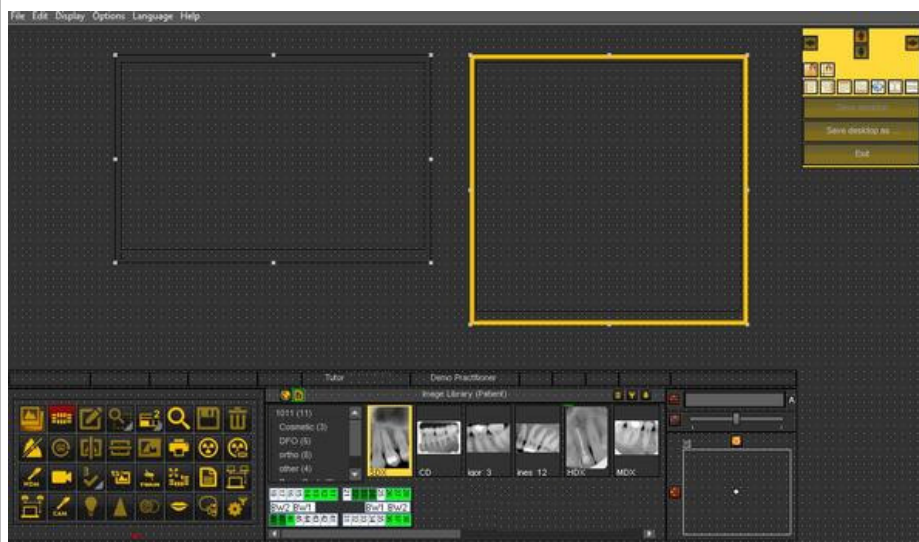
2. Overview of the toolbox icons and examples



Icon	Explanation
	These are the controls that determine the position of the toolbox. The options are left, right, top and bottom. It is also possible to drag and drop the toolbox manually.
	Snap to grid : when the icon has a red glow the screen elements will snap to the grid. This can be de-activated by clicking on the icon.
	Align to grid : this will allow you to align the screen elements to the grid.
	<p>Alignment of the screen elements.</p> <p>Align left, align right, align top and align bottom.</p> <p><i>The alignment is done against the first selected box.</i></p> <p><u>Example</u> : alignment top</p> <p>Select first box 1</p> <p>Select the second box with Ctrl and click on the second box 2</p> <p>Click on icon align top </p>




Result :

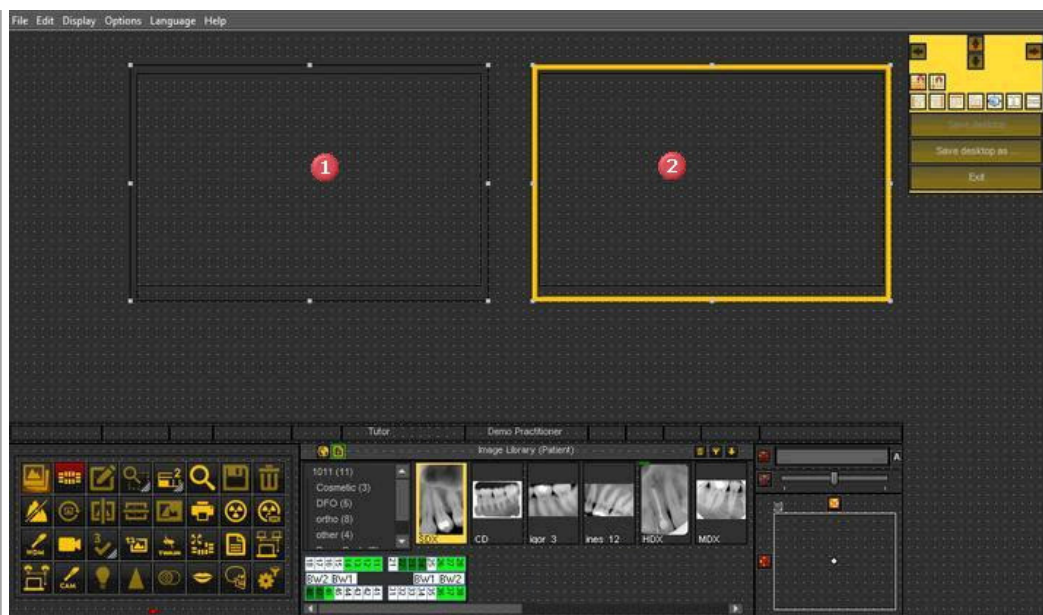


Alignment next to each other or on top of each other.

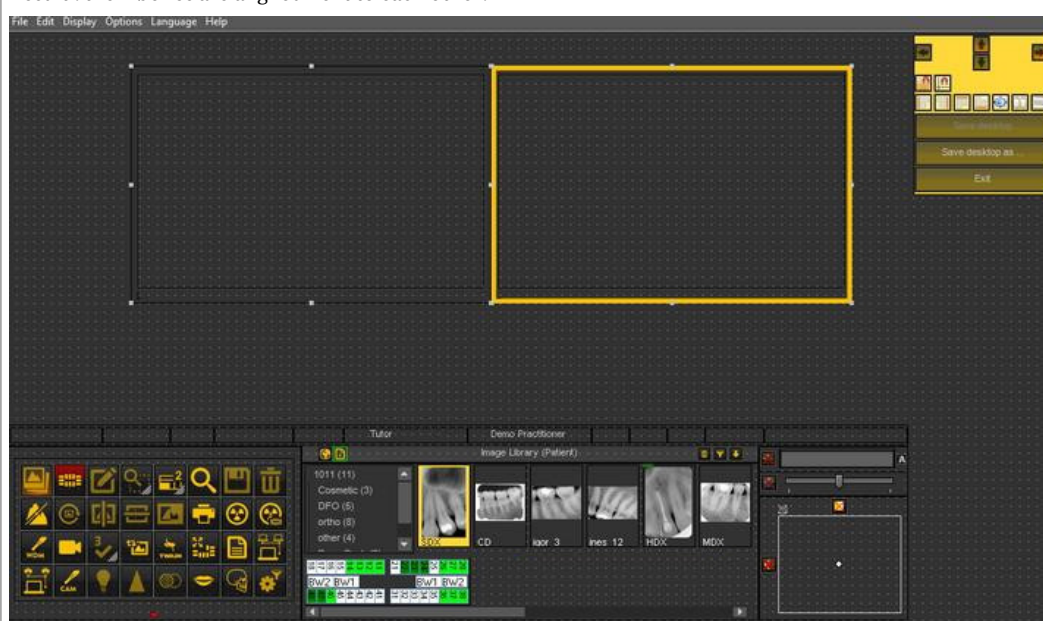
Example : alignment next to each other.

Select first box and select second box by pressing and holding the **Ctrl** button.

Click on the icon  to position the 2 windows next to each other.



Result : the 2 boxes are aligned next to each other.



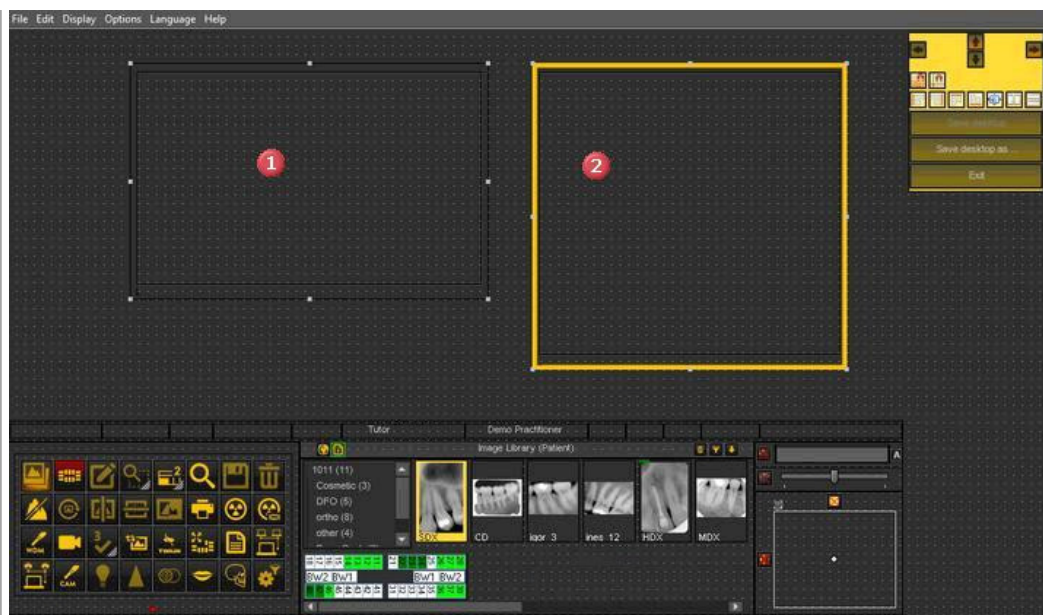
Same size


This option will allow you to create screen elements with the same size.

The first selected box will determine the size of the other selected box.

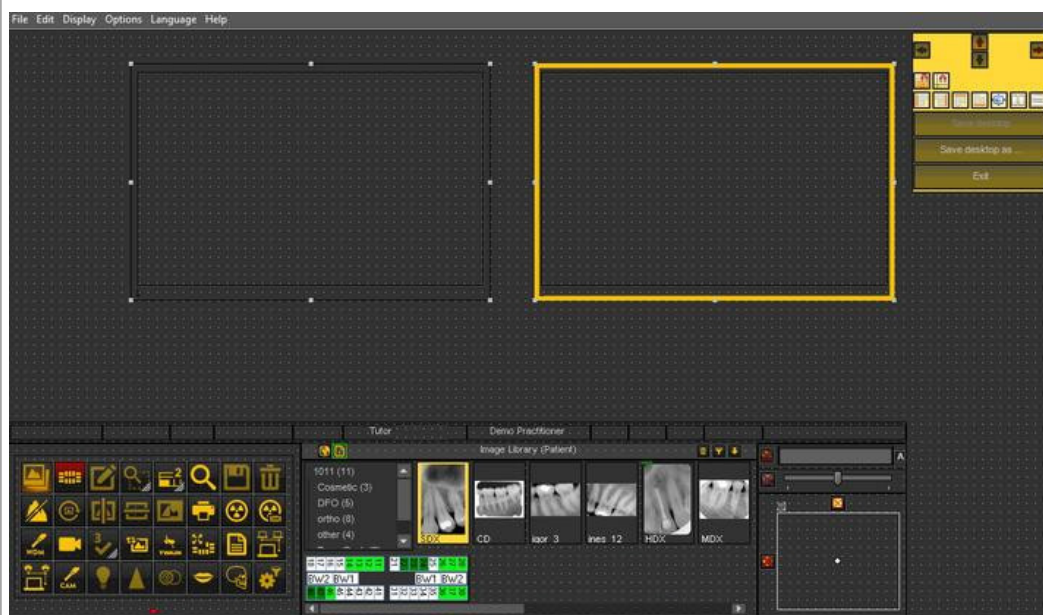
Select the first box that has the desired size.

Select the second box by pressing and holding the Ctrl key.



Click on the icon 

Result : The second box has the same size and the first box.



7.2.7 How to load another desktop

The desktop that is loaded is the Mediadent **screen layout** that has been configured for your monitor size and resolution.

It will show all the different Mediadent screen elements.

To get a better understanding of the desktop, read the article **A desktop (Section 12.2)**.

If you are not happy with the current Mediadent screen configuration, you can load **another desktop**.

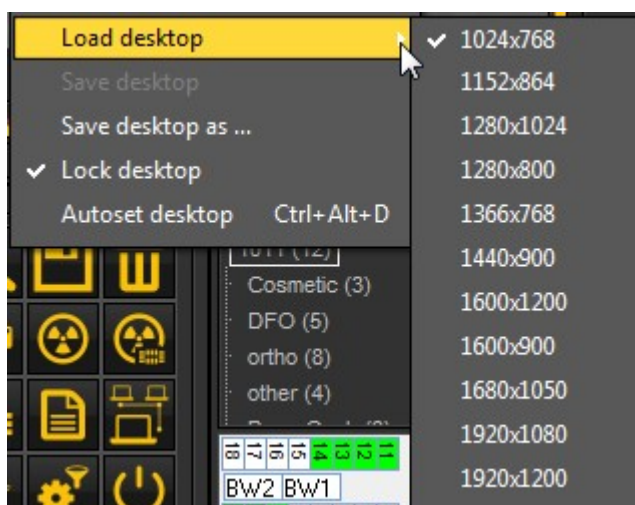
⚠ Be aware that if you load a desktop that does not fit your monitor, some Mediadent screen elements will disappear from your screen.

For example choosing a desktop that is suited for a wider monitor will have as a consequence that the Mediadent screen elements (like Windowing, Histogram, ...) on the right hand side are not shown on a monitor that is smaller.

1. Choose in the Mediadent menu **Display > Desktop Panels > Load desktop**

📄 You will get a list of **default desktops** that are available. These desktops are linked to the resolution of your screen.

2. **Click** on the Desktop you want to load



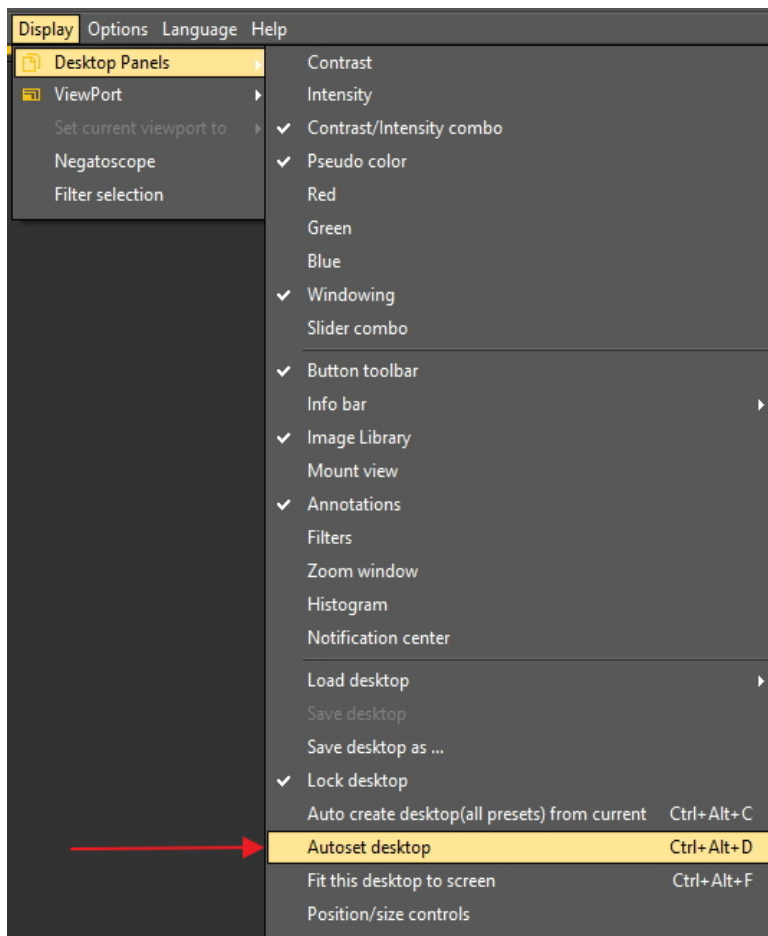
You will see a list of **pre-installed desktops**. The names indicated most current screen resolutions. Depending on the type of screen you have, you will be able to choose one of the desktops.

📄 A Desktop '1024x767' means that the Mediadent desktop will show on your monitor in '1024 pixels (width) by 768 pixels (height) resolution.

Once you have activated one of the default desktops, it is possible your desktop is not yet optimized. For example you still have some room left on your screen that is not used.

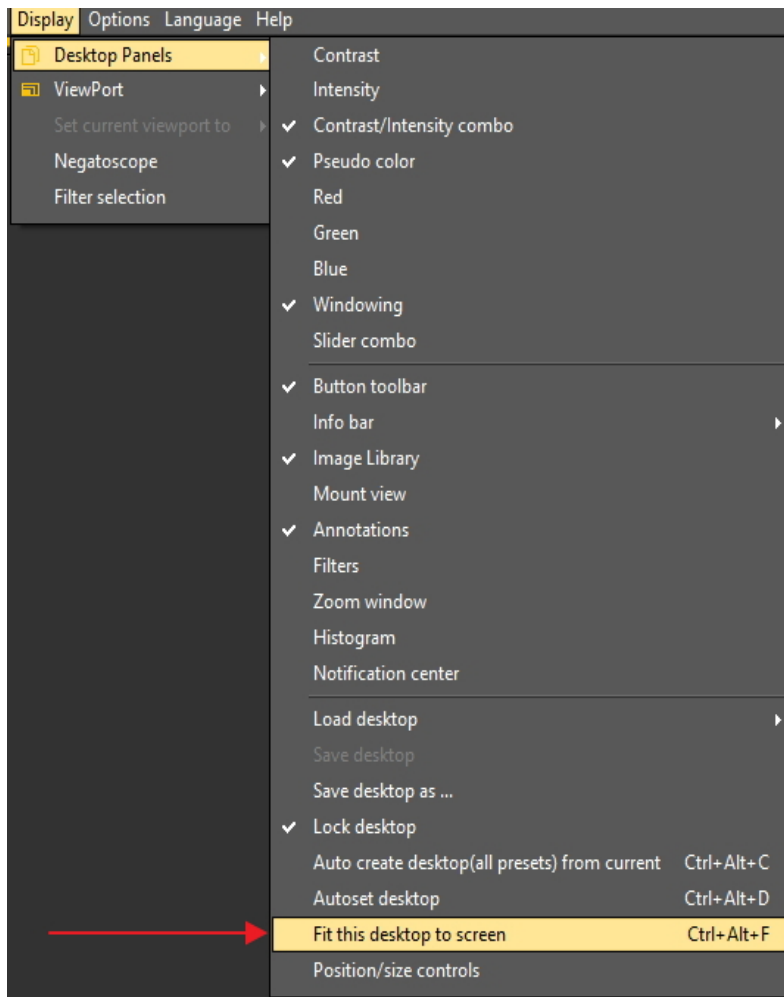
If your desktop is not optimized, there are **2 options** you can use to optimize your desktop :

1. After you have loaded one of the default desktops and you are not happy, you can choose the option **Display>Desktop Panels>Autoset desktop** in the Mediadent menu.



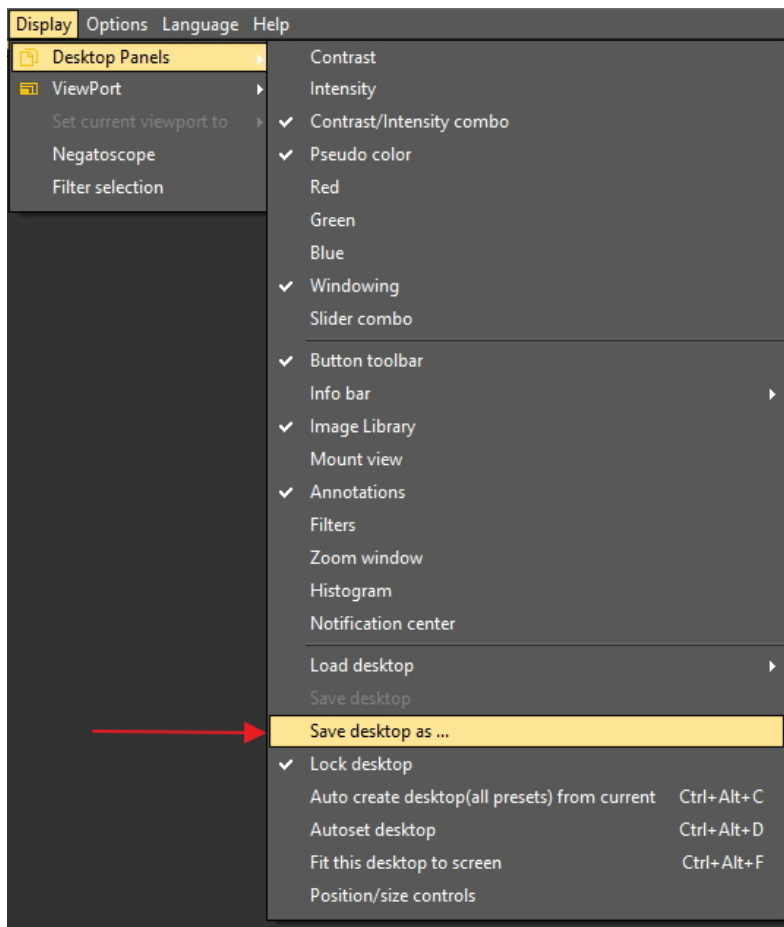
This option will use the most optimal default desktop.

2. If there is still room for improvement, choose **Display>Desktop Panels>Fit this desktop to screen**

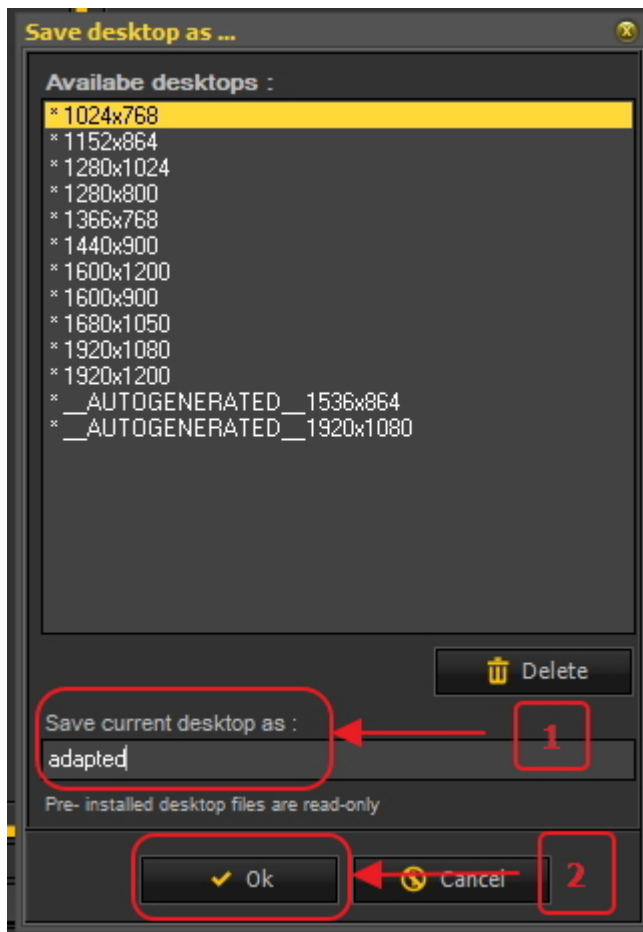


Once you are happy with the desktop, you have to save it.

To Save the adapted desktop, choose **Display>Desktop Panels>Save desktop as ...**



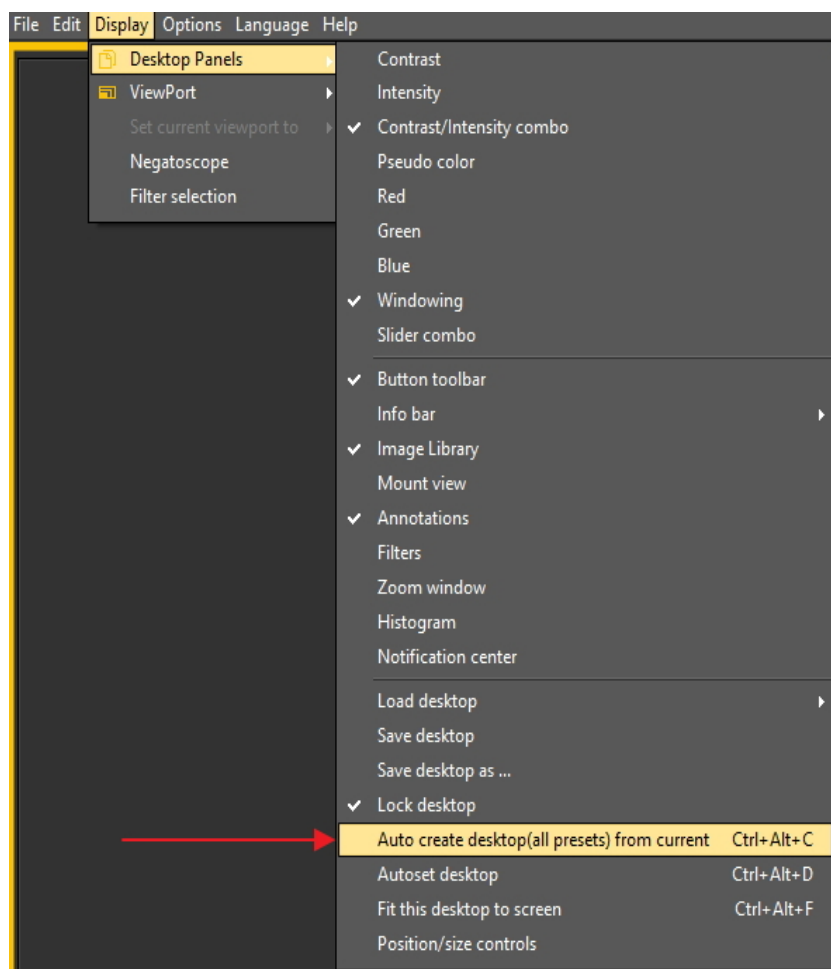
Give the desktop a name, in this case 'adapted'. This desktop will be active the next time you launch the program.



By selecting the optimized desktop, you will make maximum use of the resolution of your monitor.

Once you have the ideal desktop, you may want to automatically create all the desktops based on this ideal desktop.

This can be done with the following option : ***Display > Desktop Panels > Auto create desktop (all presets) from current***

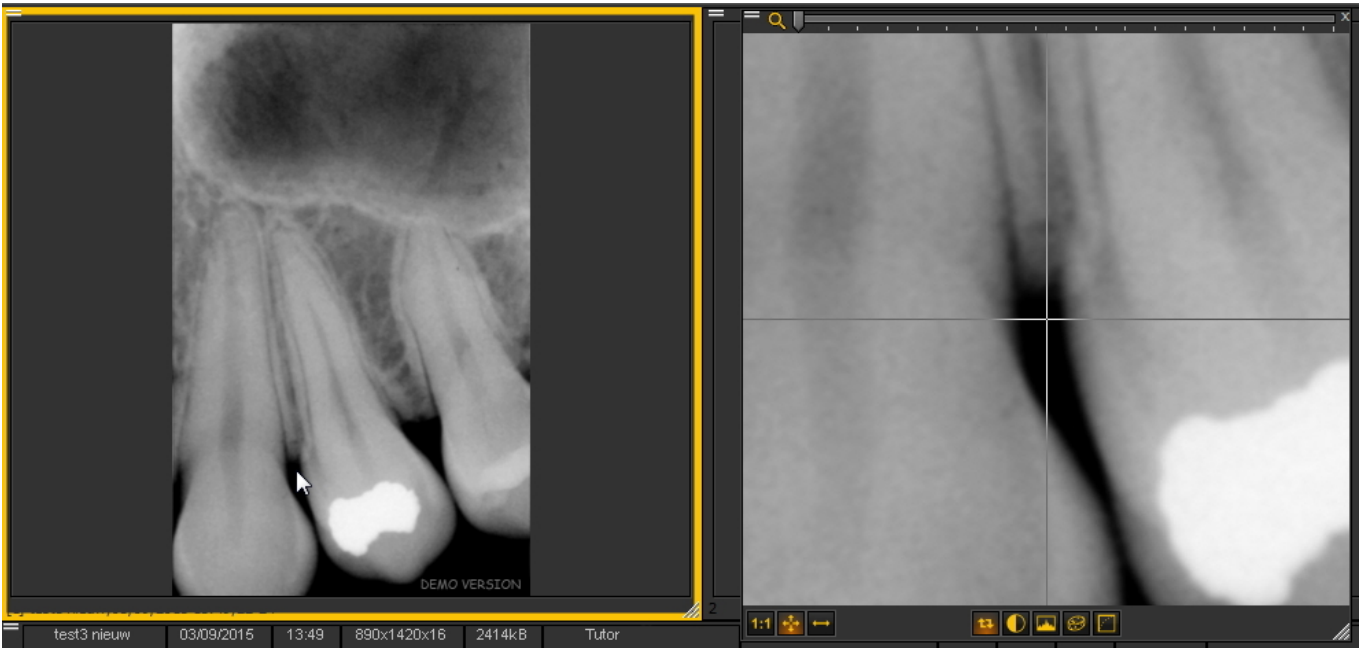


This will auto generate all the desktops (1 viewport, 2 viewport, 3 viewport ...) based on this ideal desktop. So if afterwards you switch to another desktop, because, for example, you want to see more viewports, the desktop will already be optimized.

7.2.8 How to move the zoom window

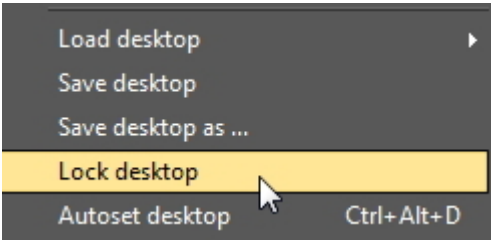


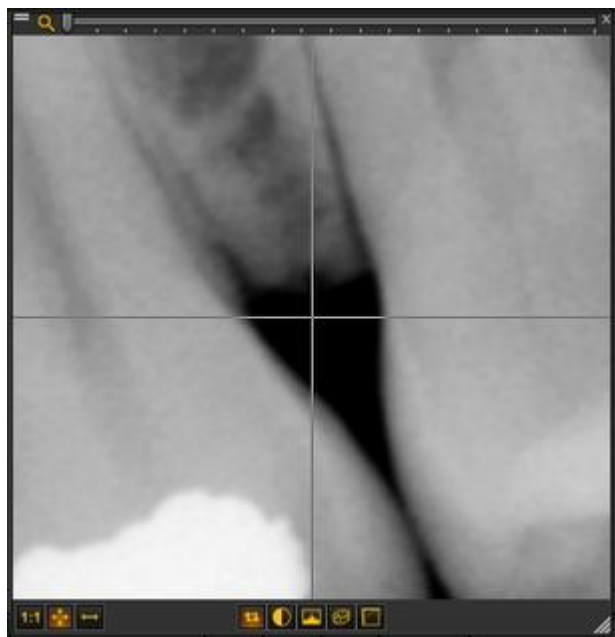
The '**Zoom window**' is one of the Mediadent screen elements you can move.



