



# Configuration - V8.0

# 1 Foreword

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## 2 General portal configuration

Global settings for the portal can be configured in the “Portal” tab:



### 2.1 Default language

The default portal language controls:

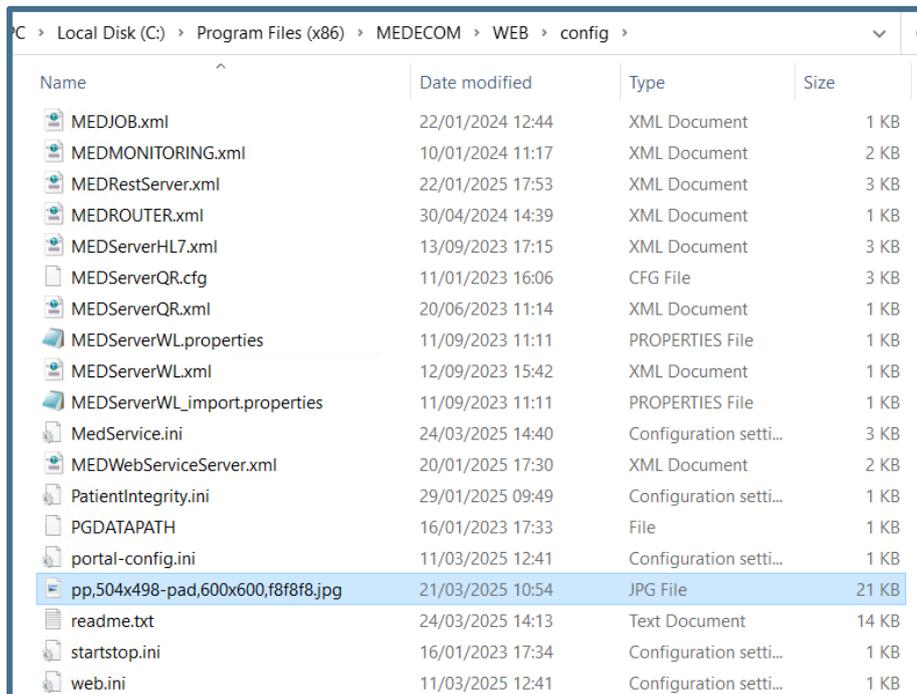
- The **default** language for the main page (before logging in). Users can still select another language if needed.
- The **default** language preference for new users. Each user can then define their own preferences and replace default ones.

### 2.2 Site information

Site information (site name, address, ...) can be customized to be used:

- On the main page
- In reports (macros)
- In automatic emails (lost password, studies sharing...)

A custom logo can also be displayed on the main page. To do so, place an image file inside the “config” folder on the server:



Then, enter the filename, with extension, in the configuration interface:

Logo:

pp,504x498-pad,600x600,f8f8f8.jpg

## 2.3 Authentication

**User session duration:** delay during which a user can access the portal from the same browser, without logging in again (cookie expiration delay).

**Number of login attempts:** number of failed login attempts allowed before the user account is locked, to prevent brute force attacks. When locked, the user must either wait for the configured lock duration (see below) or be manually unlocked by an administrator.

**Lock duration:** delay during which a user account is locked after too many failed login attempts, before they can try to log in again.

**Patient access:** enable or disable patient authentication (using accession number and birthdate).

## 2.4 Registration

**New user registration:** enable or disable new user registration from the home page. Administrators will still be able to manually create user accounts.

**Captcha:** enable or disable captcha human verification during registration by typing characters in an image. Such protection is used to prevent automated registrations by robots. *Example:*



## 2.5 Password strategy

**Minimal length:** force users to select passwords that must be at least X characters long. Please refer to the state-of-the-art recommendations and best practices.

› *Note: independently from this minimal length, when typing a password, a strength estimation is displayed to the user to help them select a secure one. This estimation can help define a robust minimal length for all users.*



**Automatic renewal:** period after which users must automatically change their password after logging in.

**Lost password email duration:** delay after which the link to reset a password expires.

## 2.6 User session

**Automatic logout:** delay of inactivity after which the user is automatically logged out.

## 3 Profile management

The "Profiles" tab allows to create, edit, and delete user profiles to manage their rights.