In this article we will explain how to move the 'Zoom window' screen element. The steps in this article apply to all the Mediadent screen elements.

To move the **Zoom window** follow these steps:

Action	Explanation
<div>1. Unlock the desktop by <i>de-selecting</i> the option Lock Desktop.</div> <div></div>	<div>If you want to move the Zoom Window, you will first need to Unlock the desktop.</div> <div>The setting should NOT be active (no check mark in front of the option).</div>
<div>2. Move the Zoom Window by using the handles.</div>	<div>To move the ZOOM Window to the desired area on</div>



your screen you have to use the handles on the **top left corner of the Window**.

You will see **2 horizontal lines** in the top left corner of the window, this is an indication that the ZOOM Window can be moved.

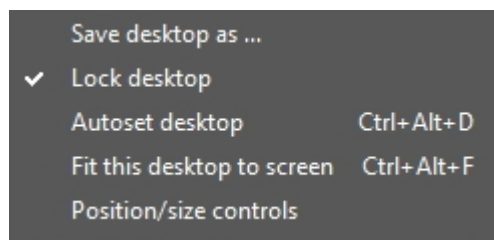


3. Lock the desktop again.

Display > Desktop Panels and Select **Lock desktop**

Once positioned correctly, you can choose to Lock the Desktop again.

A check mark must be in front of the option Lock Desktop.



The next time you use the Zoom Window, it will be repositioned.

4. Save the desktop

Display > Desktop Panels and select **Save desktop**

The next time you launch Mediadent the Window will be correctly positioned.

7.3 The Mediadent image library

7.3.1 How to move images from one patient to another

This article will explain how to **move an image from one patient's library to another**.

If you have stored an image in the **wrong** patient library, you have the possibility to move the image to the Image library of the **correct** patient.

To move an image from one patient's library to another, we will use the **Global Image Library**. This is a **common folder** that is accessible from every patient's library. It will act as a **temporary storage** for images you want to move. Read the article: **The global and patient library (Section 12.4)** and learn more about the differences.

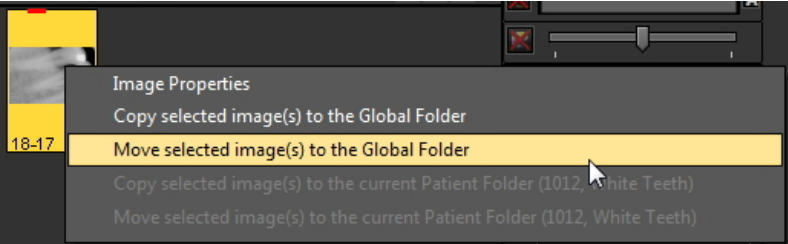
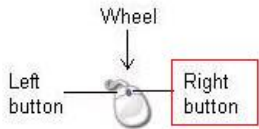

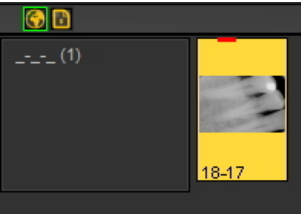

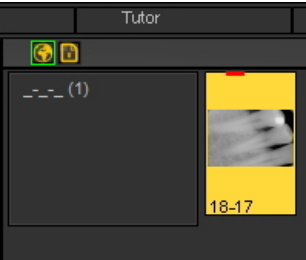
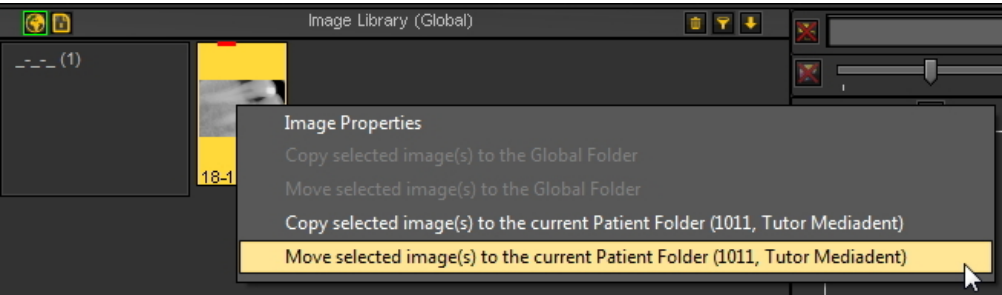
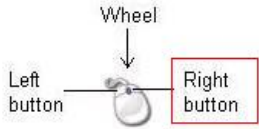
If you want to check the list of recently accessed patients to retrieve your image, read the article: **How to find the patients recently accessed (Section 7.3.2)**.


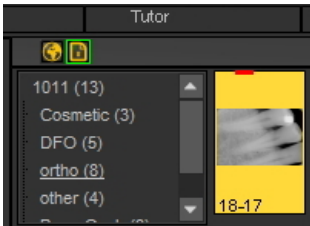


Copying an image from one patient's library to another is done in **4 steps**:

Step 1. Open the **wrong** patient's Image library via your Patient management system. So this is the patient you want to copy the wrong

- image from.
- Step 2. Copy the image to the **Global Image Library**
- Step 3. Open **correct** patient's library via your Patient management system. So this is the patient you want to copy the image to.
- Step 4. Copy the image from the **Global Image Library** into the **correct** patient's library.

Action	Explanation
<div>1. Open the wrong patient's Image library</div> <div>2. Select the image you want to move to another library and click with your RIGHT mouse button on the image.</div> <div></div>	<div>So this is the patient's library containing the wrong image(Mr. White Teeth)</div> <div>The menu will appear and you will be able to Copy or Move the selected image. In our example we will choose to Move the image.</div> <div></div>
<div>3. Choose 'Move selected image(s) to the Global Folder'</div>	
<div>4. Click on the Global Image Library  icon to verify.</div> <div></div>	<div>The image is moved to the Global Image Library.</div>
<div>4. Open the Library of the patient you want to copy the image to. This is done through your Patient Management System.</div>	<div>In this example we open the the Patient Image Library of Tutor Mediadent.</div>
<div>5. Click on the Global Image Library  icon to access the image.</div> <div></div>	<div>In the previous steps we copied the image from Mr. White Teeth library to the Global Library.</div> <div>We need to go to the Global Image Library to get the image so it can be copied to the current Patient's Library (Tutor Mediadent).</div>
<div>6. Click with your RIGHT mouse button on the image stored in the Global Image Library.</div> <div></div>	<div>Once in the Global Image Library, you will move the image from the Global Image Library to the current Patient's Library.</div> <div></div>

7. Select ' Move selected image(s) to the current Patient Folder (...) '	
8. Select the Patient's Library by clicking on the Patient's Library icon 	Go back to the image library of Tutor Mediadent Patient by clicking on the Patient's Library icon .
9. Result 	The image is stored in the current Patient's Library .

7.3.2 How to find the patients recently accessed

Sometimes it can be practical to find **images** back that were recently acquired for a specific patient.

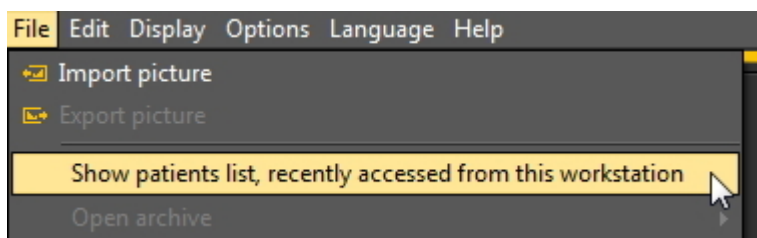
Maybe you have selected the wrong patient when acquiring the images? Or, you can't find certain images back?

Mediadent can help you because you will be able access the list of patients that were recently accessed.

This list contains the **100 recently patients accessed** from this workstation.

To access this list:

Go to **File > Show patients list, recently accessed from this workstation**



You will get a list similar to this one. The list contains the **date** the patient was accessed, the **patient ID**, **patient name** and **image folder**.

In this way you can retrace when certain images were taken and where they were stored.


You can double click on the **patient's name** and the library will open.

To view the images, close this screen by clicking on the **Exit** button.

List of patients recently accessed from this workstation

Date	Patient ID	Patient Name	Image folder
2015/09/03 13:34:45	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/03 16:28:58	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/03 16:32:25	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/03 16:32:55	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/04 10:10:04	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/04 14:07:47	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/04 14:16:26	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/04 14:16:51	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/04 15:15:08	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/04 15:16:51	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/04 15:33:29	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/04 15:33:37	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/04 15:33:48	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/04 15:34:00	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/04 15:34:05	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/04 15:34:09	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/04 15:34:46	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/07 11:37:22	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/07 11:42:25	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/07 12:10:23	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/07 12:13:30	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/07 12:14:06	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/07 12:35:17	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/07 16:28:14	1012	White Teeth	C:\Mediadent\Patients\1012
2015/09/07 16:34:26	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/07 16:53:37	1012	White Teeth	C:\Mediadent\Patients\1012
2015/09/07 16:54:34	1012	White Teeth	C:\Mediadent\Patients\1012
2015/09/07 16:55:27	1011	Tutor	C:\Mediadent\Patients\1011
2015/09/07 16:55:32	1012	White Teeth	C:\Mediadent\Patients\1012
2015/09/07 16:55:39	1011	Tutor Mediadent	C:\Mediadent\Patients\1011
2015/09/07 16:56:46	1012	White Teeth	C:\Mediadent\Patients\1012
2015/09/07 16:57:27	1011	Tutor	C:\Mediadent\Patients\1011

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 Read the article: **How to move images from one patient to another (Section 7.3.1).**

7.3.3 How to search for images

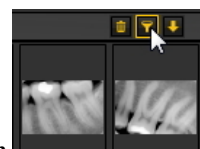
If you have a large number of images for a particular patient, it can be difficult to select the correct image for analysis.

In the Image Library you have the possibility to search, or better **filter** out the correct images.

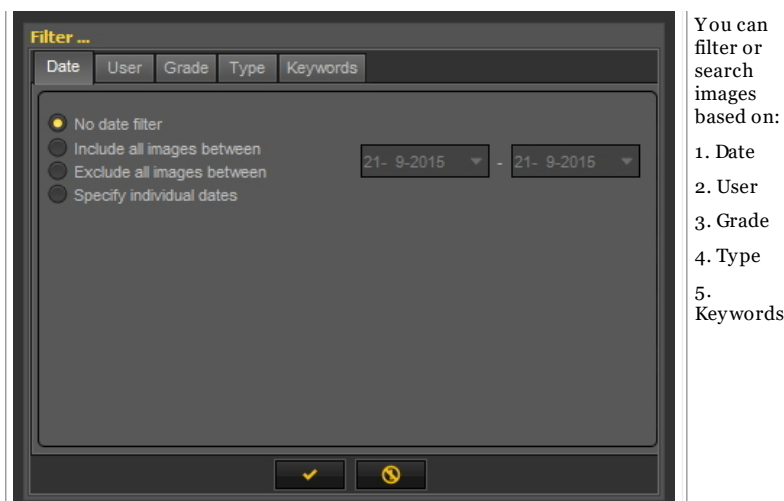
You can determine the filter or search criteria based on the **extra information or keywords** you have associated to the images.

 It is clear that you can only search on keywords or additional information such as **User, Grade, Type and Keywords** if they have been associated to an image.

If nothing is associated, the filter will not work.



To filter out images based on the **extra information or keywords** you need to use the following icon in the Image Library.



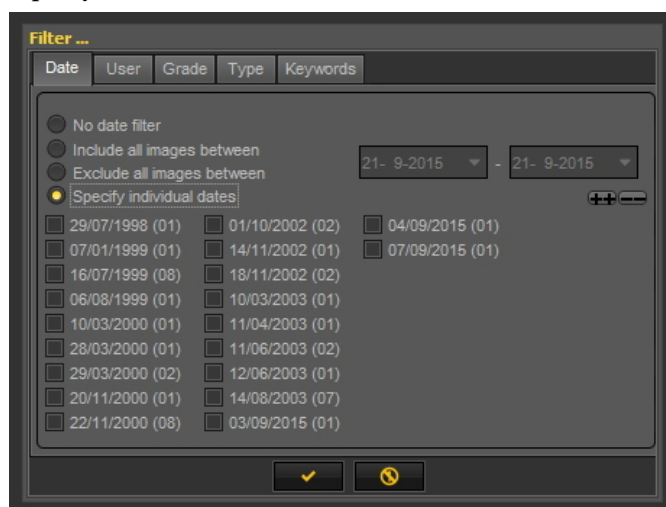
1. Search based on Date


You can filter out images that were taken in a **particular date range**.

If you know when the patient had an appointment, you can easily filter out the images that were taken on that particular date.


You can:

- **Include all images between** certain dates, the result of this filter will only be the images that were taken between certain dates
- **Exclude all images between**, the same as above, but the result will be you will see the images that were taken outside of the date range
- **Specify individual dates**



Click  to confirm.

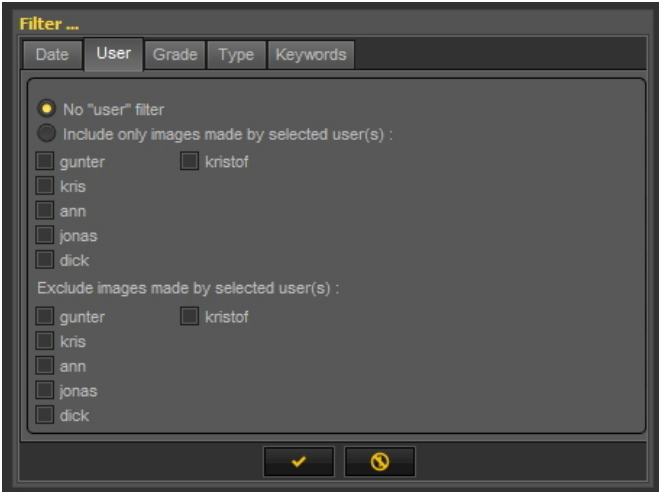
When selecting this option, you will see the dates of the images that were taken for that particular patient. If you select one of the dates, you will get the images that were taken for that patient on that date.

 To see **all the images** back, you will need to reset the Image Library. See the topic **6. Resetting the Image Library**.

2. Search based on User

You can **include** or **exclude** images that were taken by certain **users**.

Read the article [Mediadent Setup: Display Settings](#) to learn more on how to configure Mediadent to be able to select **particular users** when saving an image.



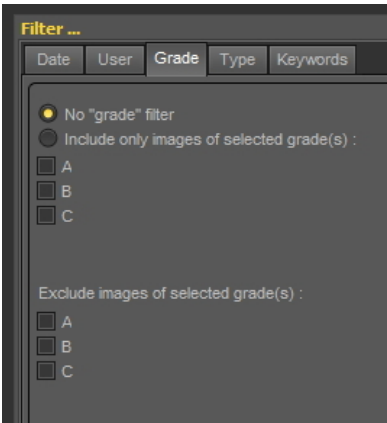
Select one of the users and you will only see the images taken by that user.


Action	Explanation
<div>1. Click on the Search icon in the Image Library</div> <div></div>	
<div>2. Select tab User and select 'kris'.</div> <div></div> <div>3. Click to confirm</div>	<div>We have added this keyword when we saved this image.</div> <div>See Also the topic Specify Extra Info and Keywords for more information.</div> <div>You can also add this via the Image Properties afterwards.</div>
<div>3. Result: You will only see the images where the user gunter is associated with.</div> <div></div>	<div>The pink bar is an indication that you have a filter active.</div>
<div>See 6. Resetting the Image Library</div>	<div> To see all the images back, you will need to reset the Image Library. See the topic 6. Resetting the Image Library.</div>

3. Search based on Grade


Search based on **Grade** works in the same manner as the Search based on User.

Click on the **'Grade'** tab and for example select to see the images with **Grade 'A'** associated to them.
You can also choose to Exclude those images.



Always **click**  to confirm.

If you don't get any images back, it means no images have the association with Grade A.

 To see all the images back, you will need to reset the Image Library. See the topic **6. *Resetting the Image Library***.


4. Search based on Type


Click on the **Type** tab and select a particular



Always click  to confirm.

As a result you will see the images where **XRAY** is associated with.
Again you can also choose to **exclude** the images where **XRAY** is associated with.

 If you don't get any images back, it means no images have the association with **XRAY**.

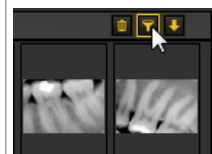
 To see all the images back, you will need to reset the Image Library. See the topic **6. *Resetting the Image Library***.

5. Search based on keywords

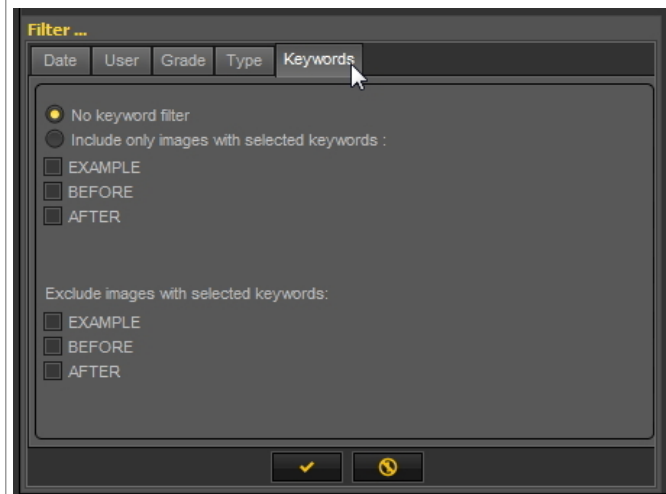
When you have saved an image with particular keywords, you have the possibility to search for images based on those keywords.

Action	Explanation
1. Go to Image Library	The following dialog box will open:

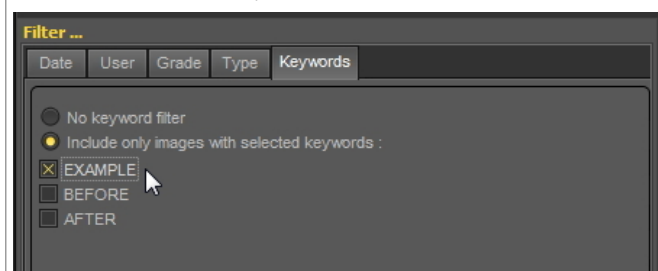
2. Click on the **small looking glass icon** in the Image Library.




3. Choose the **Keywords** tab.



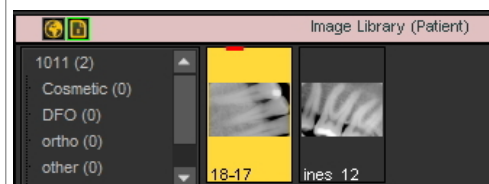
4. Select the **EXAMPLE** keyword.



We have added this keyword when we saved this image. See Also the topic [Specify Extra Info and Keywords](#) for more information.
A second method to associate keywords is via the [Image Properties](#).


4. Click  to confirm.

5. **Result** : The image with the keyword TEST is found.



The **pink bar** is an indication that you have a **filter** active.

See **6. Resetting the Image Library**

 To see all the images back, you will need to reset the Image Library.

See the topic **6. Resetting the Image Library**.

6. Resetting the Image Library

After you have filtered out a number of images, you may want to reset the Image Library to see **all the images again**. Follow these steps to reset the Image Library.

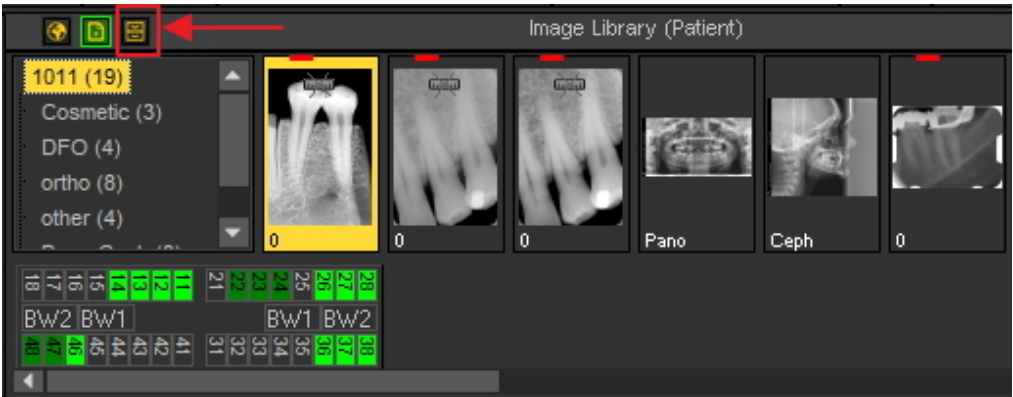
Action
1. Click on the small looking glass icon again. 
2. Click the  icon to confirm.

7.3.4 How to archive images in Mediadent

Based on end user feedback, we have added an **archiving tool** to the image library. This will give you the opportunity to **organize** the image library of the patient better.

Old images can be send to the archive folder of your choice. This folder is always available for the image library folder.

In this topic you will see how to **setup** the archive folder and **how to use the archive folder** from the patient's image library.



1. How to setup the archive folder

In the setup of Mediadent you will determine **where the location** is of the archive folder.

In this chapter we will explain how to setup an archive folder and how to **remove an archive folder**.

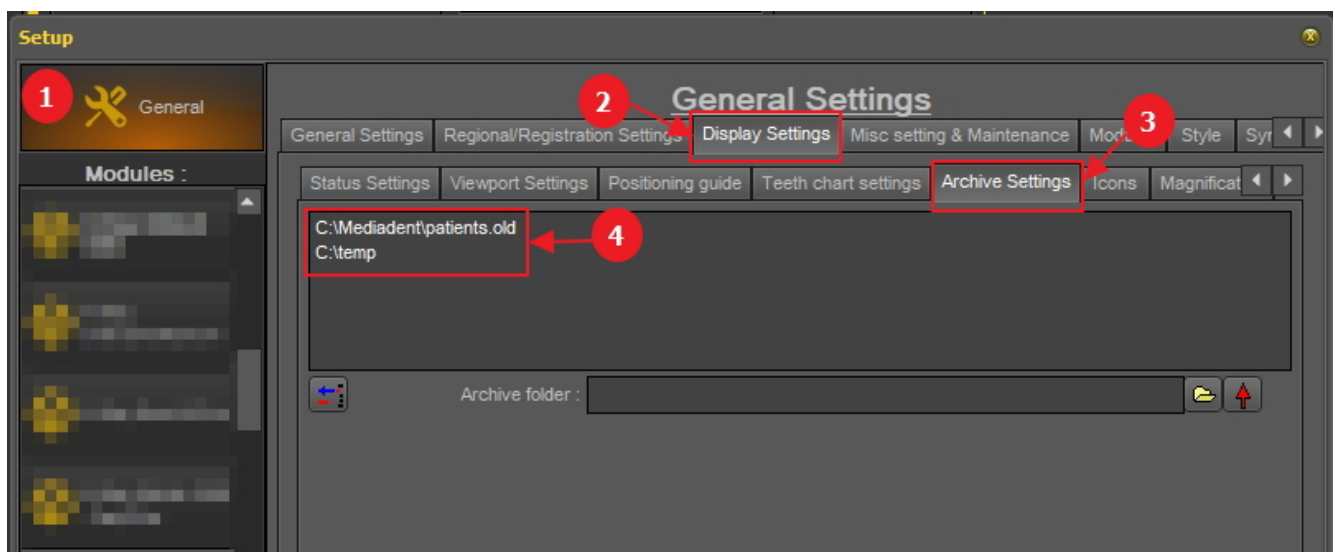
1. Setup the archive folder

Follow the steps to determine the location of the archive folder :

1. Choose **Options > Setup**

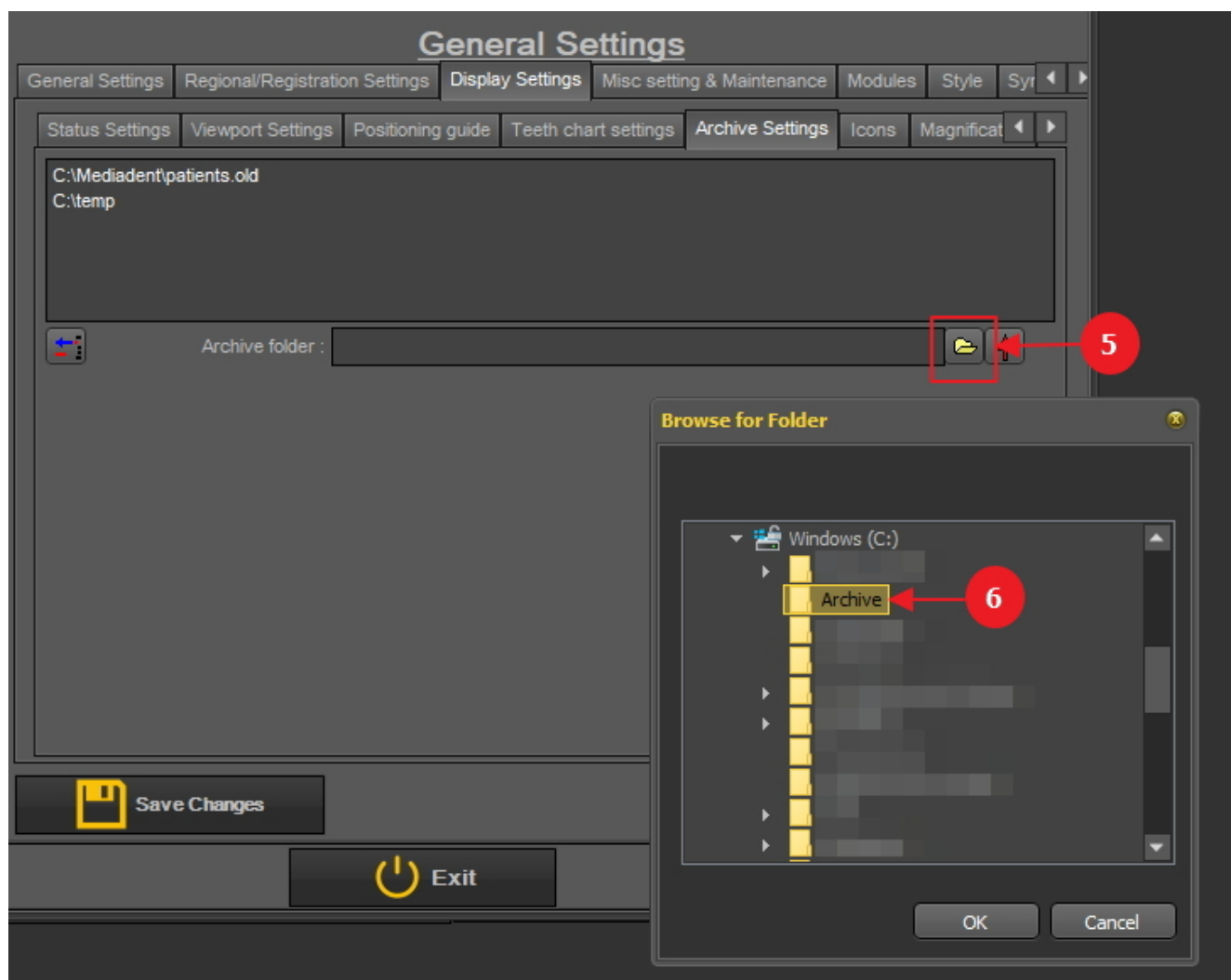
In **General Settings** ¹, choose the tab **Display settings** ²

In Display Settings choose tab **Archive Settings** ³

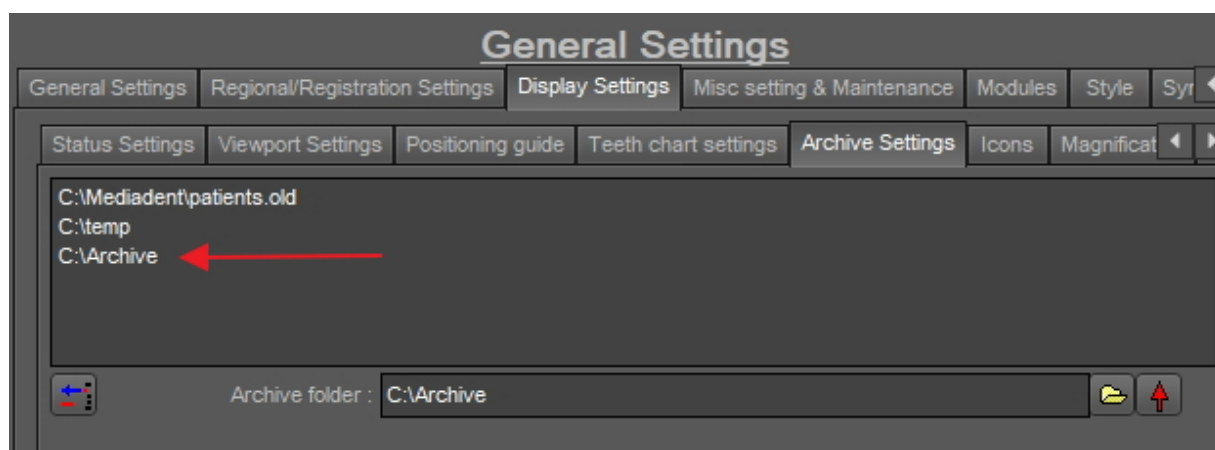



Determine the **location** ⁴ of your archive. You can choose multi locations.

2. To choose the location click on the **folder icon** ⁵, the file explorer will open and you can choose the archive folder ⁶.



3. The folder is added to the list of archive folders.



 Do not forget to '**Save Changes**' before exiting the setup.

2. Remove an archive folder

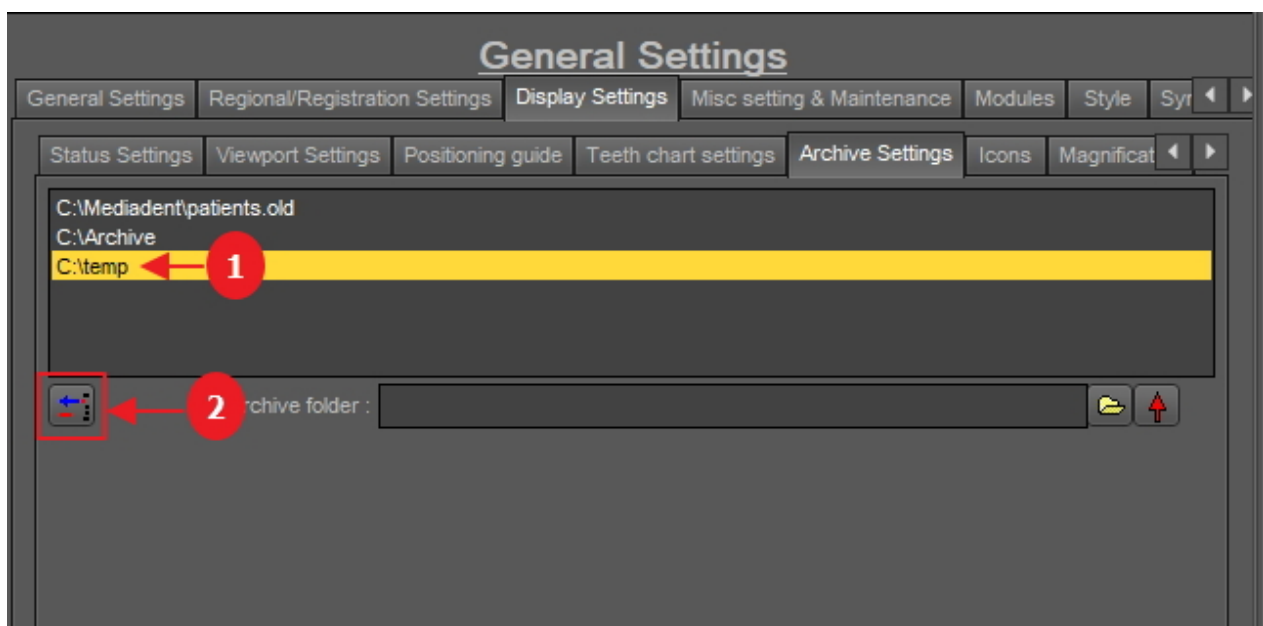
You may always remove an archive folder. This does not mean that the images that are stored in the archive folder will be deleted. It is just a way to remove the folder from the list of available locations.

So the images will still be available at this location, but the location will no longer be available for the end user to choose from.

1. Choose **Options > Setup**


In **General Settings**, choose the tab **Display settings**

In Display Settings choose tab **Archive Settings**



2. Select the folder you want to remove from the list of available archive locations ¹. In this example we choose 'c:\temp'.

3. Click on the icon ² to remove the entry from the list.

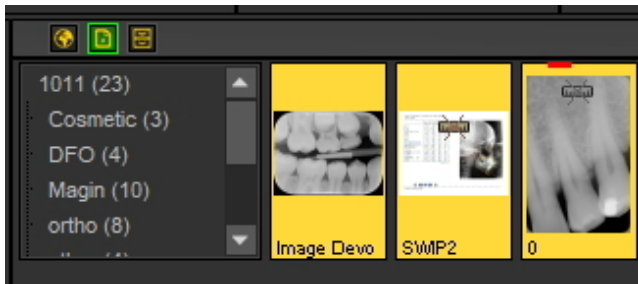
 Do not forget to '**Save Changes**' before exiting the setup.

2. How to send an image to the archive folder

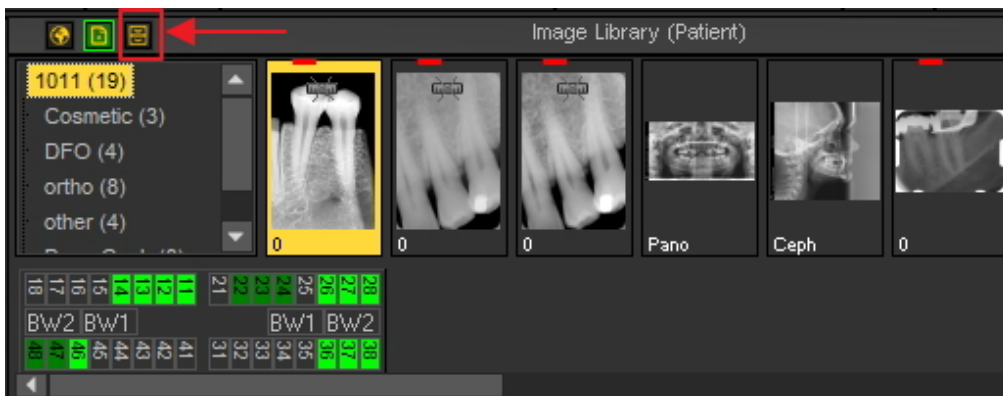
Sending an image to the archive folder is very easy!

Select 1 or more images.

To select multiple images, click on the first image and press the **shift key**. With the shift key pressed, select additional images.



Once you have selected the image(s) you want to archive, you can click on the **archive icon**.



💡 If you have created a list of locations where the images can be archived : click with the right mouse button **1** on the archive icon and select the locations **2** of your choice.



7.4 Mediadent image manipulation

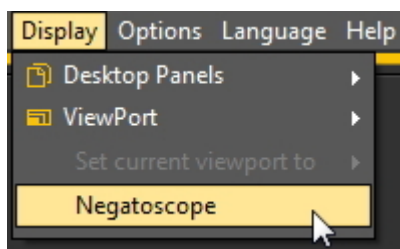
7.4.1 How to activate the negatoscope

If you want to use your **PC screen** as **negatoscope** to show an X-ray, you have the possibility to activate

the negatoscope in Mediadent.

Choose in the Mediadent Menu :

Display > Negatoscope



You will see the **white screen**.

Now you can hold the X-ray against your PC screen.

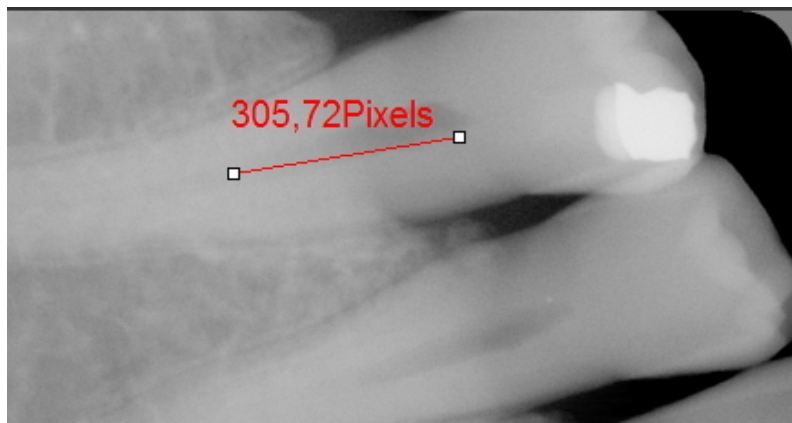
To **return**, just **click any key on the keyboard or click with the mouse button** on the screen.

7.4.2 How to calibrate an image

An image is not always **calibrated**, especially images you receive from an external source.

An indication that the image is not calibrated is shown in the image library by a crossed out ruler icon.

When you draw a line via the Measure tab, the measurement of the line is in **Pixels** and not in mm.



Calibrating an image is important when you start using **measurements**. When you draw measurements on your image you want to make sure they are relative to your image.

Especially when using the **implants module** the image needs to be calibrated.

In this article we will explain two ways of calibrating an image.

Method 1: define length of a drawn line.

We will draw a line via the Measure tab and indicates its measurement. The line we will draw is **15mm** long.

Action	Explanation
1. Load an image in the Viewport	

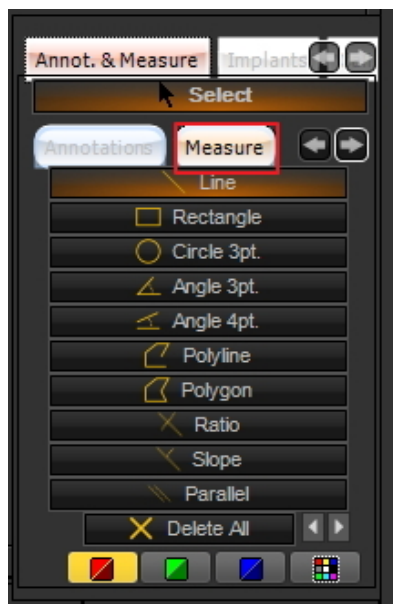
1. Click on the **Annotations** icon



In the Iconset this is by default the third icon.

2. Draw a line via the Measure tab

Choose the **Measure** tab in the Annotations and Measure dialog box.

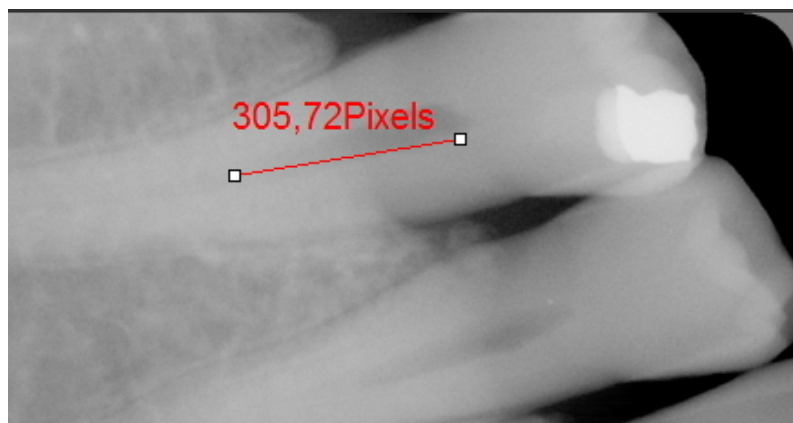


The Measure annotations will appear with a list of different annotations that can be added to the image. The usage is explained in the article '**Working with annotations**' (Section 6.2.4).

Click the **Line** button



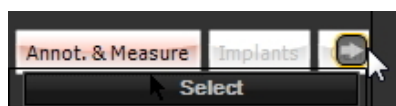
Press and hold the **LEFT** mouse button while **drawing a line** on the image.



You will notice that the measurement is in **Pixels**. This is an indication that the image is not calibrated.

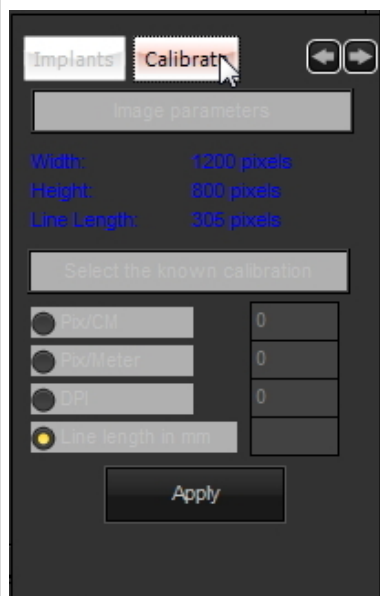
3. Calibrate the image

Click on the **small arrow to the right** to activate the calibration tab. *

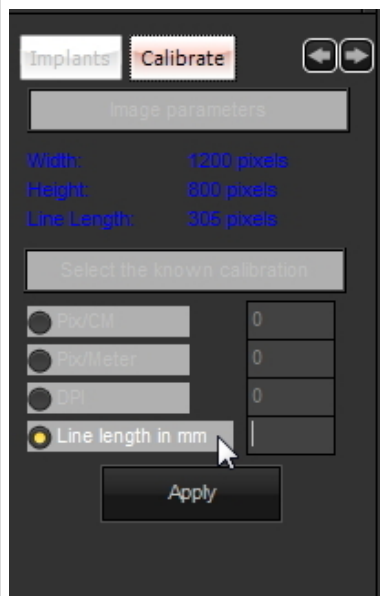


* Only if you have the Implant module, you will have to do this step otherwise you will see the Calibration tab.

Click on the **Calibrate** tab



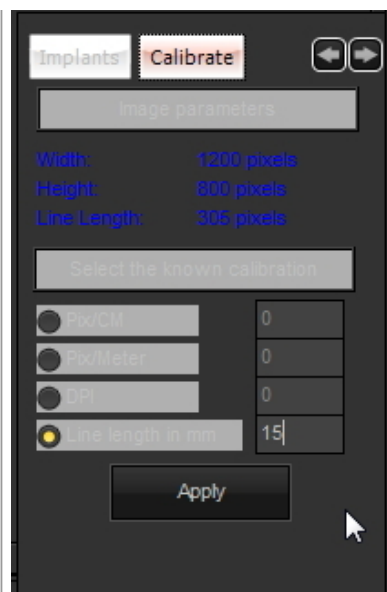
Choose **Line length in mm**.



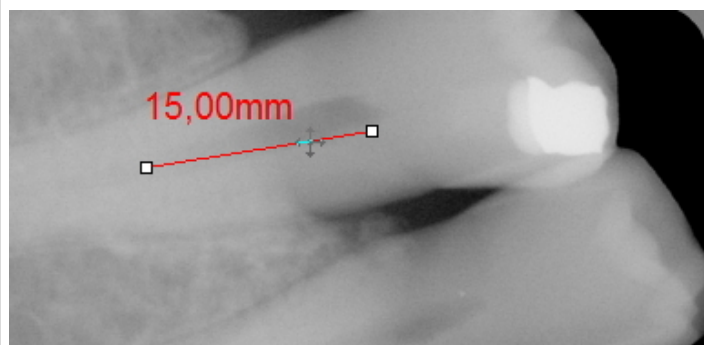
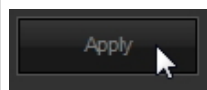
Fill in the **length in mm** of the line you have just drawn.

In this example we have chosen for 15mm, this means the line we have drawn on the image is 15mm long.

💡 It can be practical that when acquiring the image, you also integrate a **ruler**. In that way you can easily **calibrate** by using the ruler as a guide.



Click on **Apply**.

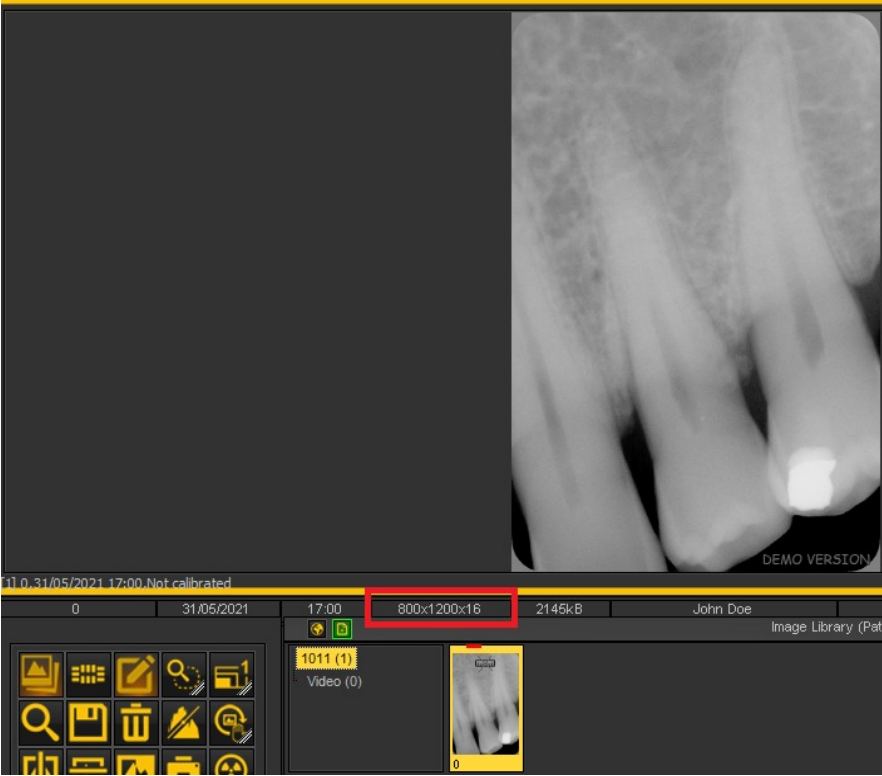


Your image is calibrated.

Once you have calibrated this type of image and you can save the calibration values in the **calibration table**. Adding the calibrated value has the advantage that every time you have an image of the same size as the new calibrated image, the image will automatically be calibrated. Take note on the Pixels/Meter value. You will need to fill this number in the calibration table.

Method 2: adding value to calibration table.

Action	Explanation
1. Image resolution	
load an image to the viewport by double clicking on an image in the image library.	The image will be displayed on the screen and additional info will be visible



The screenshot shows the Mediadent software interface. At the top, there's a large area displaying a dental X-ray of a tooth. Below the image, a status bar contains various information: '11.0, 31/05/2021 17:00, Not calibrated', '0', '31/05/2021', '17:00', '800x1200x16' (highlighted with a red box), '2145kB', 'John Doe', and 'Image Library (Pat...)'. On the left side, there's a toolbar with various icons for image manipulation. Below the toolbar, there's a section labeled '1011 (1)' and 'Video (0)'. A small thumbnail of the X-ray image is visible in the bottom right corner of the interface.

Take note of the image resolution.
In our example the image resolution is 800x1200x16.


Where as:

width = 800
height = 1200

2. Add calibration to calibration value

Click on "options > Calibration table"

The calibration table will open.



The screenshot shows the 'Calibration Table [4]' window. It contains a table with three columns: 'Width', 'Height', and 'Pixels/Meter'. The table has four rows of data. Below the table, there are four buttons: '+ Add', 'Delete' (with a trash icon), 'Save' (with a floppy disk icon), and 'Exit' (with a power icon).

Width	Height	Pixels/Meter
468	578	21700
578	800	21700
890	1420	43500
1156	1600	43500

Press the "add" button to add an entry.

This will give you the possibility to

Calibration Table [4]		
Width	Height	Pixels/Meter
468	578	21700
578	800	21700
890	1420	43500
1156	1600	43500
<div> <div>+</div> Add <div>🗑</div> Delete <div>💾</div> Save <div>🔌</div> Exit </div>		

add a new calibration value to the table.

Fill in the values from image resolution and pixels/meter value. Width and height are values from the **Image Resolution**. Pixels/meter value are either gathered from technical documents provided from various technical sources or the value is gathered from **method 1**.

In our example width was 800 and height was 1200.

Once you are finished, press "save" to apply the changes.

💡 New: If either the width or the height is always the same, but the other value is variable you now have the option to apply a wildcard.

Simply add "-1" as a value to either width or height and fill in the other values and the calibration will be done automatically.

I.e. if Images always have a resolution of 1500xnx16 where n (height) is always changing, a possible entry in the calibration table will be:

width = 1500

height= -1

Pixels/meter= 40000*

*Value to be given from technical documentation or to be checked from Method 1

7.4.3 How to recover a deleted image

You will be able to **retrieve** a deleted image from the **Recycle bin** if this has been activated in the **Mediadent Setup>General Settings**.

Read the article about the **General Settings (Section 10.2)** of Mediadent, topic '**How to avoid deleting files permanently**' to find out how to **recover** a deleted item from the Recycle bin.

7.4.4 Working with the filter window

Real-time filters in Mediadent may instantly provide an improved image quality and may facilitate diagnosis, treatment planning and follow-up.

The filter window will give you a visual overview of the different filters applied to your image. It is a great visual aid to help you choose the best image quality for you.

Once you have chosen, you can apply it to the image.

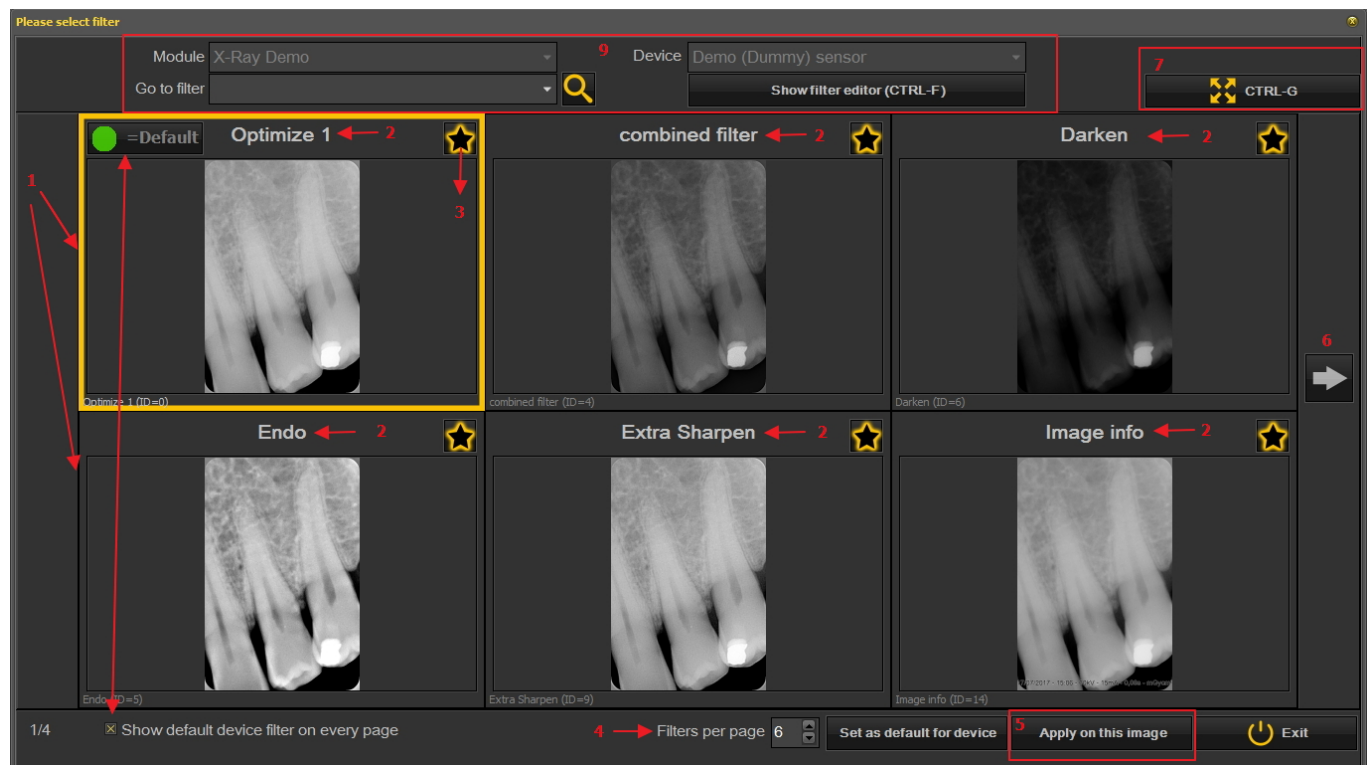
For future usage, you can also set this quality (filters) as the default.

The filter window is accessible to you during the **acquisition** of an image or afterwards, just by clicking on the **icon**.






1. Overview of the Filter window screen

Here you will find the different functions of the windows screen



Nr. Explanation

- 1 In this example you see 6 filters applied to your image
- 2 The name of the different filters applied : Optimize 1, Optimize 2, Endo ... These filters are defined in the setup 'Optimize'. See the article **The optimize module (Section 11.1)**
- 3  By clicking on the  icon, you select the filters you want always want to see on the first screen. This is practical when you have a large number of filters, you can select your favorite filters. Once selected, you will see this icon 
- 4 The number of filters shown on 1 screen can be configured. In this example 6 filters are proposed. You can have from 2 to 10 filters on your screen.
- 5 Once you have selected a filter that gives you the best image quality, you can apply this filter to the image.

- 6 Click on the arrow and show the next series of filters.
- 7 Click on the icon and you will see the selected image full screen. Click on the icon again and return to the original screen.
- 8 Show default device filter on every page. This can be switched on or off.
- 9 Additional information about the image. What is the device the image is taken with (module and device). Go to the image with the selected filter. Show the filter editor = the filter script will be shown (See **How to use the filter script (Section 4.7)**)

2. Using the Filter window screen in acquisition

These are the steps you can follow to use the windows screen in acquisition mode

Icon



Explanation



Prepare the X-ray device so an image can be taken. Click on the acquisition icon.

Grab an image




The Filter window icon is available. Once selected, the Filter window will open with an overview of the multiple filters.

Choose the desired filter and apply it to the image.

 The filter window can be activated on any selected image. Just load the image in the viewport and select the filter window icon. 

7.5 The Mediadent status mount

7.5.1 How to create a status mount


 **Warning :** Do not **modify** existing Status Mounts, since the changes will be removed when updating Mediadent.


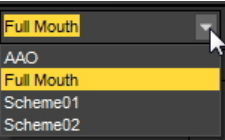
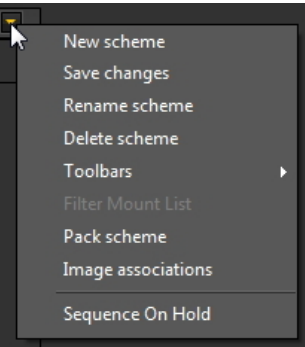
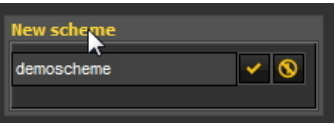
You have the possibility to create **your own Status Mount**. This will allow you to create your own procedure (sequence) for the acquisition of images.


In the Status Mount you can **associate** teeth or tooth and if necessary to modify the **orientation** of the sensor.

This is done in the following steps:

1. Create a Status Mount

 Before you create a new Status Mount you have to be sure the **Desktop** is Unlocked.
This is done in the Mediadent menu: **Display > Desktop Panels > Lock desktop** (this option should **NOT** be checked)
If this option is checked, you will need to uncheck it by clicking on Lock desktop.


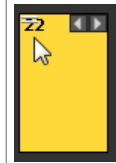
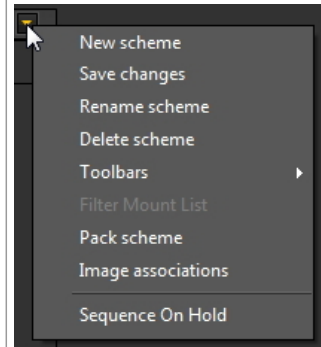
Action	Explanation
Create a Status Mount	
In Mediadent Menu : Display > Desktop Panels > Mount view or 	Activate the Status mount – See topic ' What is a Status Mount '.
	Choose an existing Status Mount that is similar to the one you want to create.
	Go to the Status mount controls and click on the icon to expand the Submenu . Choose to Create a New Scheme from the menu
	Give the Scheme a name .



Result : A blank Status Mount with the Status Mount boxes as defined in the selected standard Status Mount, in this example the Full Mouth.

Now you are ready to adapt this Status Mount.

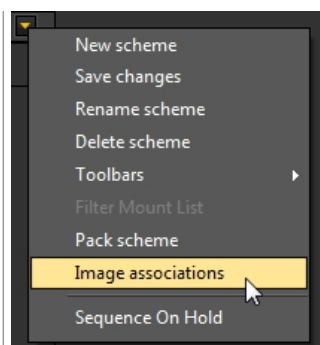
2. Activate the Status Mount boxes

Action	Explanation
Add or remove Status Mount boxes	
	<p>You can add or remove Status Mount boxes by using the Image container configurator.</p> <p>When a box is green, the Status Mount box is visible in the scheme</p> <p>When a box is red, the Status Mount box is not visible in the scheme</p> <p>Press on one of the boxes and a Status Mount box will appear.</p> <p>The box will highlighted which is an indication that it has just been added.</p> <p>The boxes are numbered, but they are not yet associated with a tooth or teeth.</p>
	<p>Because you have Unlocked the desktop you can move the box to another position in the Status Mount by using the handle (two little bars in the top left hand corner of the box).</p> <p>To unlock the desktop, choose Display > Desktop Panels > Lock desktop (make sure this option is not checked).</p>
	<div>⚠ Don't forget to Save the scheme.</div> <p>Activate the Sub menu (Right hand top) in the Status Mount box.</p>

You can **repeat this process** (adding and/or removing Status Mount boxes) until you have defined the number of Status boxes you want in your Status Mount.

3. Associate teeth/tooth to the Status Mount boxes

Action	Explanation
Overview Image Association	



You can **associate** a tooth or teeth by changing the properties of the box :

Select one of the Status Mount boxes.

You will notice when you select a box the color changes into dark grey.

Choose in the **Sub Menu > Image associations**



The **Image association box** will appear:

Orientation: This will allow you to change the orientation of the Status Mount box.

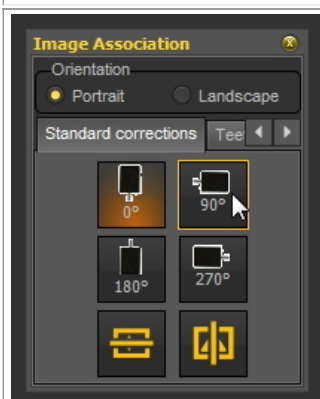
The first tab '**Standard corrections**' represents the **orientation** of the digital sensor. This means if you are using the sensor to capture intra-oral images, you have the possibility to change the orientation via this screen. You also have the possibility to flip the images from left to right or from top to bottom depending on how the sensor is placed in the patient's mouth.

The second tab '**Teeth Chart**' is partly hidden and will allow you to **associate** a tooth or teeth with the Status Mount box.

Change the orientation

Let's take a closer look at the tab '**Standard corrections**'

Depending on the way you place the sensor in the patient's mouth, you will be able to change the orientation.



In this example I will change the Status Mount box to **90°** which is the position in which I place the sensor in the patient's mouth.