Profile	Can view worklist/calendar	Can manage visit	Can cancel visit	Can change visit status	Can use patients list	Can merge patients	Can modify patients
Medical administrator	<input checked="" type="checkbox"/>						
Patient	<input type="checkbox"/>						
Radiologist	<input checked="" type="checkbox"/>						
Referring	<input type="checkbox"/>						
Secretary	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Simple user	<input type="checkbox"/>						
Specialist	<input type="checkbox"/>						
System administrator	<input checked="" type="checkbox"/>						
Technician	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Some basic profiles are installed by default and cannot be deleted.

To add or remove a right (column) to a profile (row), you need to tick the corresponding box.

Since there are a lot of rights, they can easily be filtered with the search field:

› *Note: depending on the modules installed, additional rights will be configurable.*

Click on this button to create a new profile and edit its name:



Click on this button to delete the selected profile:



**⚠ Warning:** upon deletion, a replacement profile must be selected if the deleted profile is assigned to existing users. These users will then be assigned to the replacement profile upon confirmation, potentially granting or removing rights if they are different.

## 4 User management

---

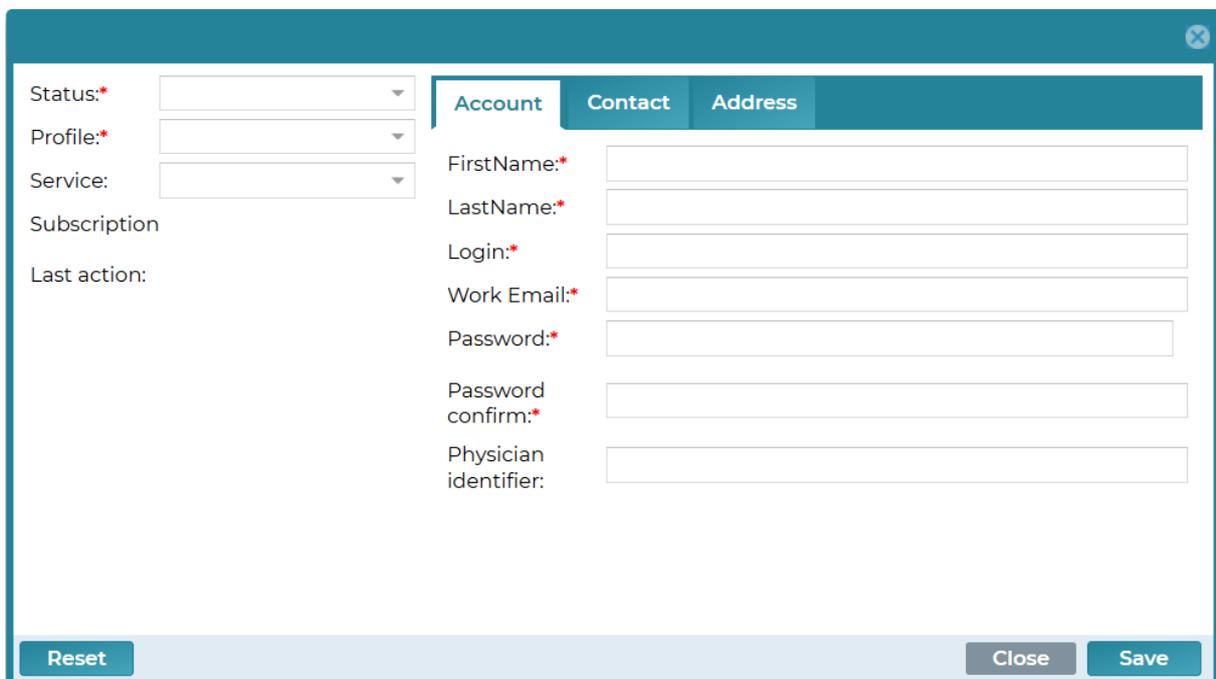
The user list tab allows to create, edit, and delete users.



To create a new user, click on the button:



Fill the form. Fields marked with \* are required.

A screenshot of a user creation form. The form is contained within a teal window with a close button in the top right corner. On the left side, there are four dropdown menus: "Status:\*", "Profile:\*", "Service:", and "Subscription". Below these is a text field for "Last action:". The main part of the form is divided into three tabs: "Account" (selected), "Contact", and "Address". Under the "Account" tab, there are seven input fields: "FirstName:\*", "LastName:\*", "Login:\*", "Work Email:\*", "Password:\*", "Password confirm:\*", and "Physician identifier:". At the bottom of the form, there are three buttons: "Reset" on the left, "Close" in the middle, and "Save" on the right.