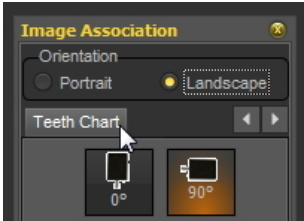
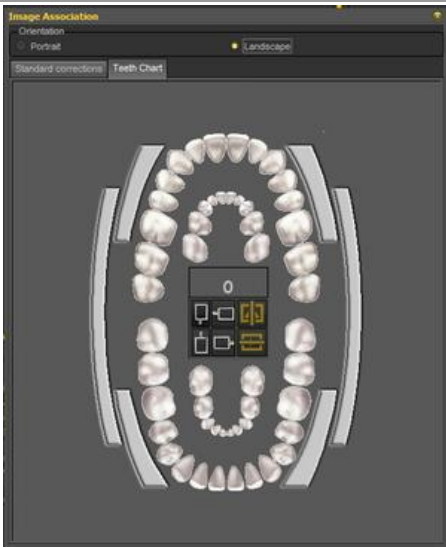

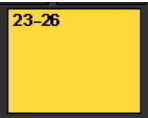



We can also change the visualization of the Status Mount box.

The image I want to take in the Status Mount box has to be in **landscape**, here I can change this.

You will see the Status Mount box orientation change into **landscape**.

Associate teeth/tooth to a Status Mount box

	<p>I will now associate teeth. Click on the right arrow in the dialog box to view the teeth association tab.</p>
	<p>Click on the Teeth Chart tab</p>
	<p>The Teeth Chart is presented. At this moment no teeth are associated to the selected Status Mount box.</p>
	<p>You can now associate a few teeth to the Status Mount box. In this example I will associate teeth 23 to 26 to this Status Mount box. You do this by selecting the teeth in the teeth scheme. To learn more about working with the Teeth Chart, you can read the article 'Working with The Teeth scheme'.</p>
	<div><p> You can close the dialog box by clicking on the X in the top right corner, the association is saved. You can also click on the Status Mount box to confirm your association.</p></div> <p>The result : The name of Status Mount box will change and reflect the teeth association.</p>



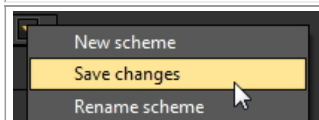
In the middle of the teeth chart you can indicate how the **sensor** will be placed in the patient's mouth (for example in an angle of 90°).

This will be linked to the Status Mount box by selecting this in the Teeth scheme.

You will see a **glow** appearing, this means that this is the way the intra-oral sensor will be used.

⚠ Again, important is to **click on the Status Mount box** or to **close** the dialog box to save the changes made to the Status Mount box.


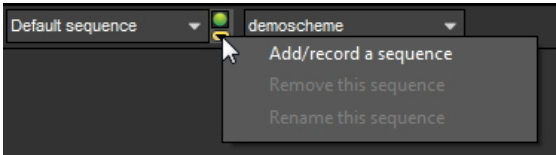
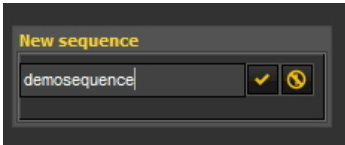
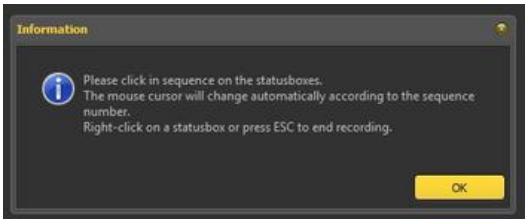
You will need repeat this process for every Status Mount box in the Status Mount.



After you have repeated this process for all the Status Mount boxes, you need to **save** the status mount.

Activate the **Sub menu** (Top right) in the Status Mount box

4. Change the sequence for X-ray taking

Action	Explanation
In Mediadent Menu : File > Acquire FMX -or- 	You can change the sequence in which the images need to be taken. To check the order or sequence in which the images will be taken you can go to the Acquisition mode with Status Mount .
Choose Add/record a sequence 	If the sequence toolbar is not activated, please read the article How to activate the sequence selector toolbar (on-line documentation) You can create your own sequence by clicking on the small pull down arrow in the Sequence selector .
	First give the sequence a name .
	The following information box will appear explaining how you can change the sequence of the status boxes.
Click on the Status Mount box where the first image has to appear. Repeat this process until you have selected all the boxes.	The cursor will change into a 01 . This is the sequence number. Click on the Status Mount box where the first image has to appear.



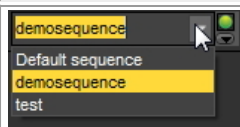
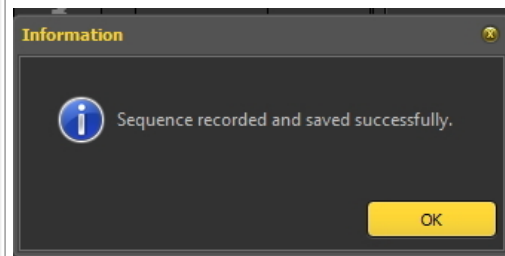
You will see the cursor change into **02**, now click on the Status Mount box where the **second image** has to be stored in.

The cursor will change into **o3**, ...

Repeat this process until you have selected all the boxes.



Once you have finished click on **Esc** or right-click on a status box.



You will be able to select the new sequence that you have created.

 Don't forget to **Save** the Status Mount.

7.6 Mediadent export/import

7.6.1 How to send an image by e-mail

Sending an image by e-mail can be practical if you want to **share** your images with colleagues or a hospital.

Within Mediadent it is possible to send an image, but you will need to have an **e-mail system** installed on your PC. Examples of most common e-mail programs are Outlook, Outlook Express, etc.

 Before you send an image via Mediadent, you need to **test** if your e-mail system is working by sending an e-mail message via your e-mail program.

There are **2 ways** in which you can send images via your e-mail program.

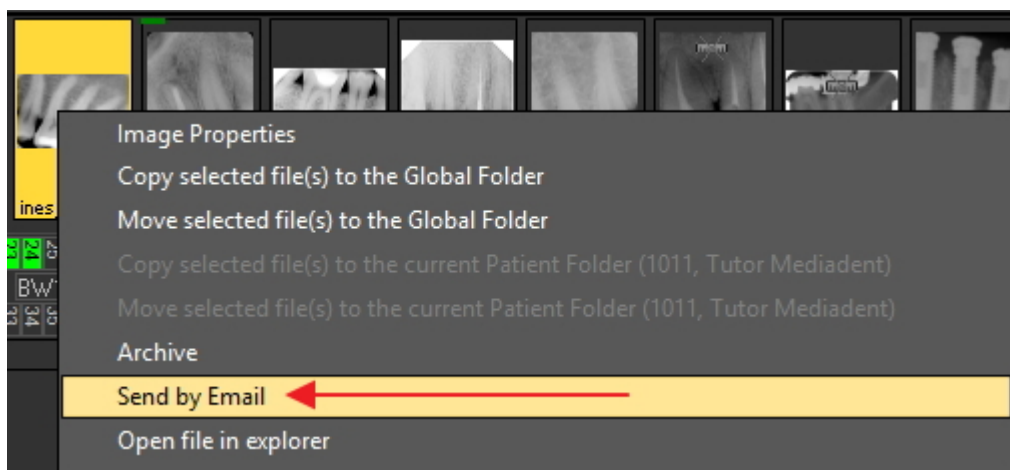
- Via the Image Library icons
- Via the Export Picture Directory option

1. Sending an e-mail directly from the Image Library of the patient

The easiest way is to **select** the images you want to send in the Image Library of the patient, choose the **Send by Email** (via the menu) or click on the **e-mail icon**.

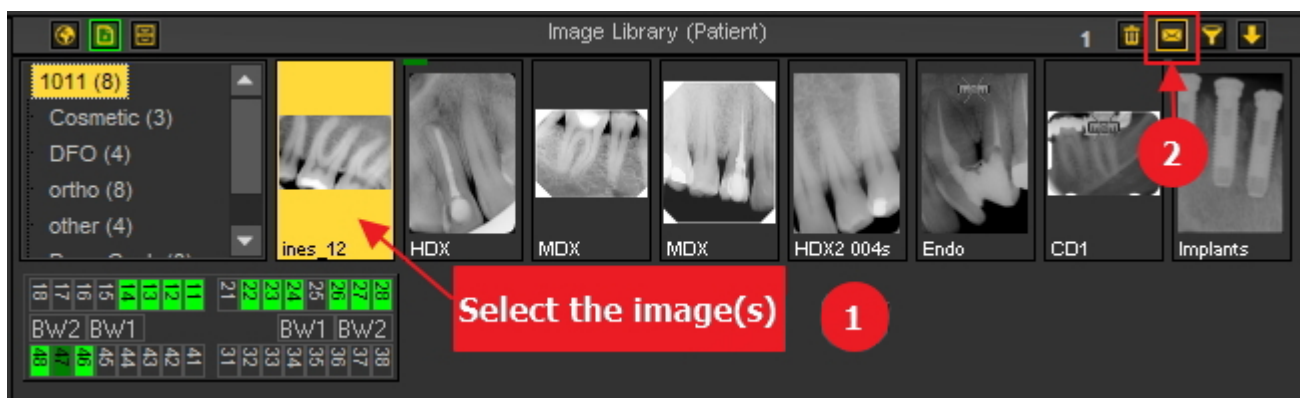
Send by Email (via the menu)

1. Select the image(s) in the image library
2. Click on the **RIGHT mouse button** to activate the menu
3. Choose '**Send by Email**'



Send by using the e-mail icon

1. Select the image(s) in the image library
2. Click on the **e-mail icon** in the Image Library

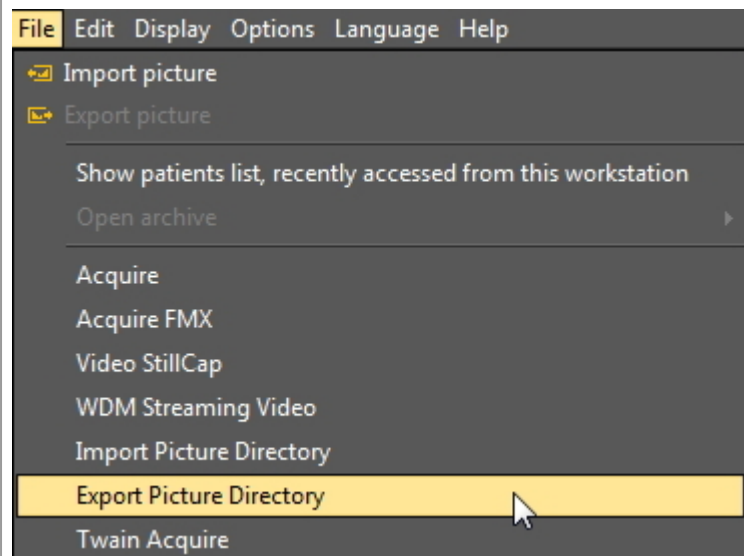


2. Via the Export Picture Directory.

The **second method** is explained in this article.

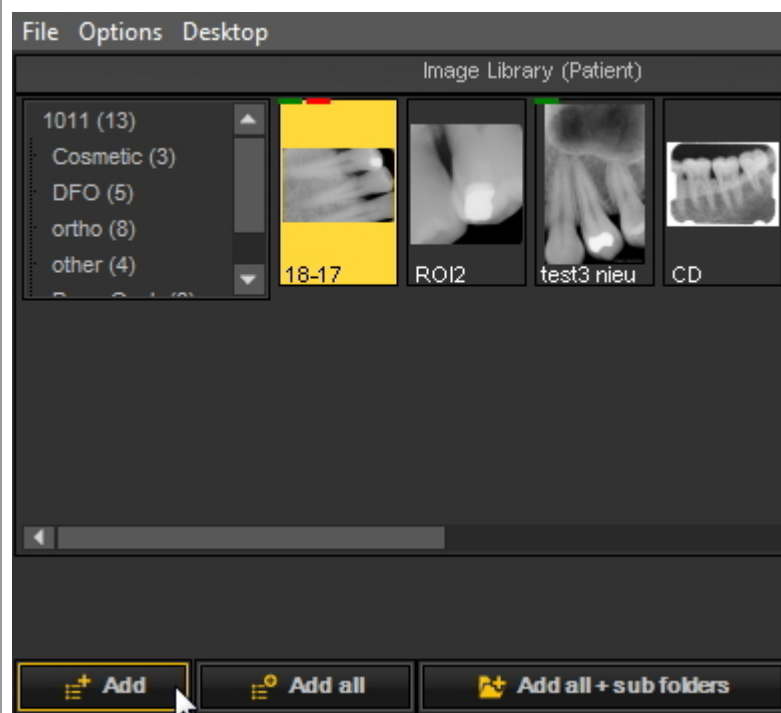
Action

1. In the Mediadent menu you will find the feature in **File > Export Picture Directory**



To get a detailed description of the screen elements, read the topic '**Export Picture Directory screen**' (**Section 6.1.2**).

2. **Click** on the image you want to send.

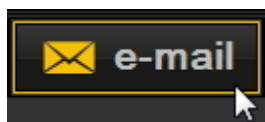


3. Choose '**Add**'.

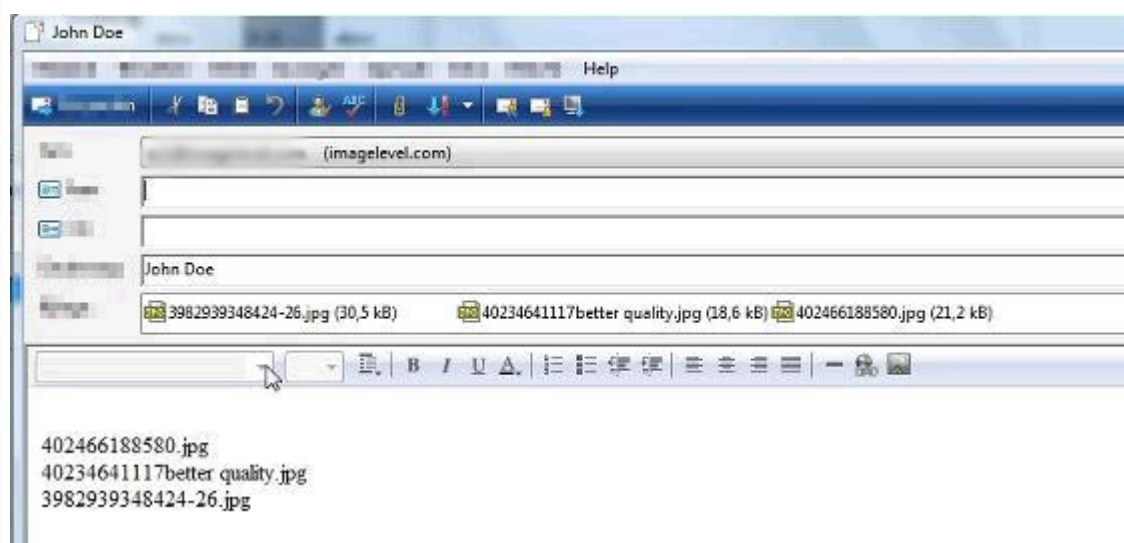
4. The **image** will appear in the **list**:

Selected images, ready for export:			
Image name	Date	Source size	Est. dest. si
18-17	09/07/2015	1586KB	? KB
ROI2	09/04/2015	316KB	? KB


5. Choose the **e-mail button**.



6. Your **e-mail program** will launch and the image will be attached to the e-mail.




7. **Fill in** the recipients names and send the message.

 Use the **'Estimate' button** to get information on the file size. Some **e-mail systems** do not allow you to send more than 5 MB. With the 'Estimate' button you will see the MB size of your attachments to the mail. If it is bigger than the allowed size, you will be able to send your image in separate e-mails. Find more information about the screen elements and buttons in the topic **'Export Picture Directory screen'** (Section 6.1.2).

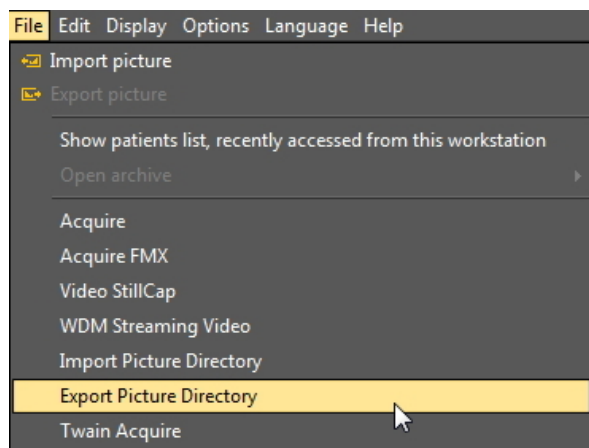
7.6.2 How to export multiple pictures of a patient

Sometimes it can be necessary to export a number of images from a particular patient so they can be shared with colleagues and patients.

 To export **1 picture**, choose for **File > Export picture** in the Mediadent menu.

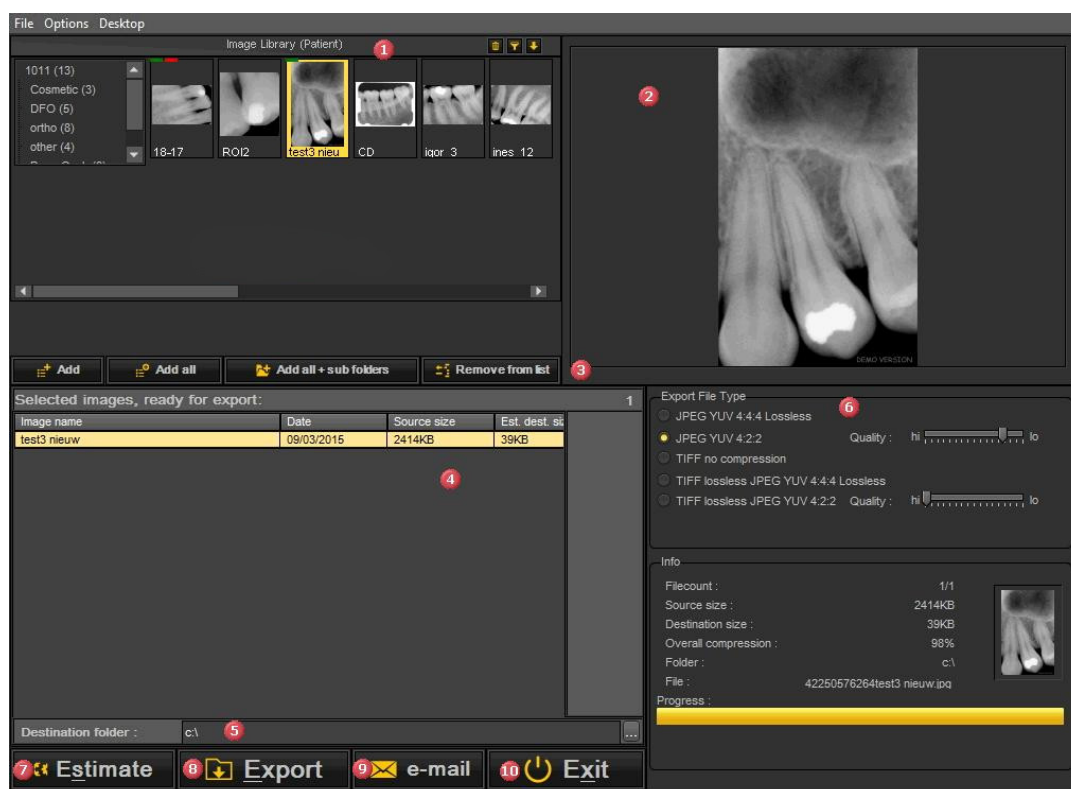
If you want to export **multiple images**, you can use the option **Export Picture Directory**.

Go to the Mediadent Menu and choose **File > Export Picture Directory**



1. Overview of the Export Directory screen

You will be presented with the following screen:

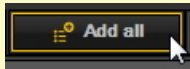
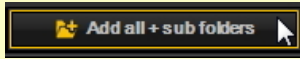

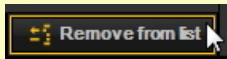




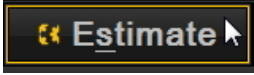
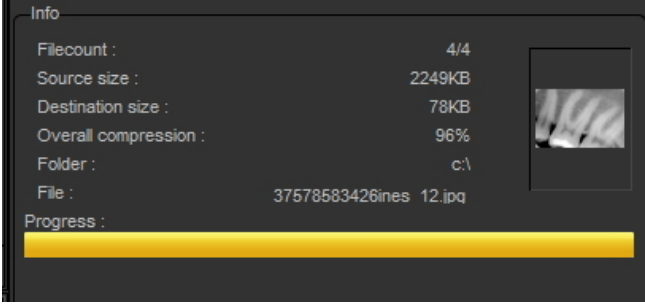
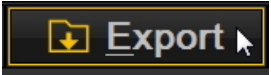
1	Image Library of the selected patient.
2	Viewport: you can preview an image before exporting it.
3	Action buttons: <ul style="list-style-type: none"> • Add: this will add the selected picture • Add all: this will add the pictures in the selected folder of the library • Add all + folders: this will add all the images of this patient • Remove from list: select the images to be removed from the list
4	List of files to be exported.

5	Destination folder: the folder you want to export the images to.
6	Additional information Export File Type: gives you the possibility to change the file type in which you want to export the files into. Info: gives extra information on the size of the file, the number of files ... that will be exported. This information will be filled in when clicking the Estimate button.
7	Estimate button: This action button will calculate the file count, source size, destination size, overall compression, folder, files ... This information will be filled in the Info box.
8	Export button: This action button will export the files in the list 4 to the destination folder.
9	E-mail button: This action button will launch your e-mail application and attach the images in the list to an e-mail.
10	Exit

2. Exporting images

To export multiple files from a particular patient follow these steps:


Action	Explanation																				
<p>1. In the Mediadent menu choose File>Export Picture Directory</p> <p>2. Select the images you want to export.</p> <p>Method 1: select the images one by one</p> <p>- Click on the image with the left mouse button to select the image</p> <div><p>💡 If you want to select more than 1 image, you can press and hold the CTRL key and select the images you want to export.</p></div>	<p>There are different ways to select images you want to export.</p> <p>💡 You do not have to select the images one by one.</p> <p>Method 2: If you want to export the images from the selected folder you can use the action button</p> <div></div> <p>Method 3: If you want to export the images from a particular folder and all the underlying sub folders, use the action button</p> <div></div>																				
<p>3. Add the images to the export list</p> <p>- Click the Add button </p> <div><p>Selected images, ready for export:</p><table><tr><th>Image name</th><th>Date</th><th>Source size</th><th>Est. dest. si</th></tr><tr><td>ROI2</td><td>09/04/2015</td><td>316KB</td><td>? KB</td></tr><tr><td>CD</td><td>08/14/2003</td><td>55KB</td><td>? KB</td></tr><tr><td>igor_3</td><td>11/18/2002</td><td>938KB</td><td>? KB</td></tr><tr><td>ines_12</td><td>11/18/2002</td><td>938KB</td><td>? KB</td></tr></table></div>	Image name	Date	Source size	Est. dest. si	ROI2	09/04/2015	316KB	? KB	CD	08/14/2003	55KB	? KB	igor_3	11/18/2002	938KB	? KB	ines_12	11/18/2002	938KB	? KB	<p>Click the Add button to add the selected images to the export list.</p> <p>💡 To remove an image from the list, select the image and click the button Remove from list</p> <div></div>
Image name	Date	Source size	Est. dest. si																		
ROI2	09/04/2015	316KB	? KB																		
CD	08/14/2003	55KB	? KB																		
igor_3	11/18/2002	938KB	? KB																		
ines_12	11/18/2002	938KB	? KB																		
<p>4. Determine the destination folder</p> <p>- Click on the small button next to the Destination folder entry box to open de Windows dialog box</p> <div><p>Destination folder : c:\ </p></div> <p>- Select the correct folder you want to export the images to.</p>	<p>The destination folder is the folder on your PC where you want to store the images.</p>																				

	
<p>5. Get an estimation of the file size</p> <p>- Click the Estimate button</p>  	<p>Before you export the images to your PC you might want to get an idea of how large the file will become when exporting the files. You can use the estimation button for this.</p>
<p>6. Export to the folder</p> <p>- Click the Export button</p> 	<p>This will export the files to the selected folder.</p>

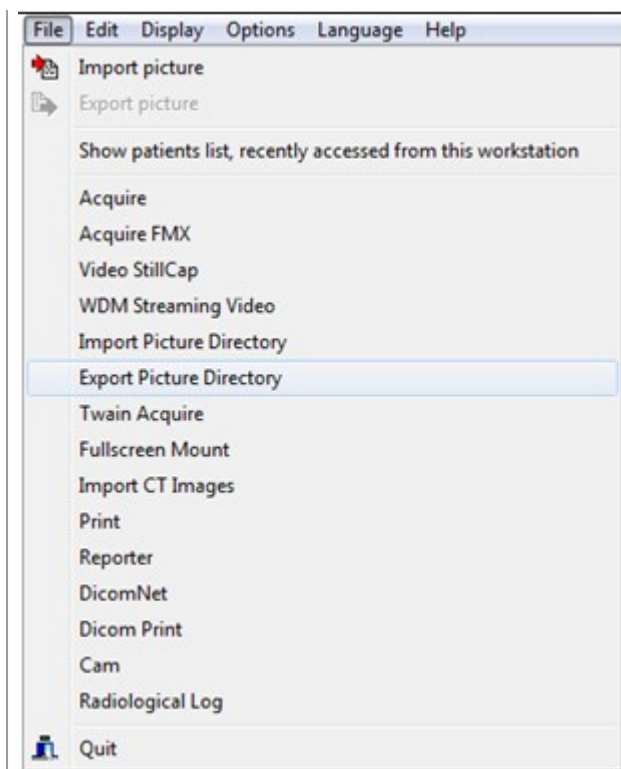
7.6.3 How to burn a CD with images from Mediadent

It can be practical to put the images stored in Mediadent on a CD or DVD.

This is possible through the **Export Picture Directory** option in Mediadent.

 If you have a **Vista** or **Windows 7** machine, you can do this directly from Mediadent. For other operation systems, like **Windows XP**, you have to install a **packet writer** software. This will create an extra drive letter on the computer. Use this drive letter in Mediadent (Step 4.).

Action	Explanation
1. Verify your the disc drive letter.	Place an empty CD or DVD in the disc drive of your computer, and verify the driver letter . You can do this with the file explorer of windows - in this case it is letter F: \
2. In Mediadent, choose File > Export Picture Directory	



3. Select the **drive letter** as destination folder at the bottom of the export window.

4. The folder browser opens, navigate to the disc drive, select it and click OK.

For Windows 7 or Vista, indicate the drive letter where the CD or DVD is inserted.

For windows XP, indicate the drive letter created by packet writer software.

5. We advice to choose the first option '**Like a USB flash drive**'.



⚠ This step is only applicable if you have **Vista or **Windows 7**.**

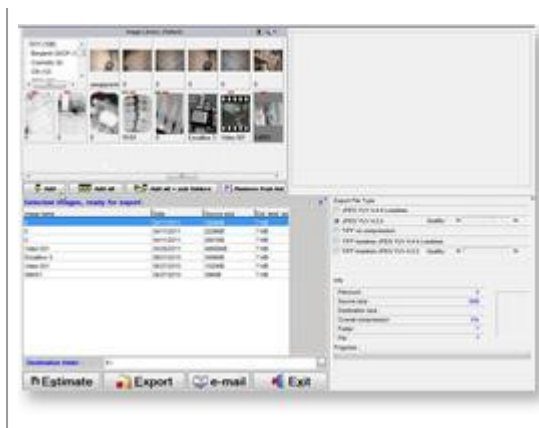
Make sure a new CD or DVD is in the disc drive. Windows will ask in which format you want to use the CD.

If you choose '**Like a USB flash drive**', you can use the CD multiple times, this means, afterwards you can burn additional pictures to the same CD.

If the option '**With a CD/DVD player**' is chosen, the disc will be opened with an interface.

6. Select the images and click on the **Export** button.

Select the images, videos or documents you would like to export, by selecting the files in the Image



Library and click on the **Add** button, if you like to export them all, please click the export all button

When all the files are selected, please click the **Export** button, the CD will be written. If the progress bar is full green, the export is done, and the CD can be ejected.

(Windows will close the write session on the CD automatically.)

7. Click on the **Exit** button.

You will leave the export window and return to the Mediadent main screen.

7.6.4 How to send any type of file from the file explorer to Mediadent

As a dentist you often receive images or files concerning your patients from your other dentists.

These images or files get stored on one of your drives. The only way in which you could import these files was through the File Import option of the File Import image library.

Based on feedback from our customers, we now offer an additional option to add image/files to the image library of your patients.

You can now add files/images straight from the Windows file explorer directly into the patient folder.

Select 1 file or multiple files and use the **right mouse button** to activate the menu.

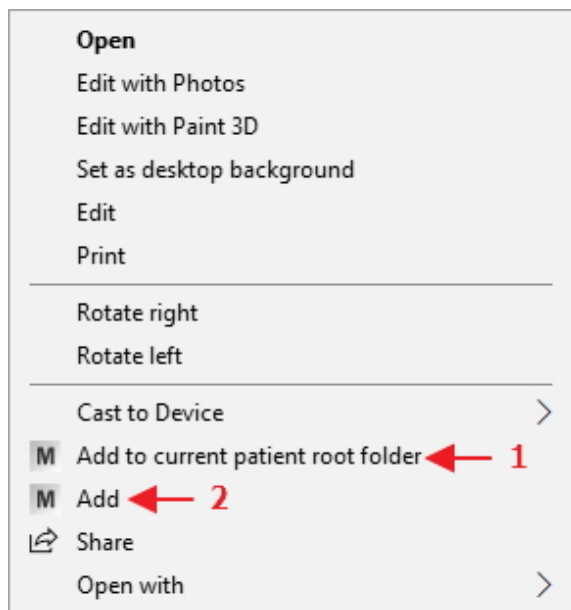
There are 2 additional options added to the menu, **Add to the current patient folder** and **Add**.

There are 2 option :

1. Add to the **current patient folder** (First option)

The selected file will be send to the active patient (the patient that has been opened in Mediadent)

2. **Add** to any location within the active patient's image library or select another patient (Second option)

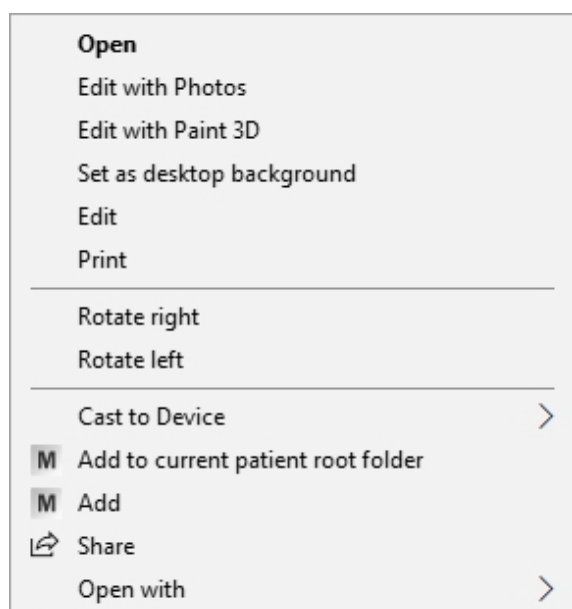


We will explain the 2 options.

Option 1 : Add to the current patient folder

Example : option 1

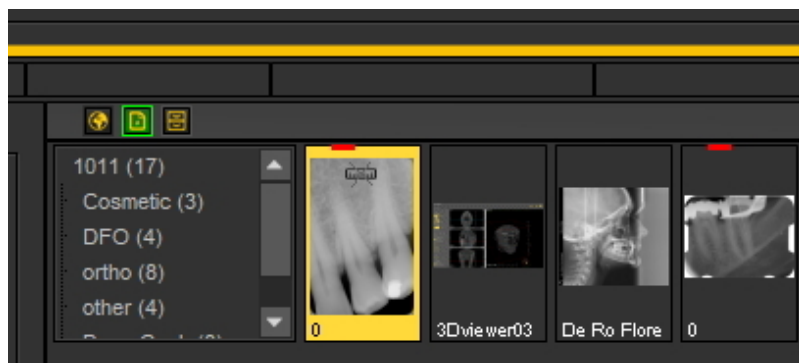
Screen



Explanation

Launch your patient management system, select the correct patient and launch Mediadent.

Right mouse click on the image/file.
In the menu, choose the option : ***Add to current patient root folder***

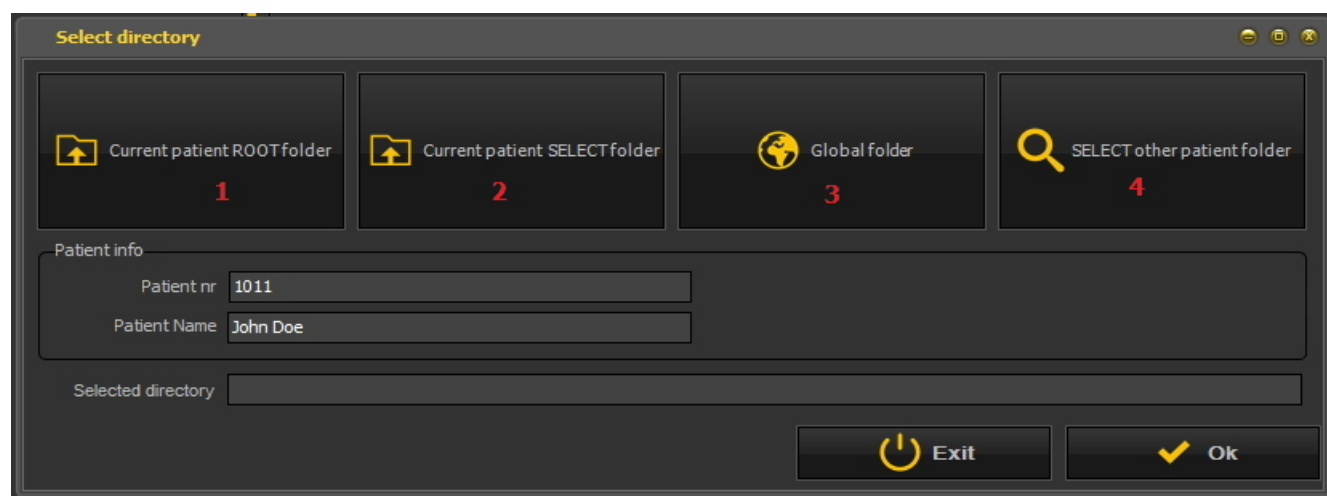


Result : the image will be stored in the root of the selected patient.

Option 2 : Add

With this option you have a variety of possibilities where the selected image or file will be stored :

1. Store in the **current root folder** (this has the same result as choosing the first option **Add to current patient root folder**). The **Patient info** shows the active patient number and patient name.
2. Store in the **current selected folder of the selected patient** : you can have multiple folders in the patients image library, with this option you can choose to add it the selected folder. Read about creating folders in the following article : **Working with the image library (Section 6.5.4)**
3. Store in the **global folder**. The global folder is a folder that is accessible from any patient image library. More information about the global folder can be found in this article : **The global and patient library (Section 12.4)**
4. Before you store the image/file, you can **select another patient folder**.



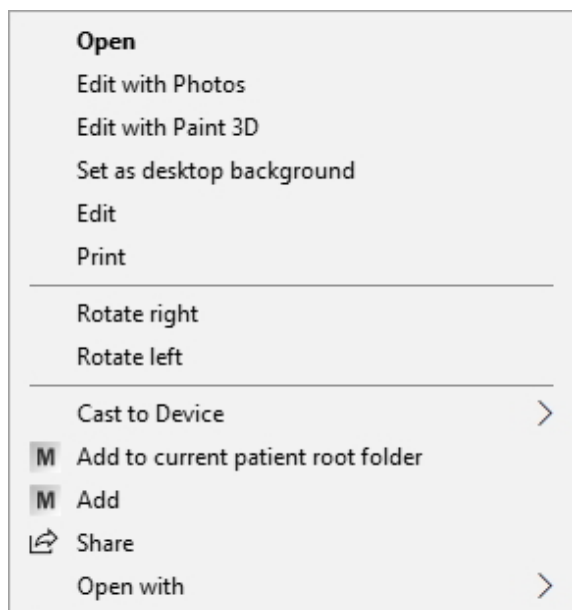
Option 2 : Adding an image/file to the 'Current patient SELECT folder'

Screen

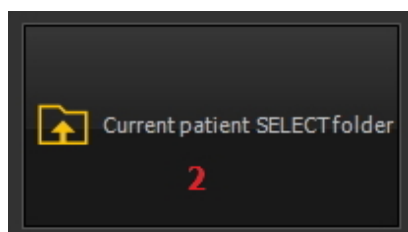


Explanation

Launch your patient management system, select the correct patient and launch Mediadent.

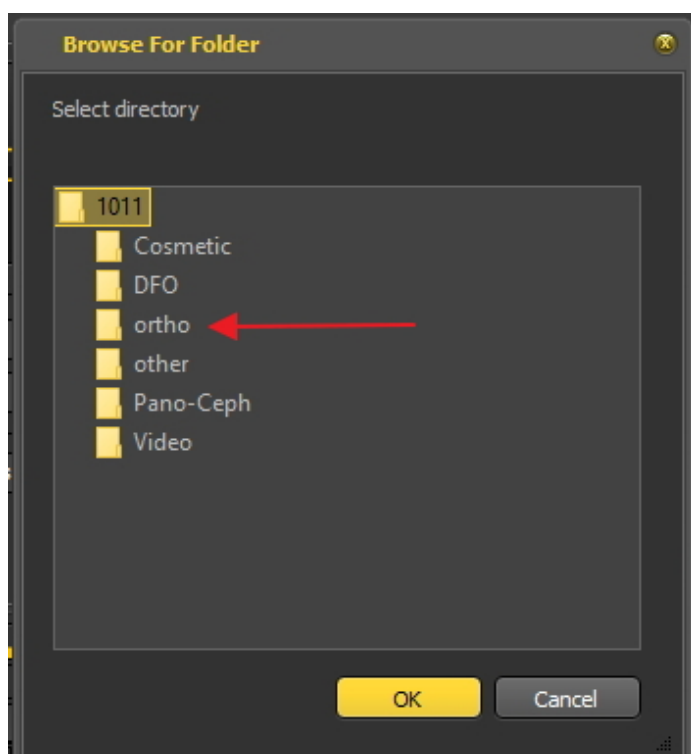


Right click on the image/file and in the menu choose the option **Add**



The option screen will open.

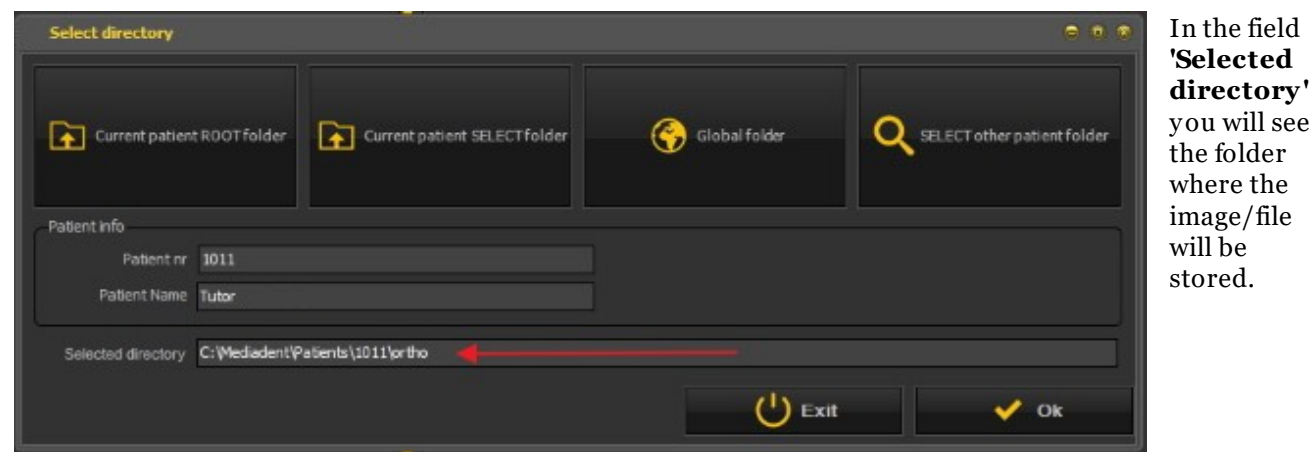
Choose Current patient SELECT folder



The next dialog box will allow you to choose a folder in the patient's image library.

Choose for example 'ortho'.


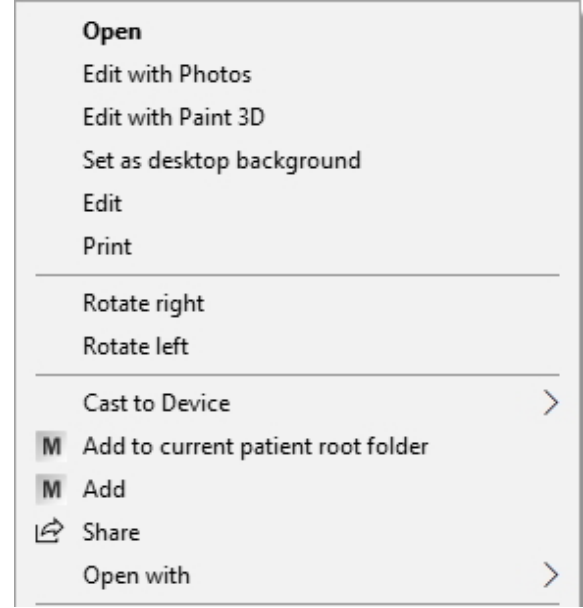
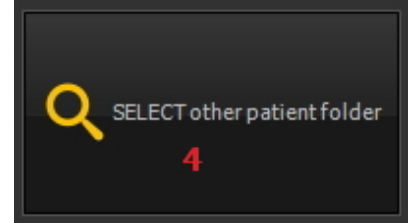
Result : the image/file will be stored in the ortho folder of the patient's image library.



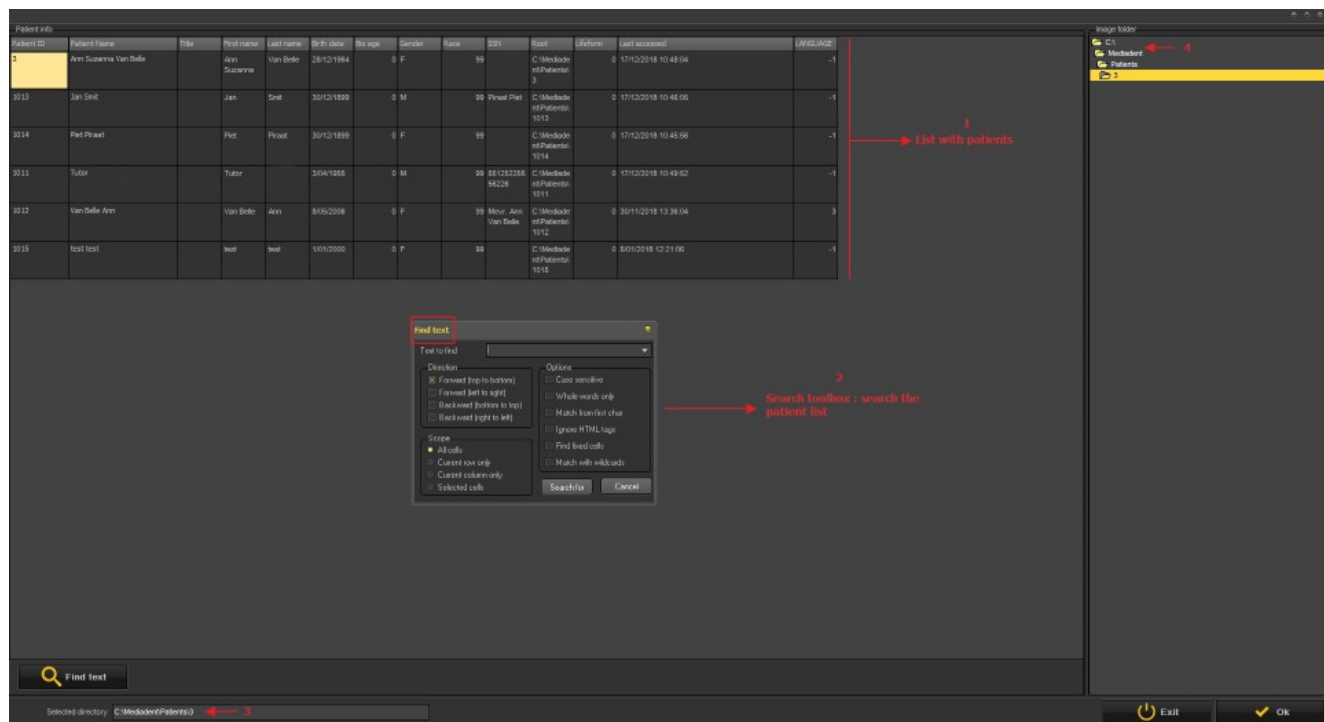
The option 3. Store to the global folder works in exactly the same way as the first option : store to the current patient folder. The only difference is that the image/file is stored in the global folder which is available from any patient folder.

Option 4: SELECT other patient folder

This option allows you to choose another patient folder to store the image/file in. This means you do **not** have to leave Mediadent and go to the patient management system to select another patient. **You can select another patient directly from this option.**

Screen	Explanation
	Mediadent needs to be launched.
	Right click on the image/file and in the menu choose the option Add
	Choose SELECT other patient folder. This option allows you to choose another patient folder. The next dialog box will open.

The next **dialog box will open**. This dialog box allows you to select another patient.



- 1 The patient list you can choose from.
- 2 You have a very extensive search dialog box.
- 3 The directory in which the search will be done
- 4 The active patient image folder where the images/files can be stored.

7.7 Mediadent automation

7.7.1 How to create a macro

What is a macro?

A macro is often used for **repeating tasks**. For example if you often have to choose between acquisition devices you have the possibility to automate these steps.

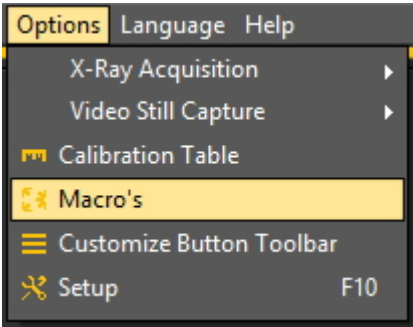
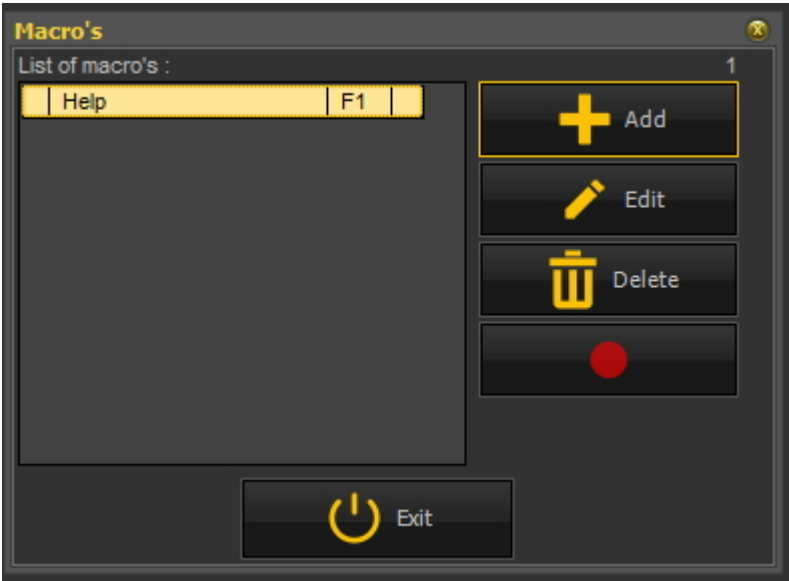
To **create** a macro, you will **record** a number of keystrokes or menu options. Afterwards you can **play** the macro that has been recorded. You can use a **function key** or an **icon** in the Icon set to play the macro.

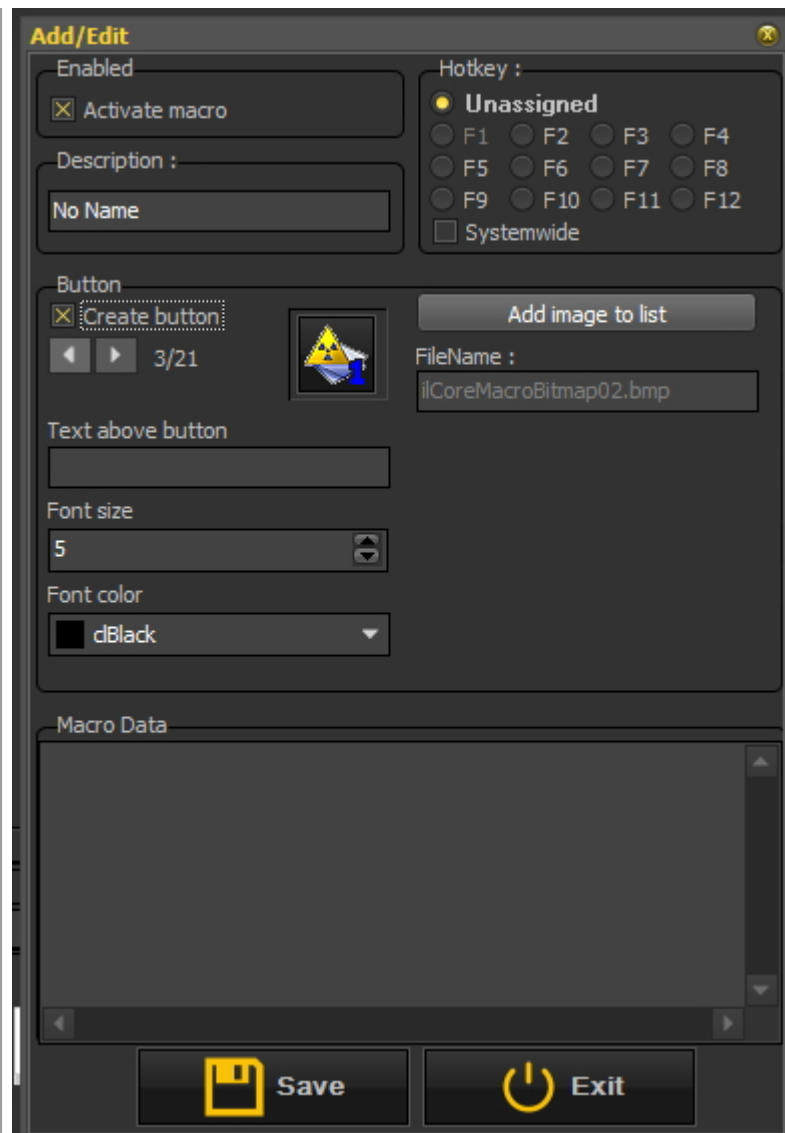
It can be compared to a recording of music that you play over and over again.

You will create a macro in Mediadent in these 2 steps:

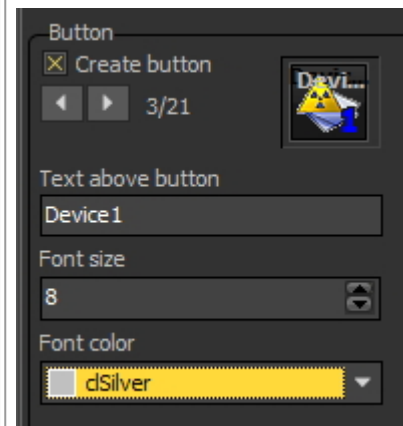
1. **Assign** one of the icons or function keys you will use to **play** the macro. Optionally you can assign a Hotkey* to the macro.
2. **Record** the macro. Record the keyboard strokes or menu options.

Step 1: Assign an icon/hotkey

Action	Explanation
<p>1. In the Mediadent menu choose</p> <p>Options > Macro's</p> 	<p>Activate the Macro's menu.</p>
<p>2. Click on the Add button.</p> 	<p>The Add button allows you to create a new entry in the list of macro's.</p>
<p>3. Click Create Button and choose one of the icons via de scrollbar</p>	<p>In this dialog box you will need to activate Create button and scroll through the scroll bar to choose one of the icons by clicking on it.</p>

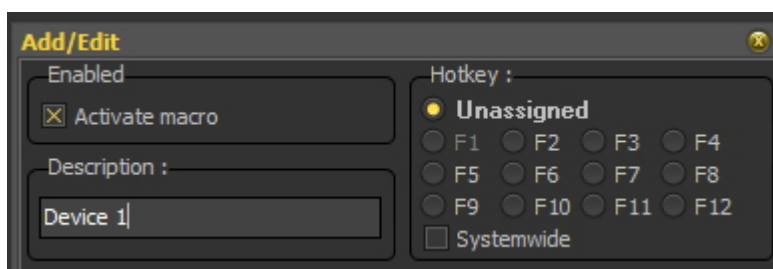


With the **version 8** you can now add **text** to the icon, change the **color** and **fonts size**.



Afterwards you will attach a macro to this icon.

4. Fill in the **name** of the macro in the Description field.



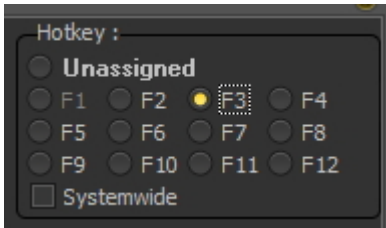

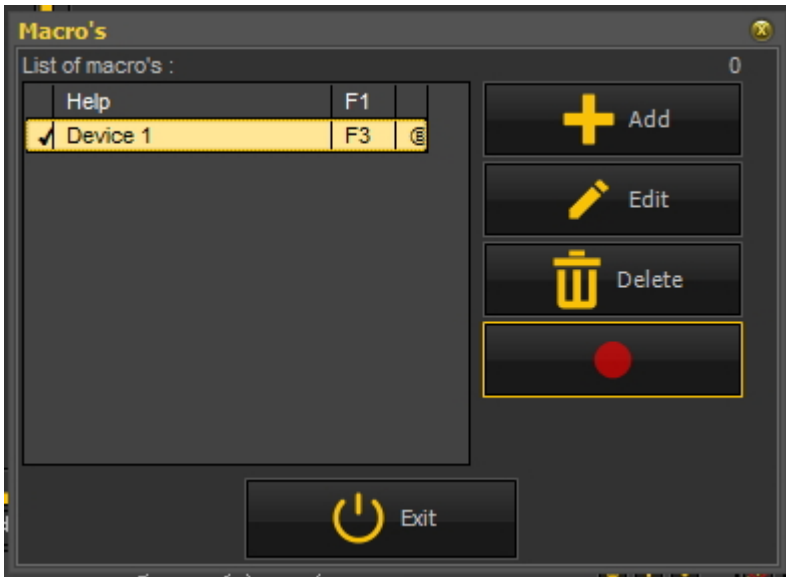
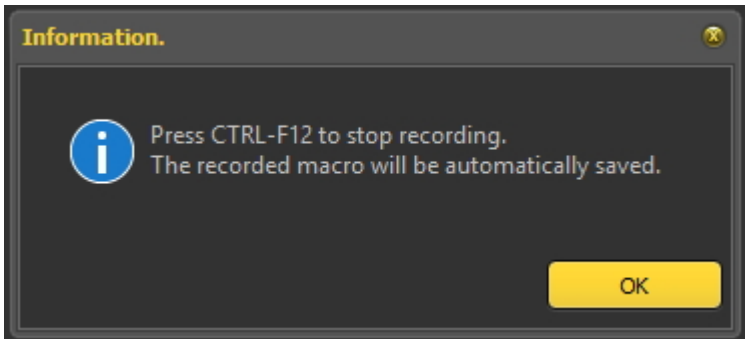
Now you have chosen the **icon**. You will also need to give your **macro** a name.

In this example I filled in 'Device 1'.

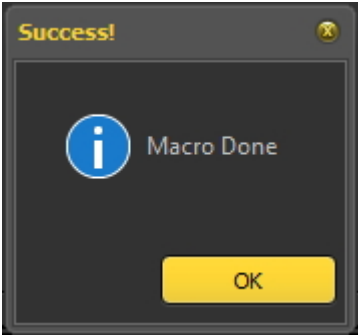
5. Optional : You can assign a **Hotkey**.

This is the shortcut you can use to activate the macro.

For example **F3** means you can use the **Function key F3** (normally found on the top of your keyboard).

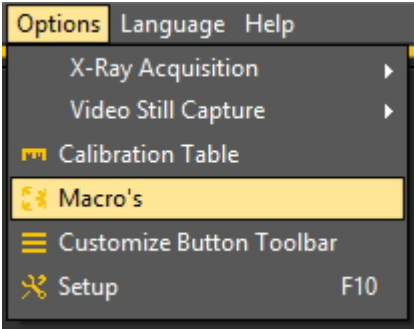
<div></div>		<div></div>	
6. Click on the Save button			
Step 2: Record the macro			
Actions		Explanations	
1. Click on the Record button.		<p>This screen shows that you have created a macro with the name Device 1 and you have assigned the Function key F3 to it.</p> <p>Now we are ready to record the macro.</p> <p>Recording a macro means that you are going to record the steps you want to save in the macro.</p>	
<div></div>			
4.Click OK		<p>The dialog box will explain you use Ctrl+F12 (Function key F12) to finish the recording.</p> <p>+</p>	
<div></div>			
3. Start recording your steps		See the steps you can record in the Example: creating a macro.	
4. When finished recording press the key combination Ctrl + F12.		This will end the recording	

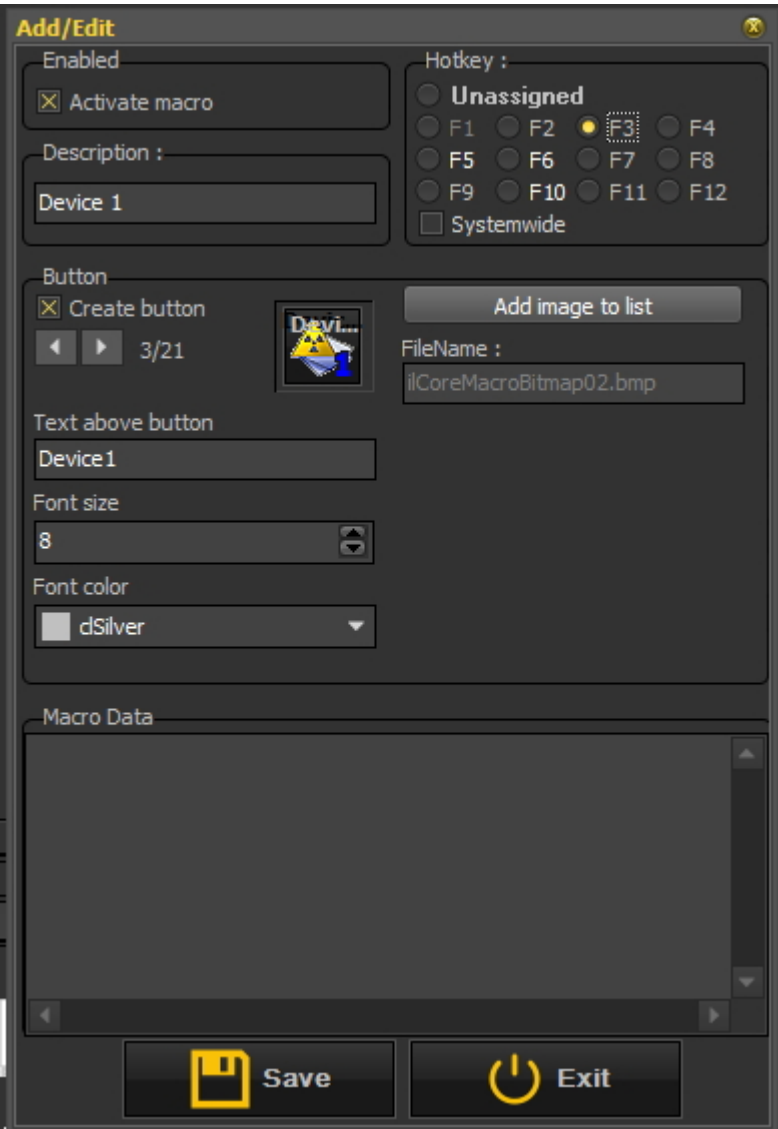
5. Click **OK**

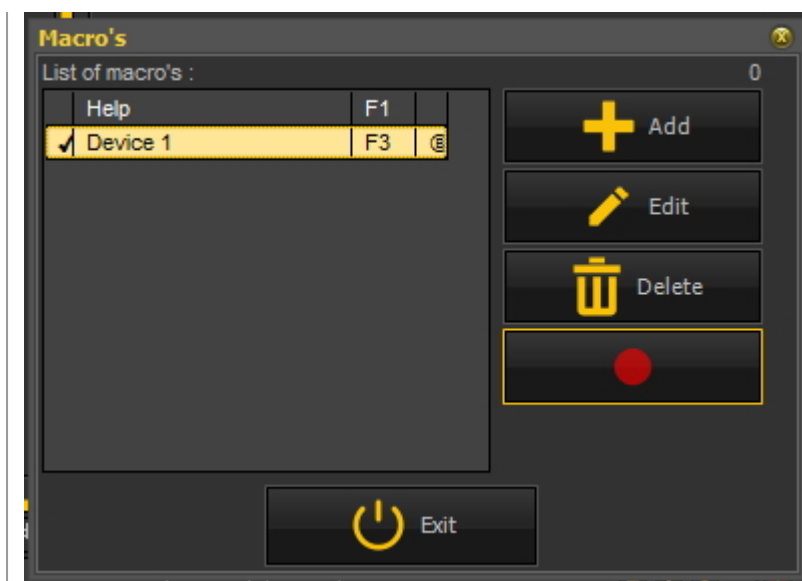


OK to confirm the recording is done.