You also need to choose a status (use "Active" to activate the account instantly) and a profile (see Profile management).

A service can be selected to restrict the access to studies from a specific service/site (see the configuration tab for service filtering).

Click on this button to delete the selected user:



Double-click on a user or click on this button to edit a user:



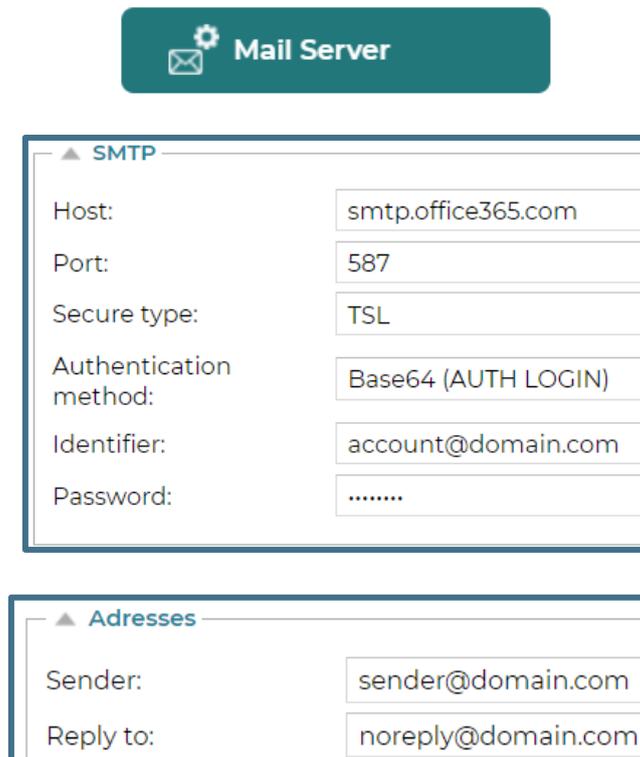
Click on this button to reactivate a user that has blocked his account (too many login attempts) or deactivate a user (they will not be able to login):



## 5 Emailing

---

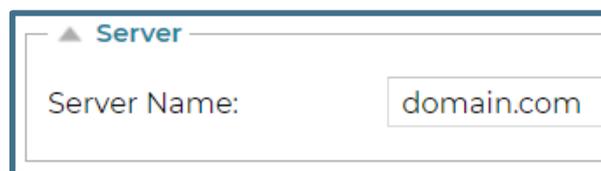
The mail server tab allows to configure the **SMTP server** to send emails.



The screenshot shows the 'Mail Server' configuration window. It has a teal header with a gear icon and the text 'Mail Server'. Below the header, there are two main sections: 'SMTP' and 'Adresses'. The 'SMTP' section contains the following fields: Host (smtp.office365.com), Port (587), Secure type (TSL), Authentication method (Base64 (AUTH LOGIN)), Identifier (account@domain.com), and Password (masked with dots). The 'Adresses' section contains: Sender (sender@domain.com) and Reply to (noreply@domain.com).

Please refer to the specific documentation of your emailing service provider to enter the correct information.

You also need to configure the server name, which is the domain that will be used to insert links in the emails:



The screenshot shows the 'Server' configuration section with a single field: Server Name (domain.com).

<https://domain.com/application/s>

Save and restart services after modifying the configuration:



Once configured, you can test the configuration by sending a test email. Provide the test recipient and click on the test button:

Test:	test@domain.com
-------	-----------------



*> Note: the software also supports sending APICrypt emails (French encrypted messages for healthcare professionals). If you have an APICrypt account and wish to use this system, contact the support team to set up and activate your user keys.*

## 6 DICOM network [Med Archive, Med RIS]

A DICOM network is made of several machines (called “nodes”), communicating with each other following the DICOM standard. A node can be an acquisition station, an archiving system, a printer, a diagnostic station... These nodes can be source or destination for push, routing, worklist...

The DICOM nodes are configured in the “Dicom nodes” tab. Only administrators have access to this tab.



Declaring modalities to **receive** images is **not required**. Med Archive accepts every DICOM STORE connection.

On the other hand, declaring nodes for **Query/Retrieve** or **Worklist** requests is **necessary**.