Example: creating a macro

Actions		Explanations
Step 1. Activate an icon		
<div>1. In the Mediadent menu choose</div> <div>Options > Macro's</div> <div></div>		Activate the Macro's menu.
<div>2. Click on the Add button.</div>		The Add button allows you to create a new entry in the list of macro's.

<div></div>	<p>In this dialog box you will need to activate Create button and scroll through the scroll bar to choose one of the icons by clicking on it.</p> <p>Give the button a name, in this example the name is 'Device 1', change the font size to 8 and change the font color in dSilver.</p> <p>You can assign the hotkey F3 to the macro.</p>
6. Click on the Save button	
Step 2. Record the macro	
7. Click on the Record button. Go through the steps you want to record in the macro.	This screen shows that you have created a macro

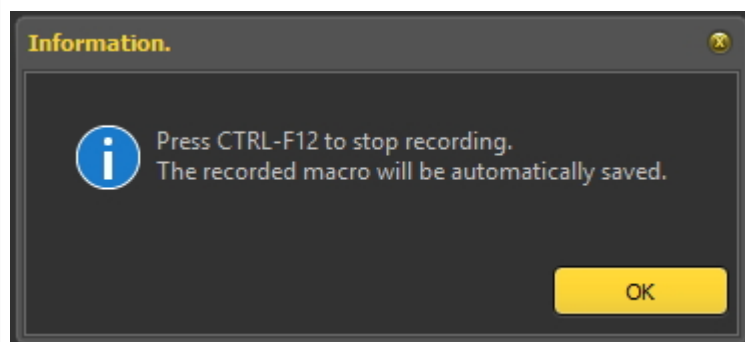


with the name **Device 1** and you have assigned the **Function key F3** to it.

Now we are ready to record the macro.

Recording a macro means that you are going to record the steps you want to save in the macro.

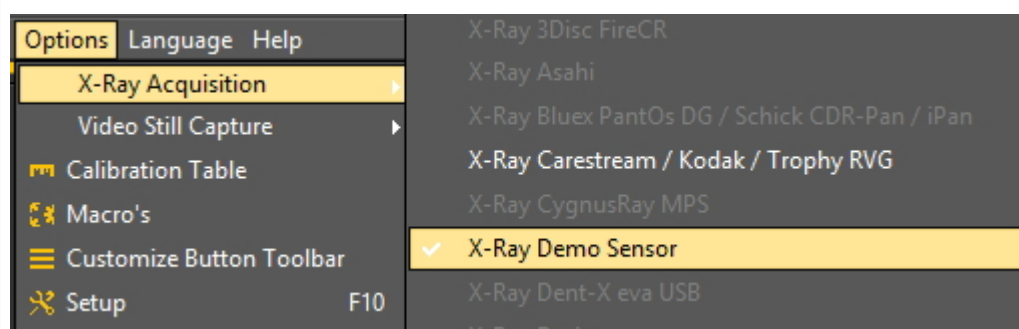
8. Click **OK**



Once you are finished with all the steps you want to record in your macro you can use **Ctrl-F12** to stop the recording.

Step 3 Example : Recording the steps for automatically selecting the X-Ray Demo sensor

9. Choose **Options > X-Ray Acquisition > X-Ray Demo Sensor**


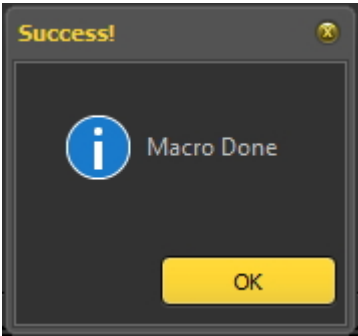



These are the steps I want to record in my macro.

10. Click on the **Acquisition** icon in the icon bar



Click on the icon.

	<p>The screen of the acquisition device opens.</p> <p>Depending on the device you have chosen you will get other screens.</p>
<p>11. To end the recording Ctrl + F12</p>	<p>Use the key combination Ctrl + F12 (Function key 12)</p>
<p>12. Click OK</p> 	<p>.</p>
<p>13. Test the macro by clicking on the Icon you have assigned the macro to or use the Hotkey combination.</p> 	<p>In my case I assigned the macro to the icon.</p>

8 New: Quick Reference

8.1 Overview icons

In this article we will briefly explain the usage of the iconset and give an overview of the different icons and their function.

It will offer **a great overview** of the possibilities of Mediadent.

When an **image is loaded** into a Viewport, you will see the active relevant icons.
























New Mediadent v8 functionality



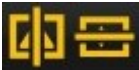

















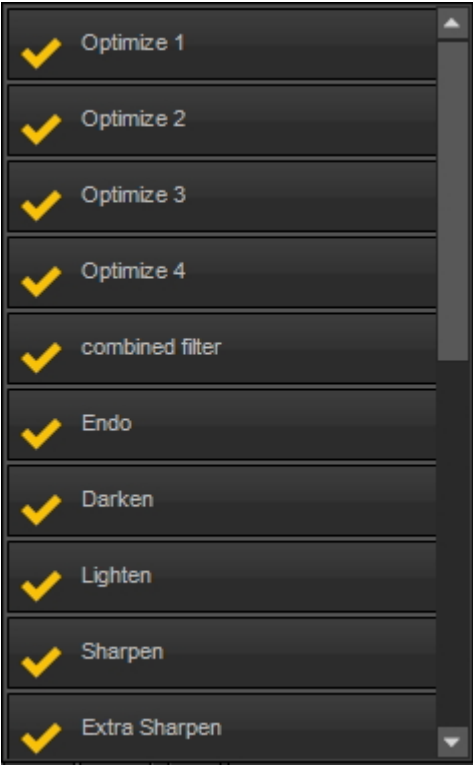








The **new filter window** provides you with a visual view on how to enhance the **quality** of you image.



Working with the filter window (Section 4.9)




Icon	Previous icon	Explanation
		<p>Icon to activate the Image Library. The image library contains all the images of the selected patient.</p> <p>Articles concerning the Image Library:</p> <p>Working with the image library (Section 6.5.4)</p> <p>Change the order of the images (on-line documentation)</p> <p>How to search for images (Section 7.3.3)</p>
		<p>Icon to activate the Status Mount.</p> <div style="border: 1px solid black; background-color: #ffffcc; padding: 5px;"> <p> If the icon has a green glow it means that there are a number of Status Mounts defined.</p> </div> <p>Articles concerning the Status Mount:</p> <p>A status mount (Section 12.3)</p> <p>Working with the status mount in acquisition mode (Section 6.4.2)</p>


		<p>Icon to activate the Annotations.</p> <p>Article concerning the Annotations: Working with annotations (Section 6.2.4)</p>
		<p>Icon to choose the shape of the Region of interest.</p> <p>Press and HOLD the left mouse button until the icon expands.</p>  <p>Article concerning the Region of interest: Working with region of interest (Section 6.2.6)</p>
		<p>Icon to choose the number of Viewports.</p> <p>Press and HOLD the left mouse button until the icon expands.</p>  <p>Articles concerning the Viewports: A viewport (Section 12.1) Working with viewports (Section 6.1.3) Manipulating the Viewport (on-line documentation)</p>
		<p>Icon to activate the Zoom Window.</p> <p>Article concerning the Zoom Window: Working with the zoom window (Section 6.2.5)</p>
		<p>Icon to save the image.</p> <p>Articles concerning saving images: Saving an image (Section 5.4) Overview of the specific Extra Info and Keywords (Section 6.5.2)</p>
		<p>Icon to delete the active image.</p> <p>Articles deleting images: How to recover a deleted image (Section 7.4.3) Working with the image library (Section 6.5.4)</p>
		<p>Icon to activate the histogram.</p> <p>Articles concerning the histogram: How does the histogram work? (Section 12.5) Working with windowing (Section 6.2.2)</p>

		<p>Icon to rotate the active image 90°.</p> <p>The second function of the icon is the possibility to 'free hand' rotate the image. Press and hold the left mouse button on the icon and the second version will become available.</p> <p>Freehand rotation ('Rotate freehand' in the on-line documentation)</p>
		<p>Icons to flip the vertical or horizontal.</p>
		<p>Icon to invert the active image.</p>
		<p>Icon to print the images.</p> <p>Articles concerning printing images:</p> <p>Printing images (Section 5.5)</p> <p>Printing the Status Mount (on-line documentation)</p>
		<p>This is one of the most important icons in Mediadent. When clicking on the icon, you will launch the acquisition mode and you will be able to use your acquisition device.</p> <p>Articles concerning acquiring images:</p> <p>Acquiring an image (Section 5.2)</p> <p>Working with the status mount in acquisition mode (Section 6.4.2)</p>
		<p>Icon to make acquisition through the Status Mount.</p> <p>Articles concerning the Status Mount:</p> <p>A status mount (Section 12.3)</p> <p>Working with the status mount in acquisition mode (Section 6.4.2)</p>
		<p>Icon to activate the WDM Video Still Capture module. This module will allow you to use your camera to take pictures.</p> <p>Article concerning the Video Still Capture module:</p> <p>Working with the Video Still Capture module (Section 6.7.1)</p> <p>If you are using an Durr Vistacam the icon will look like this :</p>
		<p>Icon to activate the WDM Streaming Video module.</p> <p>Article concerning the WDM Streaming Video module:</p> <p>Working with the WDM Streaming Video module (on-line documentation)</p>

		<p>Icon to activate one of the optimization profiles. The optimization profiles can enhance the quality of the images.</p> <p>Press and HOLD the left mouse button until the icon expands or click with the right mouse button and the list of optimization profiles will appear.</p>  <p>Articles concerning the optimization profiles:</p> <p>Working with the optimize feature (Section 6.2.8)</p> <p>The optimize module (Section 11.1)</p>
		<p>Icon to reload the original saved image. The original image can always be retrieved.</p>
		<p>Icon to activate the devices that use the TWAIN interface.</p> <p>Articles concerning the TWAIN module:</p> <p>Working with the TWAIN module (on-line documentation)</p>
		<p>Icon to activate the Full Screen status screen.</p> <p>Articles concerning the Full Screen Status screen:</p> <p>The Full screen Status mount (on-line documentation)</p> <p>HT 17 How to export the Full Screen Status Mount (on-line documentation)</p>
		<p>Icon to launch the Reporter module. The Reporter module is a separate module. If you do not see this icon, it has not been activated. Contact your dealer for more information.</p>

		<p> If the icon has a green glow it means that there are documents for that patient in the Reporter module.</p> <p>Articles concerning the Reporter module:</p> <p>Working with the Reporter Module (on-line documentation)</p>
		<p>Icon to launch the Dicom network module.</p> <p>Articles concerning the Dicom module:</p> <p>Dicom module (on-line documentation)</p>
		<p>Icon to launch the Dicom print module.</p> <p>Articles concerning the Dicom module:</p> <p>Dicom module (on-line documentation)</p>
		<p>Icon to apply an auto contrast to the image.</p> <p>Articles concerning filters:</p> <p>Working with Filters (Section 6.2.7)</p>
		<p>Icon to apply the sharpen filter to the image.</p> <p>Articles concerning filters:</p> <p>Working with Filters (Section 6.2.7)</p>
		<p>Icon to apply a noise reduction filter to the image.</p> <p>Articles concerning filters:</p> <p>Working with Filters (Section 6.2.7)</p>
		<p>Icon to apply the cosmetic module.</p> <p>Articles concerning the cosmetic module:</p> <p>Cosmetic module (on-line documentation)</p>
		<p>Icon for using the D.F.O. (Dental Facial Orthopedics) analysis tool. It offers the possibility to quickly generate an orthodontic analysis. For more information contact your local distributor.</p>
		<p>Icon to apply filters to your image.</p> <p>Articles concerning filters:</p> <p>Working with Filters (Section 6.2.7)</p>
('HT 12 How to import images' in the on-line documentation)		<p>Directory Import icon. This is an optional icon. By default this icon is not activated.</p> <p>Articles concerning the directory import :</p> <p>HT 12 How to import images (on-line documentation)</p> <p>To add this icon to your icon bar, please read this article : How to customize the iconset (Section 7.2.2)</p>
		<p>Directory Export icon. Like the above, this icon is also not activated by default.</p> <p>Articles concerning the directory export :</p>

		<p>How to export multiple pictures of a patient (Section 7.6.2)</p> <p>To add this icon to your icon bar, please read this article : How to customize the iconset (Section 7.2.2)</p>
		<p>Icon to exit Mediadent. Mediadent can be configured NOT to close, this will speed up the process of launching Mediadent through a patient management system.</p>
		<p>This is the Dental Eye icon. This additional module that is used together with the Dentaleypad. This intelligent dental camera follows a work flow so it focuses at the right spot, zooms in and mirrors the images independently. More information about this new camera can be found on this website : DentaleyePad.</p> <p>This camera is seamlessly integrated into the Mediadent Status. This allows for e.g. automatic tooth/teeth association.</p> <p>Articles concerning the DentalEyepad integration can be found here: How to use the Dentaleypad camera in Mediadent ('Dentaleypad' in the on-line documentation)</p>

 You can **hide** unused icons. Read the article **How to customize the iconset (Section 7.2.2)** to learn how to do this.

8.2 Overview Menu

9 New: Questions and answers

This sections gives an overview of support issues we encounter frequently.

The issues are described and possible solutions are proposed.

What to do when Mediadent launches in DEMO mode? (Section 9.1) (Section 9.1)

9.1 What to do when Mediadent launches in DEMO mode?

Symptom

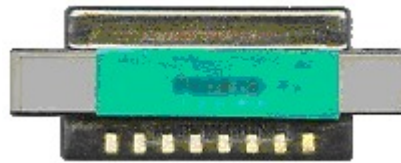
When I launch Mediadent I get the word '**DEMO**' in red on the screen.



Description

The Mediadent software works with a special USB key or parallel **security** dongle.

Pictures of the parallel keys:



Picture of the USB security dongle:



When Mediadent launches in demo mode this can have **several causes**, for example:

1. If this key is **not accessible** on your PC or on the server, Mediadent will launch in demo mode.
2. Another cause can be that the key is **no longer valid** for the installed version of Mediadent

Solution

This problem should be handled by your dealer, but before contacting them you can check the following:

1. Please locate the USB key or parallel key. You will recognize this key because it has a green sticker on it with a number starting with U or N. (U is a single user and N means network).
2. Make sure the key is inserted in the USB port or the parallel port of your PC, or in the case of a network installation on the machine that acts as a server.
3. Check if the key is working correctly (In the case of the USB key you will see a small green light, this is an indication that the key is working properly) - please contact your dealer if you suspect your USB key is broken.
4. In case of a **network installation**, make sure that the **server** with the key is **turned on** and that you have access to the server. You can restart the server and test if Mediadent launches normally.
5. Your **firewall** and or **anti-virus product** can be blocking the access to the security dongle. To test this, turn off the firewall and or anti-virus product and check if Mediadent launches normally. Please contact your **dealer** for the correct firewall and anti-virus configuration.
6. If you have checked this, it is also possible that the key no longer supports the version of Mediadent you are trying to run. Please **contact** your dealer for more information about Mediadent upgrades.

10 Mediadent Setup

10.1 Overview Mediadent Setup

These articles explain the different **configuration** options in Mediadent. This is an **advanced** topic and changes might effect the behavior of Mediadent.

If you have any questions or remarks, please don't hesitate to **contact us**. Read the article **Getting support (Section 13)** for more information.

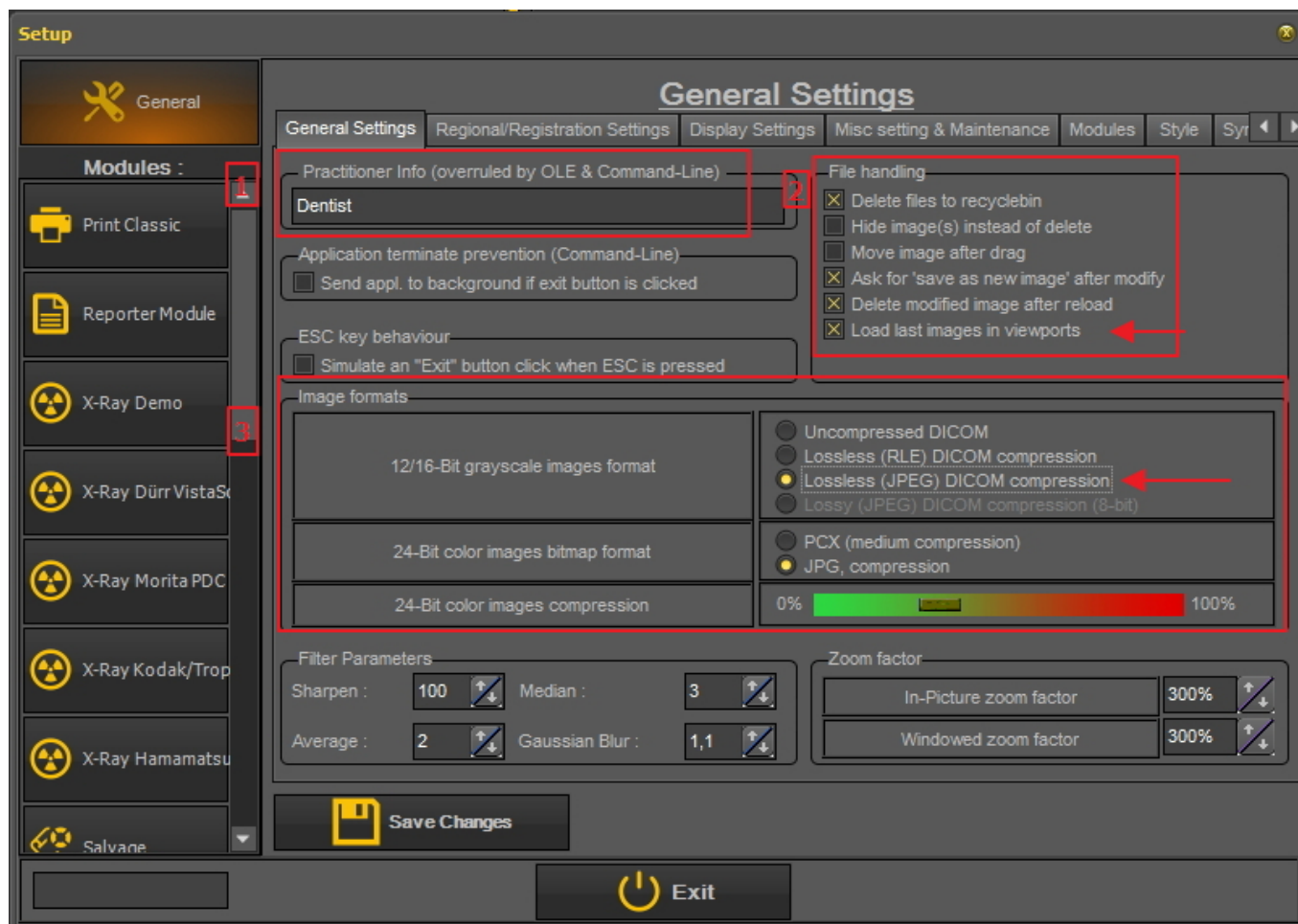
1. **General Settings (Section 10.2)**
2. **Regional Registration Settings (Section 10.3)**
3. **Display Settings (Section 10.4)**
4. **Misc setting and maintenance (Section 10.6)**
5. **Modules (Section 10.7)**

10.2 General Settings

This **advanced section** will show a number of settings you can configure in Mediadent.

In the **General Settings**, you will be able to:

- 1 Change the **Practitioner info**
- 2 Determine how Mediadent will react in certain circumstances like deleting images, saving files etc... You can also avoid permanently **deleting** images
- 3 Indicate how Mediadent has to handle the **images format**



1. How to change the Practitioners Info

If you have a practice with a number of dentists it can be practical to show the **name of the dentist** in the status bar.



There are 2 ways to change the name of the practitioner:

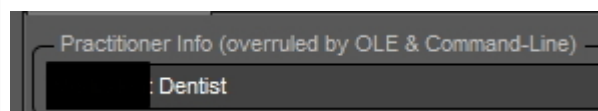
1. Change the name in **Mediadent Setup>General Settings**.
2. Change the name in your **Patient Management System**. The vendor of the Patient management system will be able to help you integrate the practitioner's name into Mediadent.

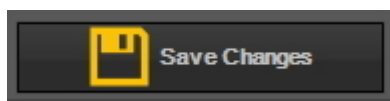
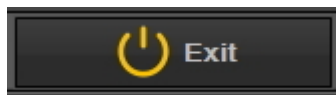
The changes made in your Patient Management System will **override** the settings in Mediadent Setup.

Follow these steps to change the **Practitioner's name in Mediadent**.

Action

1. Go to **Mediadent Setup>General Settings**
2. Fill in the **practitioners** name in the field Practitioner Info (overruled by OLE & Command-Line)



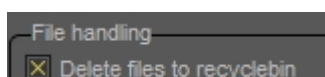
3. Save the changes**4. Exit****2. How to avoid deleting files permanently**

1. To avoid from permanently deleting files from the hard disk, follow these steps.

Action

1. Go to **Options>Setup**

2. In the **General Settings tab** : Select the option '**Delete files to recycle bin**'.



If this is checked, you will always be able to retrieve the images from the **recycle bin**.




You only have to do this **once**. This setting will be retained in Mediadent.

This will only work on that particular PC. It will **not work** in a network configuration.

2. Retrieving images from the recycle bin

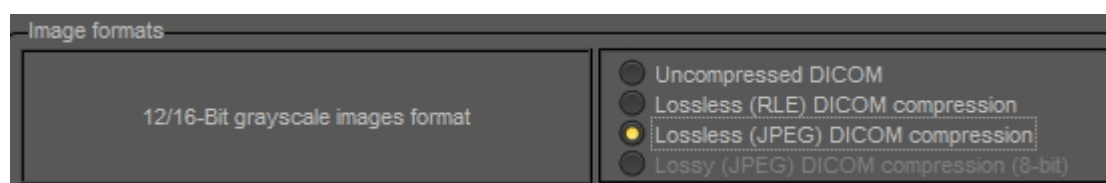
Action	Explanation
1. Double click on the recycle bin of Windows to open it	Open the recycle bin in Windows.
	Look for the image files of Mediadent. The image file consists of 3 files : .DIC file .mih file .bmp file You have to restore these 3 files.
Select the first file and click with the RIGHT mouse button on the file. A menu will appear and select Restore or choose Restore this item in the menu.	Repeat this for the 3 files.

 The images should be taken by the workstation where the recycle bin resides. This will **not** work in a network environment when the server acts as a storage for the images.

3. Important to verify in case of problems

When you experience problems when saving images, please make sure that the Image format is correctly configured.

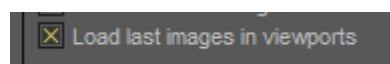
Please verify this option and check the correct compression :



4. View the last images in viewports

It is possible to view the latest images for a particular patient. The next time the patient is opened the last viewed images will be loaded.

Please check this option in the setup

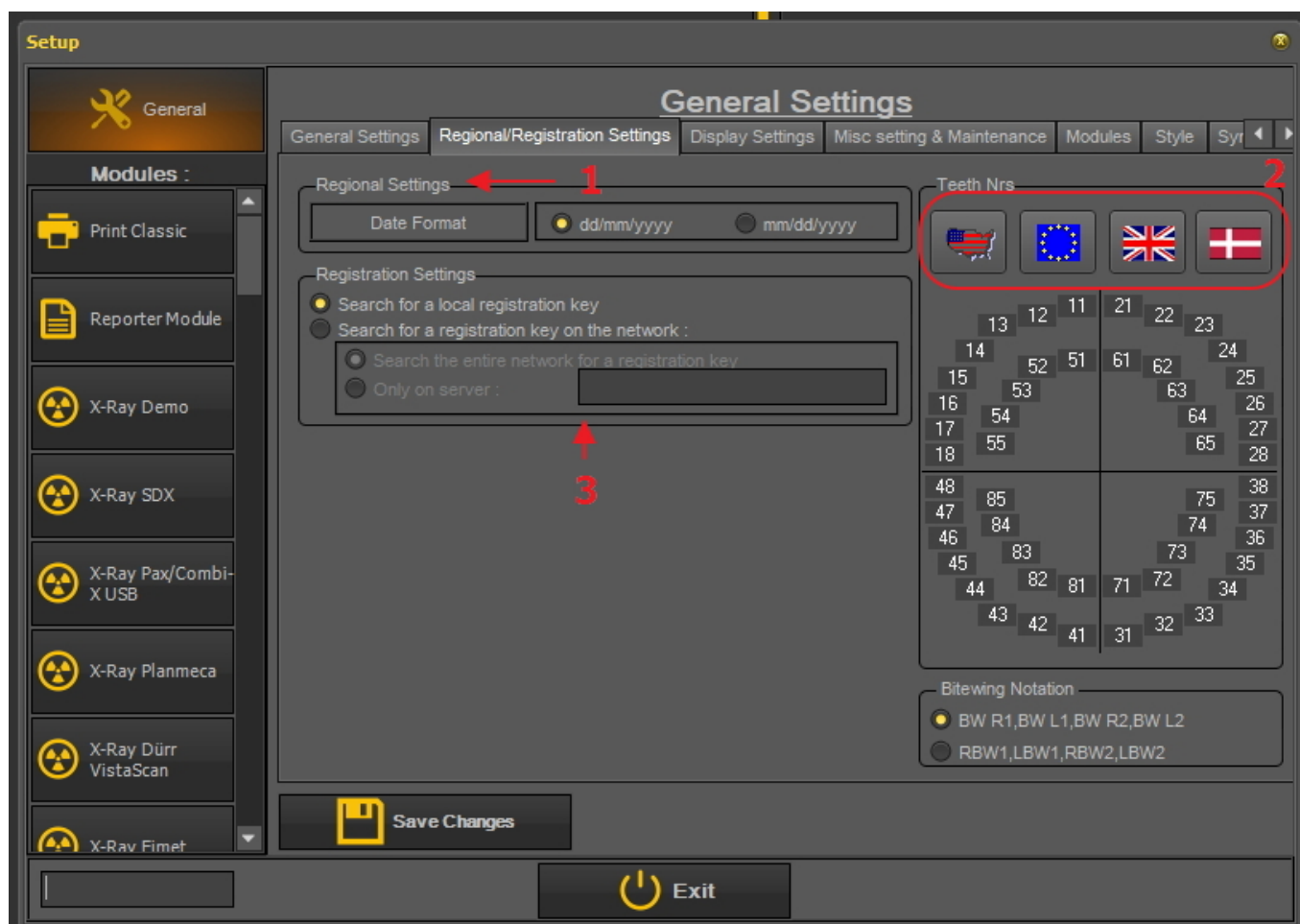



10.3 Regional Registration Settings


In this **advanced section** we will explain the options in the Regional Registration Settings of the Mediadent Setup.

On this tab you will be able to configure the following options:

- 1 The date format:** You can choose between European and American date format
- 2 Teeth Numbers:** You can configure the teeth numbers depending on the standard in your country.
- 3 Registration Settings:** If you have questions about this topic, please contact our Helpdesk. For instructions, read **Getting support (Section 13)**.



 Always **Save Changes** before exiting the dialog box or your changes will not take effect.

 For more information about these settings, contact our Helpdesk.

How to change the teeth numbering


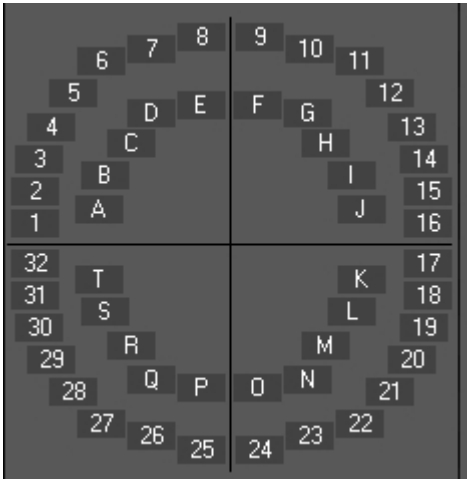

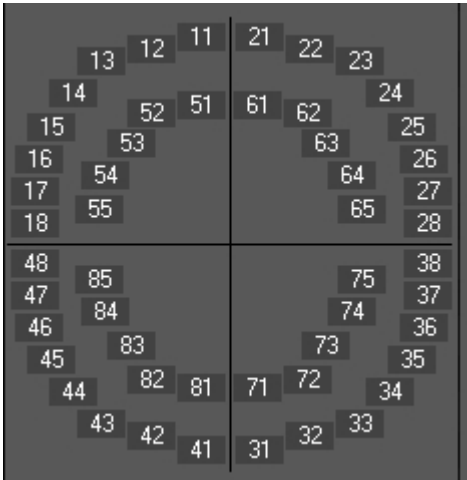

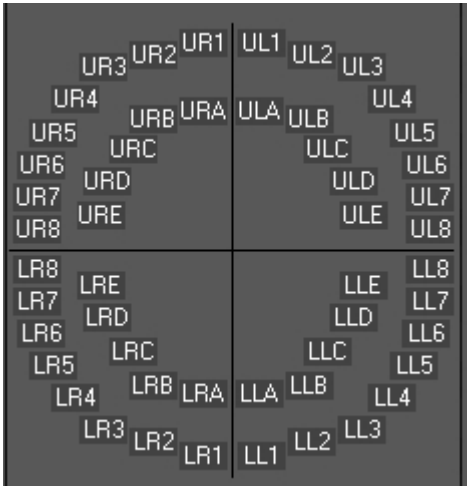
You have the possibility to change the teeth numbering.

There are **3 possibilities**:

- Universal Numbering system
- FDI Two-Digit Notation
- Palmer Notation

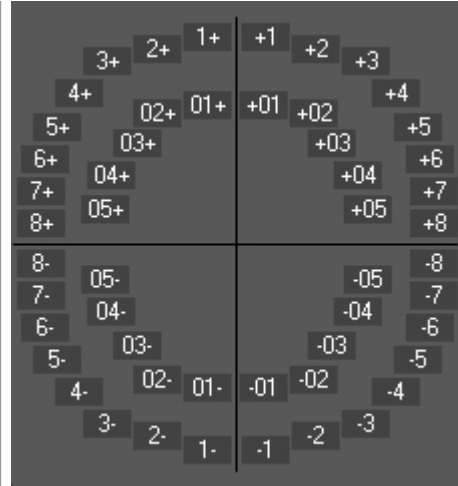
To change the teeth numbering, **click** on the corresponding **icons**

Icon	Result
------	--------

<div></div> <div>Universal Numbering System</div>	
<div></div> <div>FDI Two-Digit Notation</div>	
<div></div> <div>Palmer Notation</div>	



Vitor Haderup notation



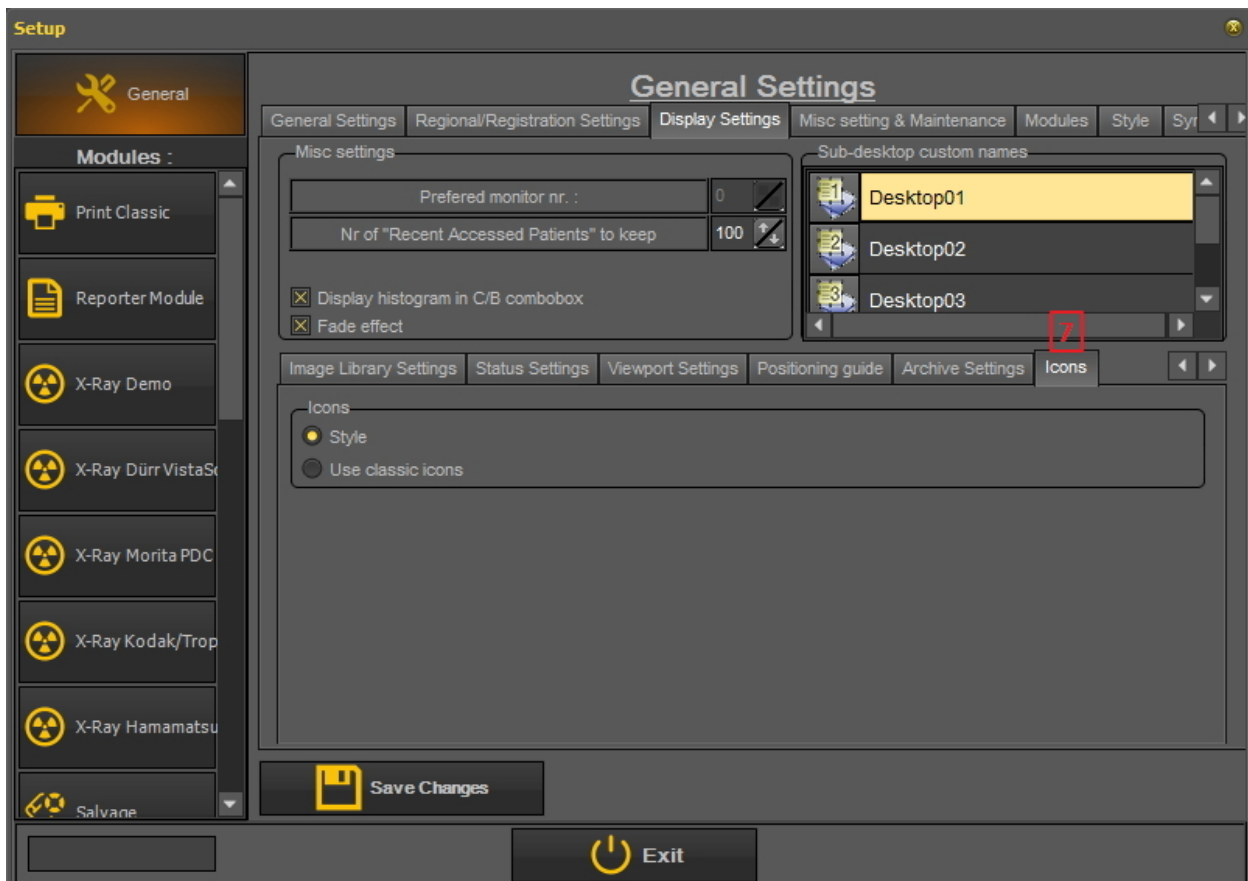
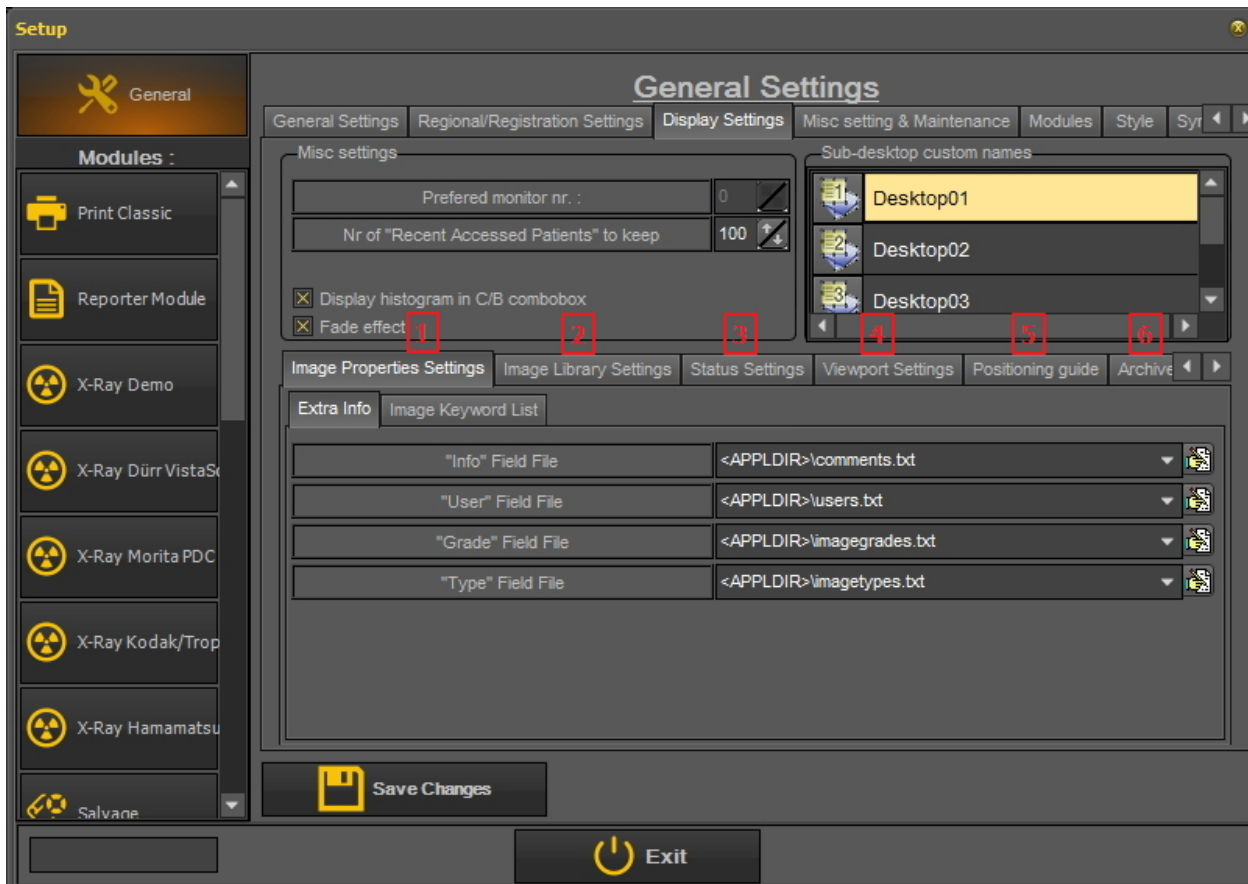
Always **Save Changes** before exiting the dialog box or your changes will not take effect.

10.4 Display Settings

In this **advanced top** we will explain several settings that can be configured to help you find images based on keywords and extra information you can associate with your images.

In the **Mediadent Setup > Display settings** you have the possibility to configure the following things:

- 1 Define the **Image Properties Settings** like the 'User' fields, 'Grade' fields, 'Type' fields.
Read the article '**Overview of the specific Extra Info and Keywords (Section 6.5.2)**' to understand how they can be used.
- 2 Define the **Image Library Settings** like the default folders Mediadent will create in the Image Library (for example D.F.O., Video, ...).
- 3 Define the **Status Settings** will allow you to determine the options in the status acquisition mode and status full screen mode.
- 4 Define the **Viewport Settings** like showing a grid or a ruler on calibrated images.
- 5 The **Positioning guide** is new to this version, here you will be able to configure where the position guide images are stored and how long the full screen view will be shown.
- 6 Here you will find the settings for **Archiving**. You will be able to choose the archive folder.
- 7 In the **Icons** tab you can determine the look of the icons (classic or new).



1. Define the Image Properties Settings

In the **Image Properties Settings** you will configure the fields you can use to filter on.

In the article [Specify Extra Info and Keywords](#) you will learn how to select extra info and keywords. In this article we will explain how to create the lists with keywords you can choose from.

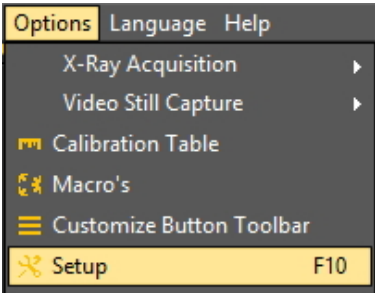

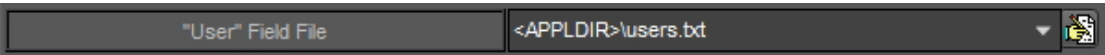
There are 2 tabs where you can enter extra fields:

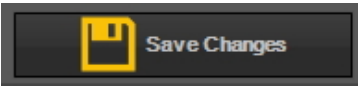


- **Extra Info:** Info field, User field, Grade field, Type field
- **Keywords:** User defined keywords. These keywords you can choose yourself.

1.1 Extra Info

You have the possibility to add **Extra Info fields** to your images. These fields are linked to your images and can be used to filter on. Adding the fields in the Display Settings will make them available in the Image Properties.

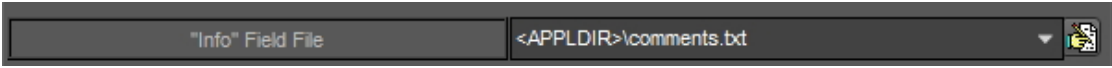

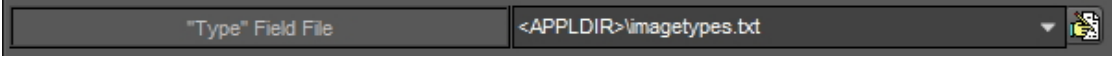
In this example we will show how to add **2 names** to the "User" Field File. Once they are created, they are available through the **properties** of the image and when **saving** an image.

Action	Explanation
<p>Step 1. In the Mediadent menu, choose Options>Setup and choose the tab 'Display Settings'</p> 	
	These are the different fields you can configure.
<p>Step 2. Click on the icon next to <APPLDIR>\users.txt.</p> 	<p>In the example we want to add 2 Users, so we can choose between the 2 users in the Image Properties.</p> <p>On the tab 'Image Properties Settings', click on the icon to change</p>

	the "User " Field File.
	<p>This will open the Notepad.</p> <p>In the Notepad you will be able to type a list of users.</p> <p>Changing the grade, image types and comments are also done via Notepad.</p>
Step 3. Type the names in Notepad	<p>Type in the names of the Users.</p> <p>In this example the users are gunter and Benjamin. Type in the first name and enter, then type in the second name.</p>
<p>Step 4. Choose File>Save</p> <p>Step 5. Choose File>Exit</p>	<p>After typing the names, don't forget to save the Notepad file.</p>
<p>Step 6. Choose Save Changes in the Mediadent setup screen.</p>  <p>Step 7. Exit the Mediadent setup screen</p> 	<p>Back in Mediadent Setup screen, you still have to save the changes in Mediadent.</p>
<p> You need to close Mediadent and restart the program to have your changes take effect</p>	

Next step Box

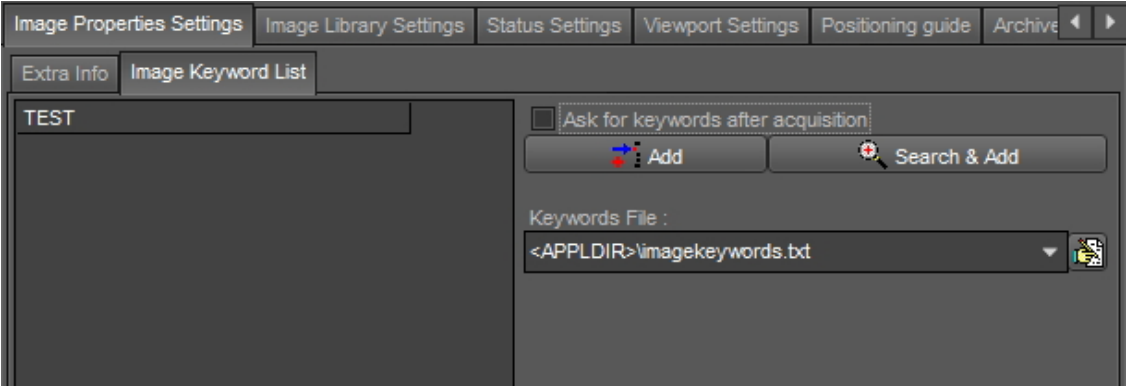
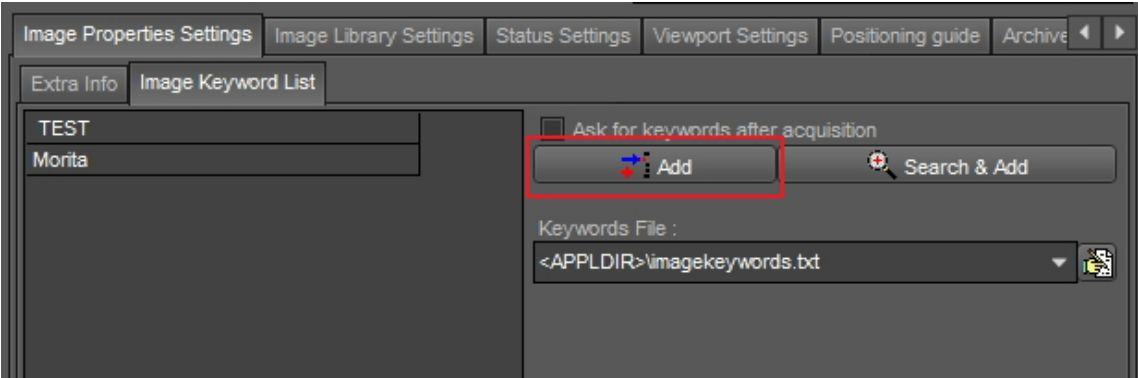
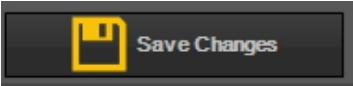
To **test** the changes made, select an image and change the properties. Read the article [Image properties](#).

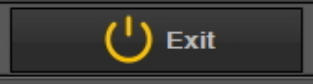
Changing the Grade, Image Type and Comments is done in the same way. You can repeat a number of steps as explained above.	
Action	Explanation
To change the Comments field	
Repeat Step 1.	Go to Step 1. in the previous explanation.
2. Click on the icon next to <APPLDIR>\comments.txt.	This will allow you to add standard comments
	
3. Type the comments in Notepad	
Repeat Step 4. to Step 7.	Go to Step 4. in the previous explanation and repeat the steps until Step 7.
To change the Grade field	
Repeat Step 1.	Go to Step 1. in the previous explanation.
2. Click on the icon next to <APPLDIR>\imagegrades.txt.	This will allow you to change the Grades. By default you have Grade A,B and C.
	
3. Type the grades in Notepad	
Repeat Step 4. to Step 7.	Go to Step 4. in the previous explanation and repeat the steps until Step 7.
To change the Image Type	
Repeat Step 1.	Go to Step 1. in the previous explanation.
2. Click on the icon next to <APPLDIR>\imagetypes.txt.	This will allow you to change the image type field. You can change the list of the image types in the Notepad screen.
	
3. Type the different image types in Notepad	

Repeat Step 4. to Step 7.	Go to Step 4. in the previous explanation and repeat the steps until Step 7.
---------------------------	--

1.2. Image Keyword List


These are the **user defined** keywords you can define yourself. These fields will become available in the **properties** of the image and when you **save** an image.

Action	Explanation
Go to the Setup of Mediadent: Display Settings as previously described	
Choose the 'Image Keyword List' tab	On the tab 'Image Keyword List' you can add your own keywords.
	
Type in the keyword.	In this example, the keyword 'Morita' was typed in.
	
Click on the 'Add' button.	You are ready to type in a second keyword if necessary.
 Click on 'Save Changes' .	Always Save the changes before existing the dialog box.





Click on **'Exit'**.

To test, select an image in the image library and change the image properties. You will have the possibility to add the new defined keyword.

 You have the possibility to ask for keywords every time you make an acquisition. Check the option **'Ask for keywords after acquisition'**.

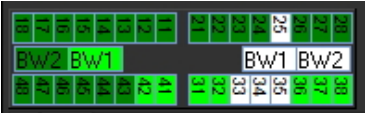
☒ Ask for keywords after acquisition

 Add

 Search & Add

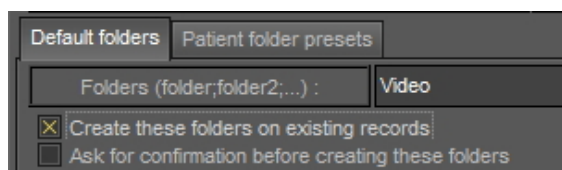
2. Image Library Settings

The Image Library Settings will allow you to change the **layout** of the Image Library. Via these options your will also be able to set **default folders** that are created every time we add a new patient.

<p>Display logo in Image Library: Uncheck this option if you don't want to see the Mediadent logo.</p> <p>Monitor/Auto refresh Image Library: This option will automatically update the Image Library when new images are added.</p> <p>Show tiny teeth chart: Uncheck this options if you don't want to see the teeth chart in the Image Library.</p> <div></div>
<p>When you tick the option 'Activate the global folder by default in the Image Library' means that when opening a patient's library, the global folder will always be visible.</p> <p>To understand what the global folder can do, read the article Global and patient library and How to move images from one patient to another.</p>
<p>By default you can determine which folders are created in the patient's library.</p>

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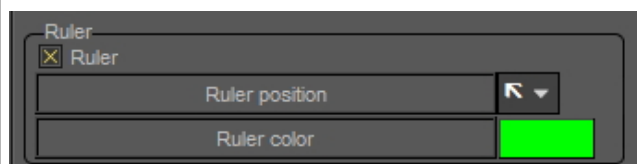
To add a default folder, type the name of the folder in the box.



3. Viewport Settings

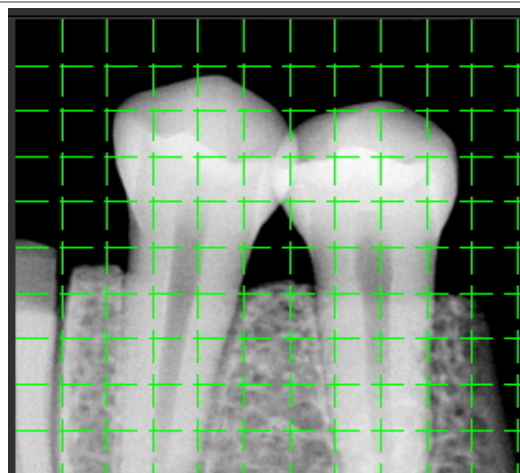
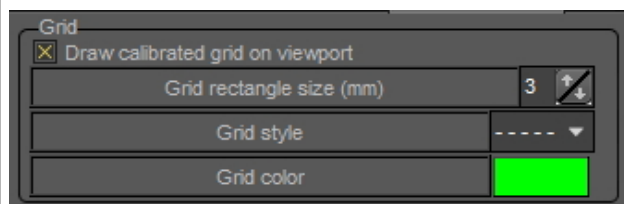
Ruler

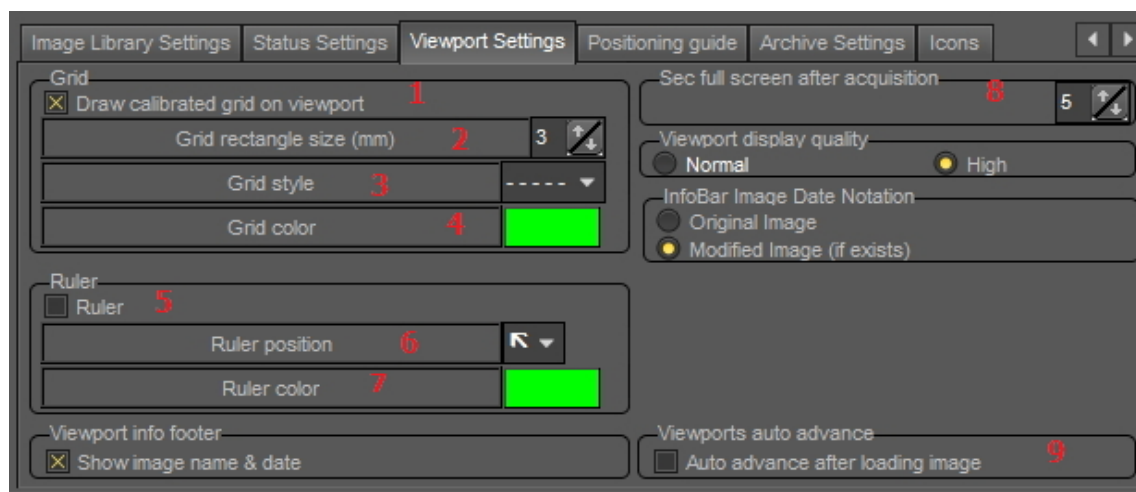
The ruler in this picture is set to GREEN for clarity.



Grid

The grid in this picture is set to GREEN and 3mm for clarity.





In this dialog box, you can select the tab **Viewport Settings** and change the default settings for the **Grid** and **scale**.

1	When this option is checked the grid will automatically be visible in the Viewport.
2	You can change the size of the Grid rectangle for better analysis.
3	The Grid style is also something that can be configured.
4	Changing the color can help to visualize the grid on your image.
5	If you want the ruler to be visible in your Viewport, check this option.
6	You can choose the position of the ruler: the left top, right top, left bottom, right bottom.
7	Of course the color can be changed for better visibility.
8	Determine the number of seconds the image can be viewed full screen after taking the image in acquisition mode.
9	Check this option if you want to see the last viewed images of a patient.

10.5 Archive Settings

In the setup of Mediadent you will determine **where the location** is of the archive folder.

In this chapter we will explain how to setup an archive folder and how to **remove an archive folder**.

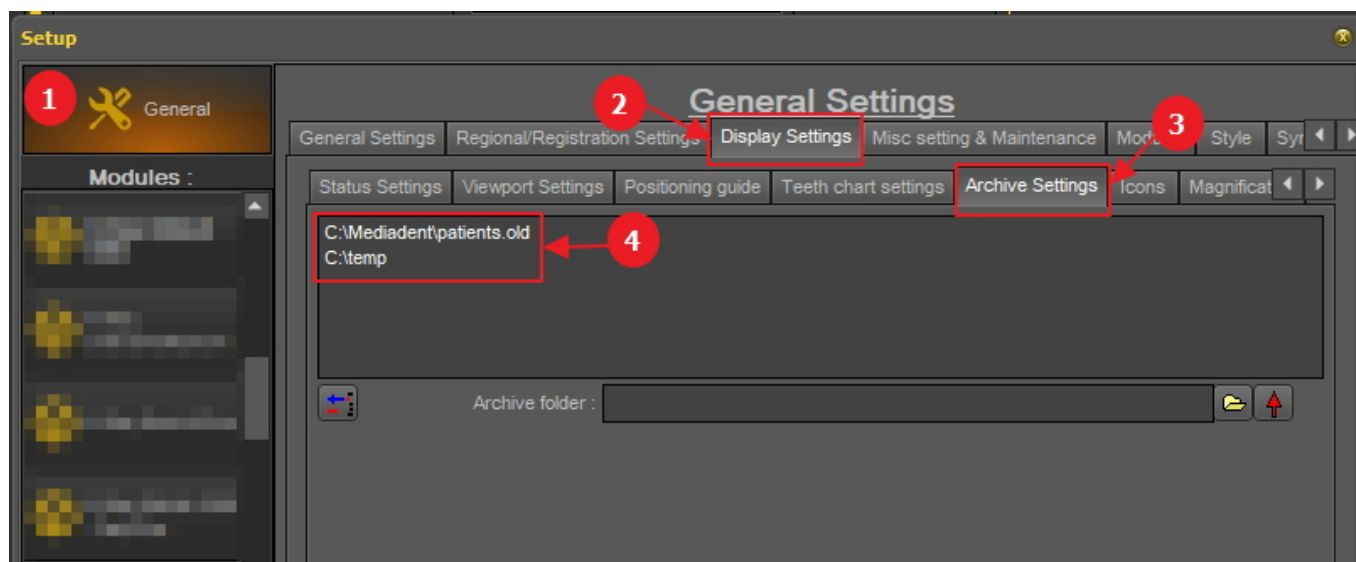
1. Setup the archive folder

Follow the steps to determine the location of the archive folder :

1. Choose **Options > Setup**

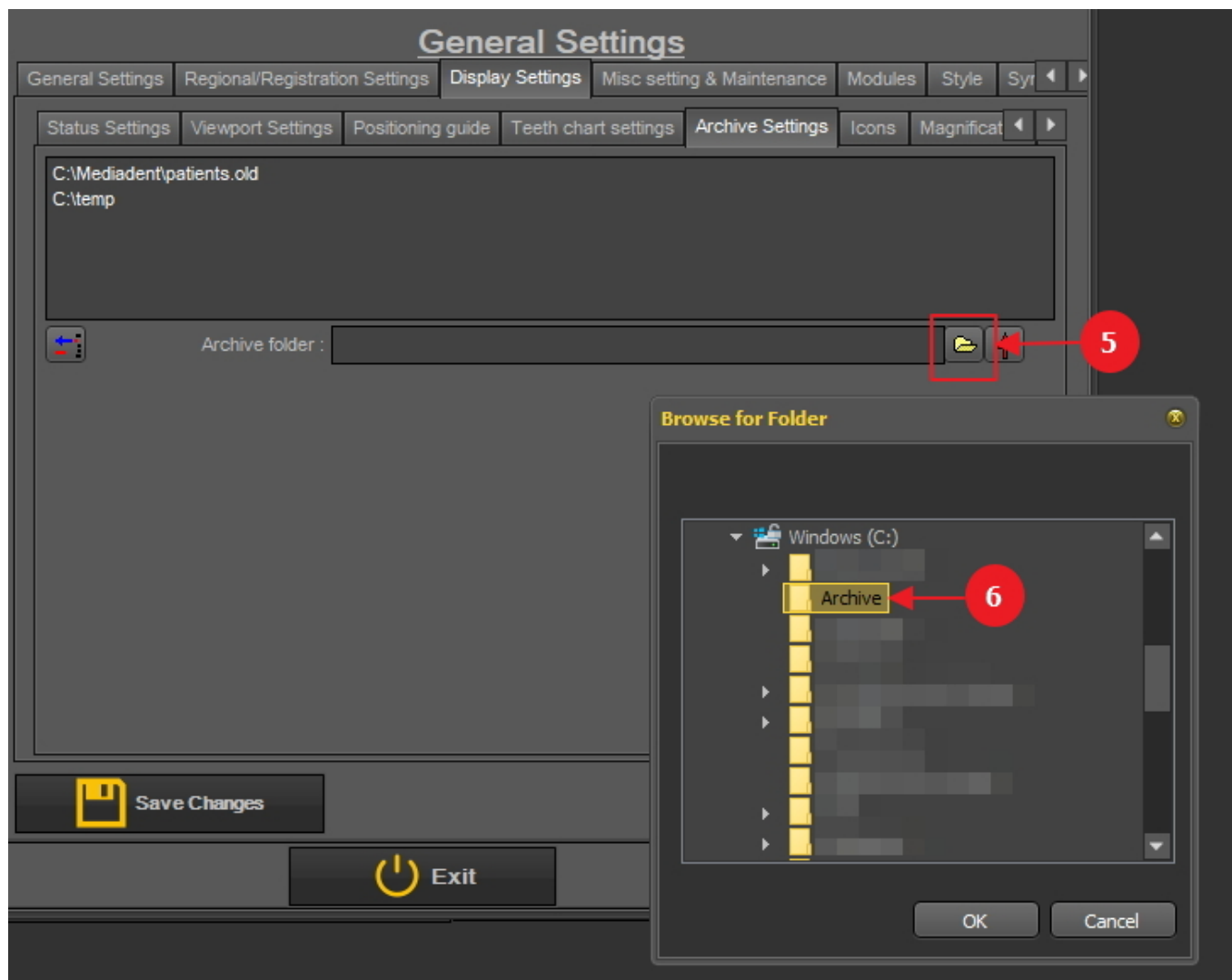
In **General Settings** ¹, choose the tab **Display settings** ²

In Display Settings choose tab **Archive Settings** 3

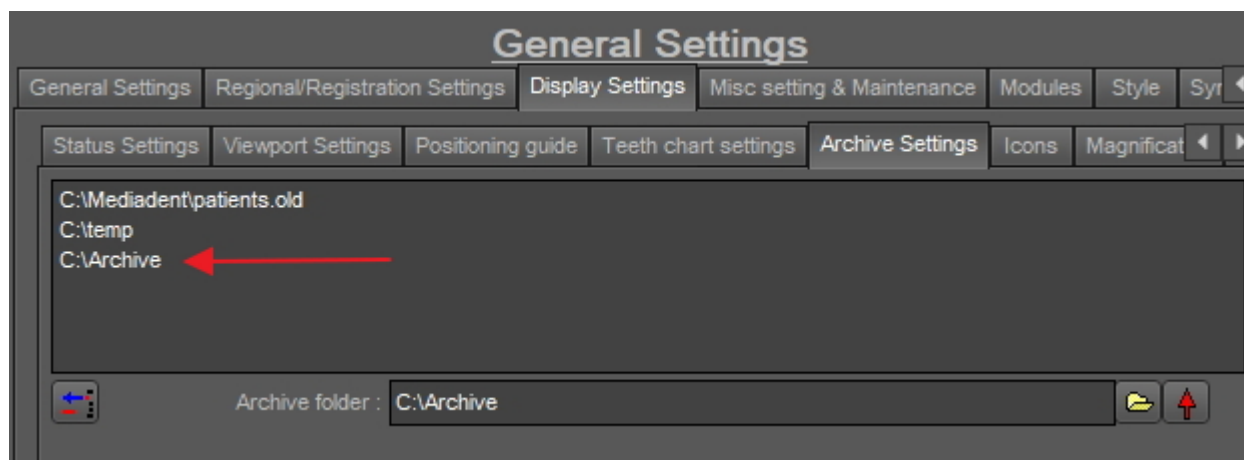



Determine the **location** 4 of your archive. You can choose multi locations.

2. To choose the location click on the **folder icon** 5, the file explorer will open and you can choose the archive folder 6.



3. The folder is added to the list of archive folders.



 Do not forget to '**Save Changes**' before exiting the setup.

2. Remove an archive folder

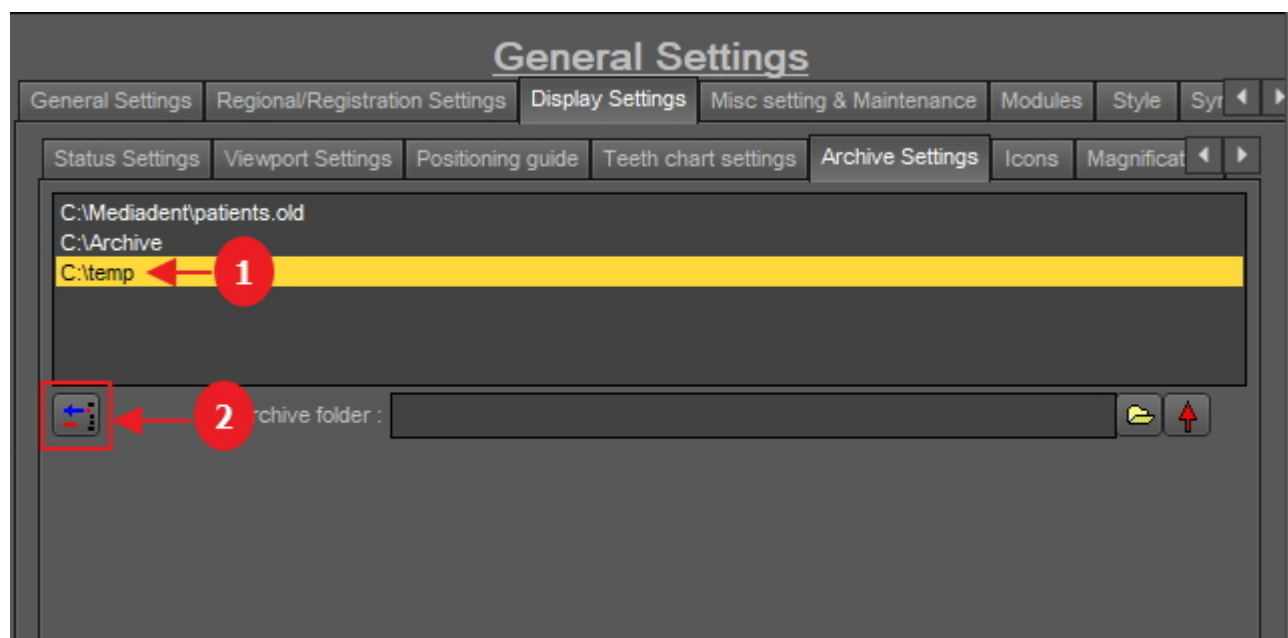
You may always remove an archive folder. This does not mean that the images that are stored in the archive folder will be deleted. It is just a way to remove the folder from the list of available locations.

So the images will still be available at this location, but the location will no longer be available for the end user to choose from.

1. Choose *Options* > *Setup*


In **General Settings**, choose the tab **Display settings**

In Display Settings choose tab **Archive Settings**



2. Select the folder you want to remove from the list of available archive locations ¹. In this example we choose 'c:\temp'.

3. Click on the icon ² to remove the entry from the list.

 Do not forget to '**Save Changes**' before exiting the setup.

10.6 Misc setting and maintenance

This tab is reserved for technical personnel.

For more information read the article **Getting support (Section 13)**.

10.7 Modules

This tab shows the **different modules** that are loaded in Mediadent.


A module is a small program that gets loaded when you launch Mediadent and this small program makes sure that Mediadent can work with your acquisition device.

If the color is **green** it means the module is loaded and can be used in Mediadent.

General Settings					
General Settings	Regional/Registration Settings	Display Settings	Misc setting & Maintenance	Modules	Style
Load?	Module	Version	Nr	Reg	Key
<input type="checkbox"/>	Dicom Print	2.00	50	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	DirExport	2.02	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	DirImport	2.00	2	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	ImageLib Tools	2.01	55	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Optimize	2.01	3	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Print Classic	2.01	4	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Radiological Log	2.00	53	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Reporter Module	2.01	33	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Salvage	2.00	5	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	StatusFullScreen	2.00	10	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Twain	2.00	6	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	VfwStillCap	2.11	28	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	WDM Streaming Video	3.00	27	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	WdmStillCap	3.02	7	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	X-Ray 3Disc FireCR	2.01	61	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	X-Ray Acteon/Sopro	2.02	39	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	X-Ray Asahi	2.01	51	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	X-Ray CygnusRay	2.01	54	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	X-Ray Demo	2.01	8	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	X-Ray Dent-X Eva	2.01	26	<input type="checkbox"/>	<input type="checkbox"/>

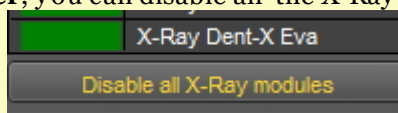
Disable all X-Ray modules Enable all X-Ray modules

When Mediadent **launches** the activated modules are loaded.

 If you want **Mediadent to launch quicker**, you can disable all the X-Ray modules by clicking on

the button **'Disable all X-Ray modules'**

Afterwards you can only activate the X-Ray module that you want to use.



If you just want to de-activate 1 module, click on the green box in front of the module. In this case we will de-activate the X-Ray Asahi module.

You will notice that the box in front of the module is RED, this means the module is de-activated and will not launch when starting the program.

General Settings

General Settings
Regional/Registration Settings
Display Settings
Misc setting & Maintenance
Modules
Style
Syr

Load?	Module	Version	Nr	Reg	Key
<input checked="" type="checkbox"/>	Dicom Print	2.00	50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	DirExport	2.02	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	DirImport	2.00	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	ImageLib Tools	2.01	55	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Optimize	2.01	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Print Classic	2.01	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Radiological Log	2.00	53	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Reporter Module	2.01	33	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Salvage	2.00	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	StatusFullScreen	2.00	10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Twain	2.00	6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	VfwStillCap	2.11	28	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	WDM Streaming Video	3.00	27	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	WdmStillCap	3.02	7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	X-Ray 3Disc FireCR	2.01	61	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	X-Ray Acteon/Sopro	2.02	39	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	X-Ray Asahi	2.01	51	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	X-Ray CygnusRay	2.01	54	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	X-Ray Demo	2.01	8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	X-Ray Dent-X Eva	2.01	26	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Disable all X-Ray modules
Enable all X-Ray modules



Be aware that you do not de-activate **your** acquisition device!

If you are not sure about this setting, please contact us. Read the instructions on how to get support:
Getting support (Section 13).

11 Mediadent Module Setup

11.1 The optimize module

Changing the Optimization profile is one of the advanced features in Mediadent.

You can create an optimization profile that will **automatically** perform certain actions that will enhance your image.

In the optimization profile you can perform following actions to enhance the image:

- Flip vertical
- Flip Horizontal
- Rotate
- Invert
- Apply Unsharp Mask, Gamma, Gaussian Blur, ...
- Stretch Intensity
- Histo Equaliz
-

These settings can be saved in an optimization profile and applied to your images.

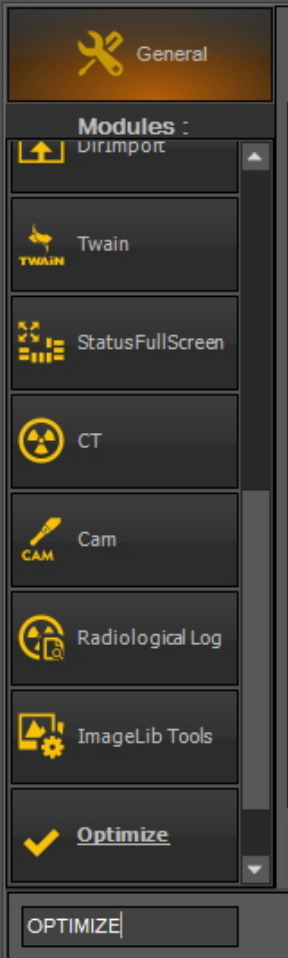
Applying an **optimization profile**, can be done in 2 ways.

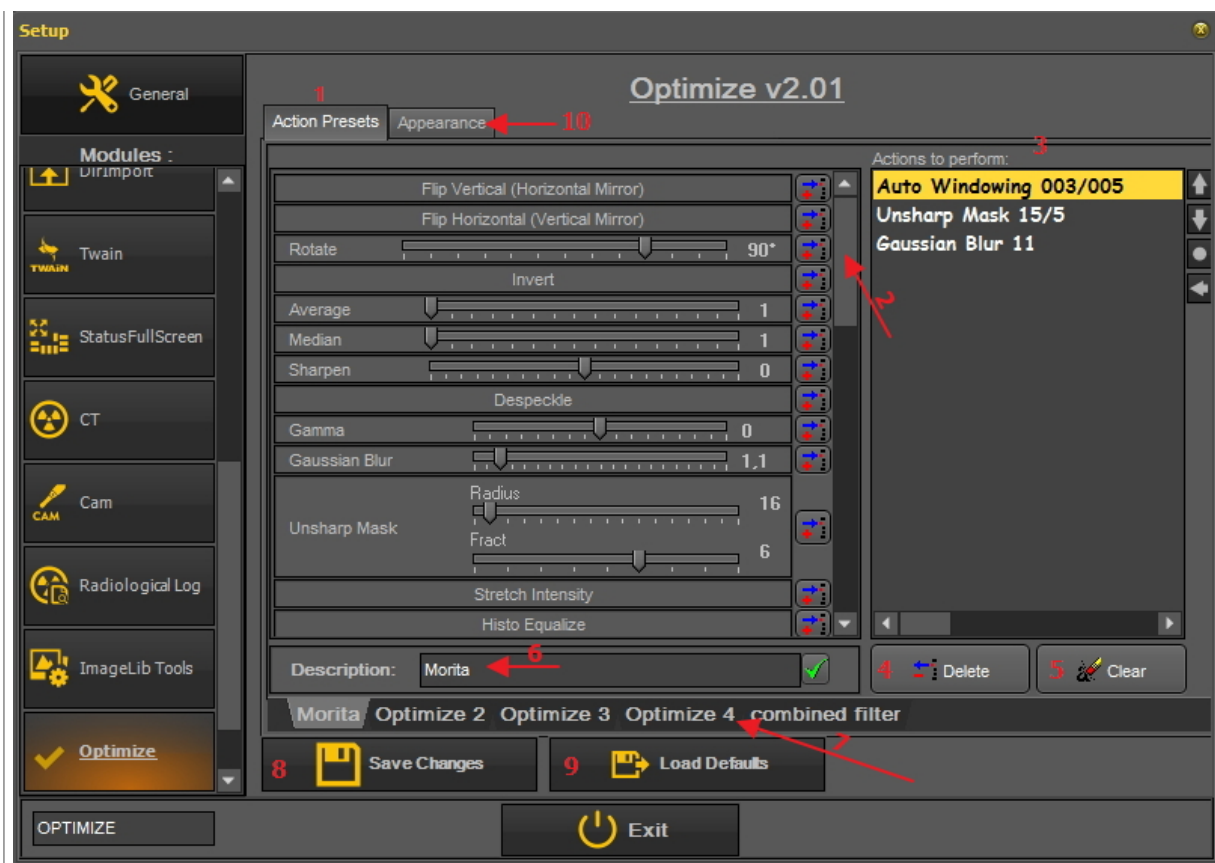
1. The optimization profile gets applied **automatically** when an acquisition is made with an particular acquisition device.
2. The optimization profile get applied **manually**. Read the article **Working with the optimize feature (Section 6.2.8)**.

In this advanced article you will learn how to **modify** an optimization profile and how you can **assign** an optimization profile to an acquisition device so it the optimization profile gets applied automatically (point 1.)

1. Modify an Optimization profile

Action	Explanation
In the Mediadent menu, choose Options>Setup Type ' Optimize ' in search box	Automatically the 'Optimize' module will be

	active.
--	---------



Overview of the optimization screen

	These different filters available that can be saved to an optimization profile.
	You can scroll down in the list and find more or less the same options as the Filter options.
	The list of filters that are saved for the selected optimize. In this example, the 'Morita' optimize is selected.
	Will delete a the selected filter in the list.
	This will clear all the filters for this particular Optimization profile.
	Description of the Optimization profile. In this case we have renamed 'Optimize 1' to 'Morita'.
	Each tab represents an Optimization profile. You can configure up to 5 Optimization profiles . Each Optimization profile contains a list of filtering actions to perform.
	Before existing this screen, always Save changes (this is NOT done automatically).
	By default a number of Optimization profiles are already available. You can change the Optimization profiles, if you are not happy, you can revert back to the default settings, by using this button.
	The Appearance tab is used to link a particular Optimization profile to an acquisition device. This will be explained later.

Example: We will modify Optimize 3 and add the action Flip Vertical


1. Go to the Optimize module in the Mediadent Setup	
2. Click on the Optimize 3 tab	You will notice that the Flip Vertical
2. Click on the icon next to the Flip Vertical action	

	<p>action is added to the list of filters to be applied.</p> <p>Every time you click on the Optimize 1 button in the iconset these actions will be performed to the selected image in the Viewport.</p>
<p>3. Save Changes</p> 	<p>Always Save Changes before exiting the setup screen.</p>

2. Assign an Optimization profile to an acquisition device

The **Appearance** tab is used to link a particular Optimization profile to an acquisition device.

For example: If, for your device the image always has to be flipped horizontal, then you can make an Optimize profile for this and assign it to that particular acquisition device.

<input type="checkbox"/> Default Core Preset. This is the Optimization that is default available.
<input type="checkbox"/> This is the list of acquisition devices you can assign an Optimization profile to. The action list that is defined in the profile will be executed.
<input type="checkbox"/> To link the Optimization profile to the device, check this box .
<input type="checkbox"/> To activate the Optimization profile to the device, check the radio button .
 To assign an Optimization profile to the device, you have to check the box AND check the radio button.

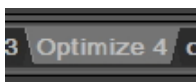
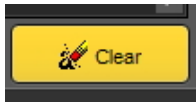

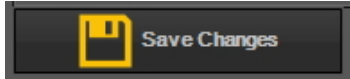
3. Example: Change Optimize 3 and link to Demo sensor

As an example we will do the 2 steps. First you need to determine the action list and then you need to assign a device to this action list.

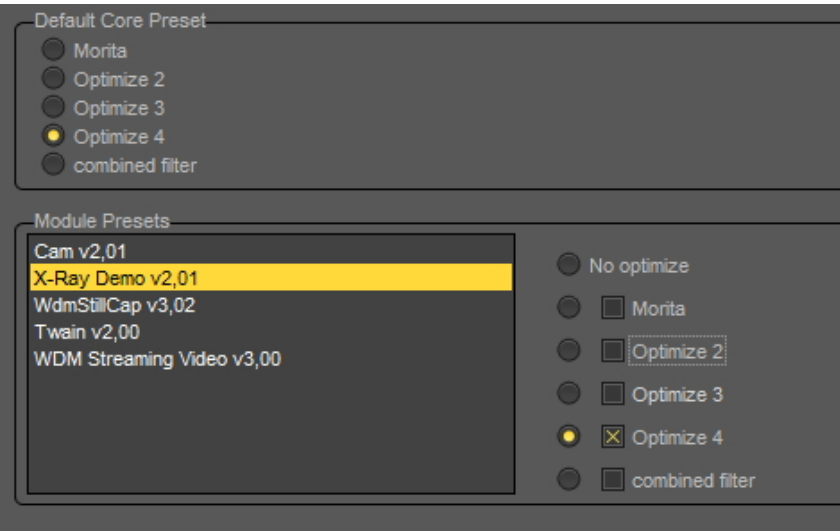
Let's change the **Optimization profile 4** and link it to the **Demo sensor**.

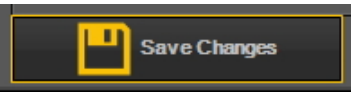


We would like to **flip the image vertically** every time we acquire an image when using the Demo sensor.

Action	Explanation
Step 1: Configure the action list	
1. Click on the Optimize 4 tab	First we will

	configure the action list for the Optimize 4 profile.
2. Remove all the actions from the Optimization profile 3, by pressing the Clear button 	We will remove all the actions that are default.
3. Add the Flip Vertical action by clicking on the icon 	The action 'Flip Vertical' will appear in the list.
4. Save the changes 	We will save the Optimize 4 action list.

Step 2: Link the optimization profile to the Demo sensor

<div><div>1. Go to the Appearance tab.</div><div>2. Choose the Demo Sensor in the list of Module Presets.</div><div>3. Select Optimization profile 4 by checking the Optimize 4</div><div>4. Activate the Optimize 4 by checking the radio button</div></div> <div></div>	<div>Linking the Optimize 4 profile to an acquisition device is done via the 'Appearance' tab.</div> <div>Check the Optimize 4 box to link the profile to the device.</div> <div>You also need to activate it, this is done by checking the radio button in front of the Optimize 4 profile.</div> <div>So both the check box AND the radio button needs to be checked.</div>
<div>5. Save changes – Yes to save the changes</div>	<div>You always</div>

	need to Save before exiting the module, otherwise you settings will not be saved.
<p data-bbox="129 412 225 450">6. <i>Exit</i></p> 	Every time you use this device the Optimize 3 action list will execute. In this case a Vertical Flip.
<p data-bbox="129 674 1490 752"> The optimization profile is also linked to the filters you can apply to your image. All the settings in the filter can be saved in an optimization profile and applied during acquisition.</p>	

12 General topics explained

12.1 A viewport

A **Viewport** is a region where you can load an **image** into for analysis purposes. Loading an image can be done by first **activating** the Viewport. To activate a Viewport you have to select it by clicking in the region with your left mouse button. Once the Viewport is activated you will see that it changes color (dark grey). Now you can **double click** on an image in the Image Library and it will be loaded into the Viewport.

12.2 A desktop

A **Desktop** is the way in which the **different screen elements** like Viewports, Icon set, Image Library, ... are presented on your screen.

The Desktop will determine :

- How many **Viewports** A **Viewport** is a region to which you can load an **image** for analysis purposes. Loading an image can be done by first **activating** the Viewport. To activate a Viewport you have to select it by clicking in the region with your left mouse button. Once the Viewport is activated you will see that it changes color (dark grey). Now you can **double click** on the image and it will be loaded into the Viewport. are visible.
- What the position is of the Iconset.
- Where the Image library is positioned
- If and where the histogram is positioned
- If and where the brightness/contrast bar is positioned

In short it determines the look of your Desktop within Mediadent.

Read more about the **different Desktop elements** in the topic about the **screen elements (Section 4.1)**.

Example of one of the standard Mediadent Desktops :





Important to understand is that the Desktop is also tied to the **resolution** of your screen. When changing the screen or screen resolution it may be necessary to load another Desktop or to create your own Desktop.

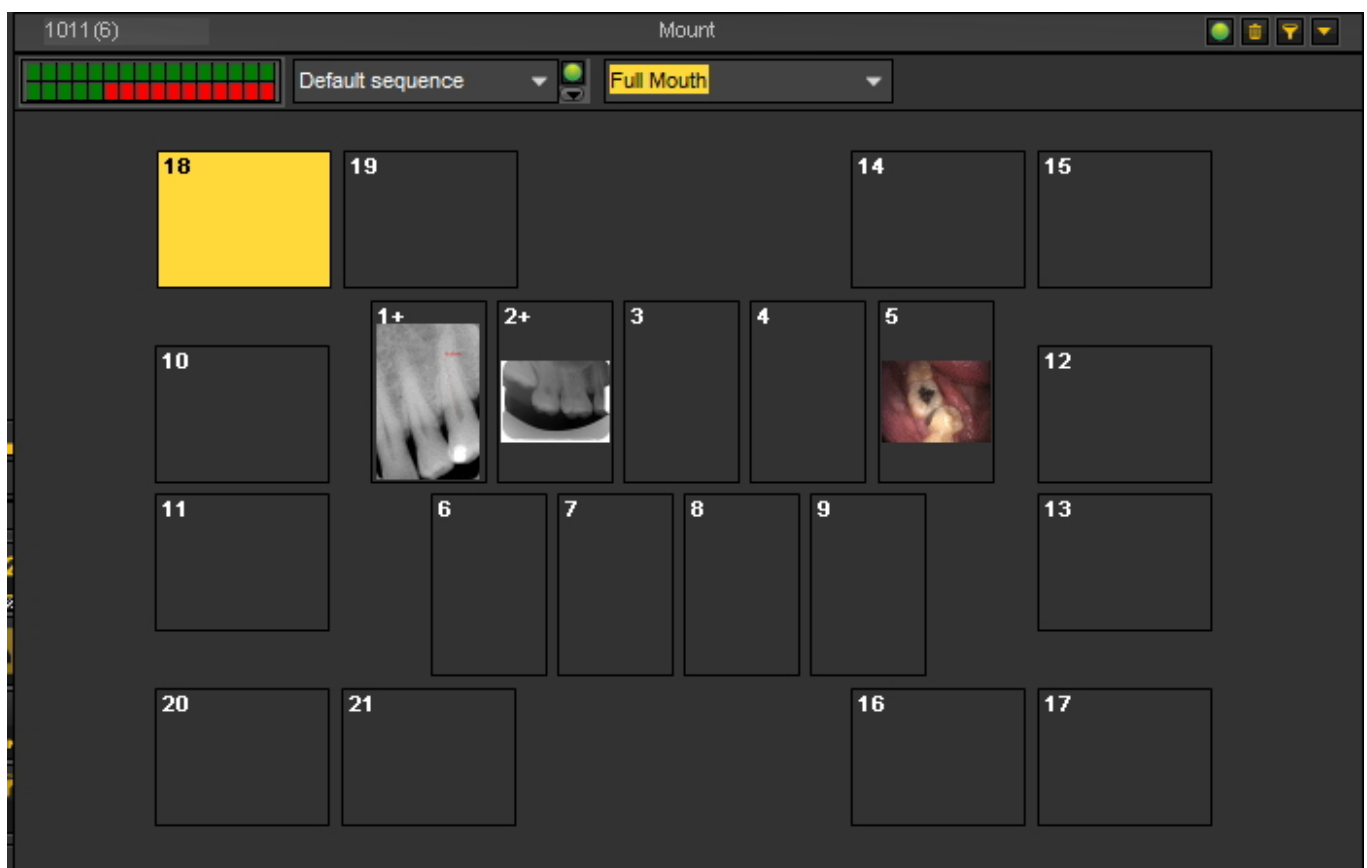
12.3 A status mount

In this topic we will explain the basics of an alternative way of working with your images.

The **Status Mount** is together with the **Image Library** a way to **organize** your images.

The images can be stored, modified or deleted in the Status Mount or the Image Library.

You can also use the Status Mount in **acquisition** mode. The images will be captured in the boxes.



Differences between the Image Library and the Status Mount

The **Image Library** is the main container where the images are stored in. The manipulations you do on the images in the Image Library are **permanent**. This means deleting an image in the Image Library will also result in the deletion of the image in the Status Mount. Removing an image from the

Status Mount will not result in the deletion of the image.

Working with a Status Mount has a couple of **advantages**:

- You have the possibility to **automate** the image taking process. In some offices there is a **procedure** in place for taking pictures. For example in some cases it is common practice to take images of the full mouth. In that case it is very handy to be able to automate this.
- Another advantage of using the Status Mount is that you can automatically **associate** the tooth or teeth to the image. The name of the image will represent the tooth or teeth association.
- Also the **order** in which the pictures are taken can be determined in the Status Mount.
- If you take intra-oral images it is also possible to change the **orientation** (rotate 90° or flip horizontally or vertically) of the image in the Status Mount Box independent of the original image.

12.4 The global and patient library

Global Image Library

The Global Image Library is a **library** which is accessible from **every patient's library**.

It can be used to store images for demonstration purposes or as a **temporary storage** for images you want to move from one patient's library to another.


The **icon** for the **Global Image Library** can be found in the Image Library : 

Click on the Global Image Library icon to see the images that are stored in this Library.

Patient Image Library

The Patient Image Library is the folder you will store the images taken for that **specific patient**. You have the ability to structure the Patient's Library in any way that is suited for you.

You will be able to create **subfolders** in the Patient's library.

The **icon** for the **Patient Library** can be found in the Image Library : 

Clicking on the icon will show the images in the Patient's Image Library.

Learn more about using the Patient's Library in the topic '**Working with the Image library**' (Section 6.5.4).



You can use the Global Image Library if you want to move or copy an image from one patient's library to another. See the topic '**How to move images from one patient to another**'. (Section 7.3.1)

12.5 How does the histogram work?

An **image histogram** is a type of histogram which acts as a graphical representation of the **tonal distribution** in a digital image. It plots the **number of pixels** for each tonal value. By looking at the histogram for a specific image a viewer will be able to judge the entire tonal distribution at a glance.

The **horizontal axis** of the graph represents the tonal variations, while the **vertical axis** represents the number of pixels in that particular tone.

The horizontal axis:

The **left side** of the horizontal axis represents the **black and dark areas**, the **middle** represents medium **grey** and the **right hand side** represents **light and pure white** areas.

The vertical axis:

The vertical axis represents the **size of the area** that is captured in each one of these zones.

Thus, the histogram for a **very bright image** with few dark areas and/or shadows will have most of its data points on the **right side and center of the graph**.

Conversely, the histogram for a **very dark image** will have the majority of its data points on the **left side and center of the graph**.

Mediadent and the histogram

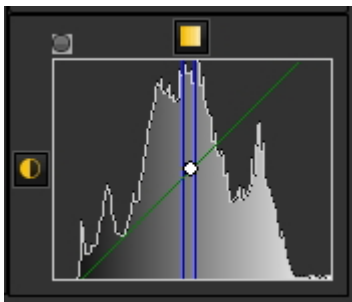


Image editors, like Mediadent, typically have provisions to create a histogram of the image being edited.

The histogram plots the number of pixels in the image (vertical axis) with a particular brightness value (horizontal axis).

Algorithms in the digital editor (Mediadent) allow the user to visually **adjust the brightness value** of each pixel and to dynamically display the results as adjustments are made.

Improvements in picture **brightness and contrast** can thus be obtained.

In the article **Working with windowing (Section 6.2.2)** you will learn how to use the histogram in Mediadent.

(Source: Wikipedia)

13 Getting support

If you have any **additional questions** concerning Mediadent, you can contact the organization you bought Mediadent from (your dealer).

In case of **technical issues**, be prepared:

1. When you are experiencing technical problems be sure to have the following **materials** at hand:

- Mediadent installation CD
- Installation CDs of your acquisition device

2. The **questions** you can expect to be asked are the following:

- What are the circumstances in which the problem occurs?
- What is the version of Mediadent running on the PC?
- What is the operating system running on the PC?

...

To help you better, provide as much background information as possible.

14 Identification






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