Actions	Enabled	Label ↑	AET SCP	AET SCU	Description	Hostname	Port	Room	Modality	Echo SCP	Store SCP	Store SCU	Query SCP	Query SCU	Worklist S...	Worklist S...
P) E)	<input checked="" type="checkbox"/>	ALEXIS	MEDMAM...	MEDMAM...		192.168.29...	104			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P) E)	<input checked="" type="checkbox"/>	LOCAL	SCPAET	SCU AET		127.0.0.1	104			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P) E)	<input checked="" type="checkbox"/>	MAMMO	MAMMO	MAMMO		mammo	104	Salle mamr		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P) E)	<input checked="" type="checkbox"/>	MEDXR	MEDXRAY	MEDXRAY		192.168.29...	104	Salle radio		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P) E)	<input checked="" type="checkbox"/>	MEDXR2	MEDXRAY2	MEDXRAY2		192.168.29...	104	Salle echo	DX	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P) E)	<input checked="" type="checkbox"/>	THIBAUT	THIBAUT	THIBAUT		192.168.29...	104			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 6.1 Adding a DICOM node

To add a DICOM node, click on the green button in the tool bar:



Fill out the required information on the new row.

To edit a node, simply modify the information on the corresponding row.

All changes are automatically saved.

The information to fill is the following:

- **Enabled:** enable or disable the use of this DICOM node
- **Label:** the display name (identifying the node elsewhere in the interface)
- **AET SCP:** the AE Title of the node
- **AET SCU:** our AE Title (e.g., MEDARCHIVE)
- **Description:** node description (optional)

- **Hostname:** the IP address (192.168.XXX.XXX) or the machine name on the network
- **Port:** the communication port of the machine
- **Room:** the room of the machine (optional, see next section)
- **Manufacturer:** the name of the manufacturer (optional)
- **Modality:** the modality handled by the node (optional)

Then, tick the boxes to indicate if the node is an SCU and/or SCP for the different services.

## 6.2 Configuring rooms

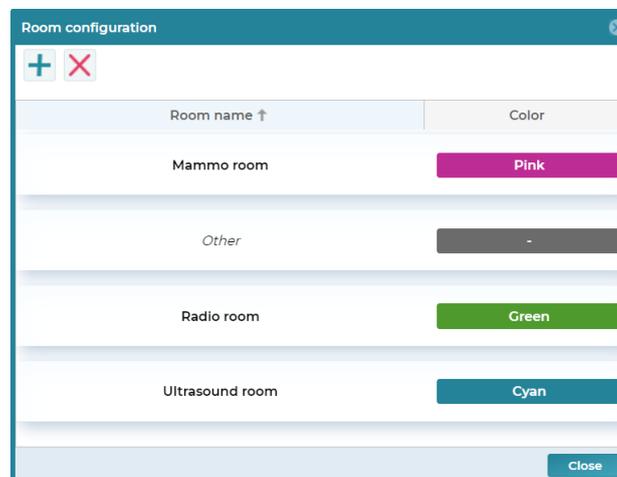
Acquisition modalities can be assigned to a room for the calendar scheduling module. To configure rooms, click in the **Room** cell to open a selection menu:



In this menu, click on this button to open the room configuration window:



From this window, you can create/delete rooms and assign colors to them.



The room “Other” cannot be modified or deleted. It corresponds to the default room for all the modalities (and therefore visits) that are not associated to a room.

### 6.3 Deleting a DICOM node

To delete the selected DICOM node, click on this button in the toolbar:



### 6.4 Testing the communication with a DICOM node

*> Note: the communication tests are conducted between the web server and the node, not between the browser and the node.*

At the IP network level, it is possible to ping a node by selecting the corresponding row and clicking on the first button:



At the DICOM protocol level, it is possible to send a DICOM C-ECHO by selecting the corresponding row and clicking on the second button:



## 7 Cache storage configuration [Med Archive]

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The cache is a folder used to store the DICOM files received on Med Archive. It should be configured on a disk that is only dedicated to this storage, with a capacity and access speed adapted to the volume of data it will handle.

A cache must always be configured to receive DICOM files.

### 7.1 Cache folder configuration

The cache configuration is only accessible by a system administrator, in the “Cache” tab:



The cache directory to store the DICOM files can be configured at the top of the window:

Path:	D:\Cache
-------	----------

Click on the “Save” button at the bottom of the window.

To configure another cache, click on the button “Delete current cache” at the bottom of the window.

› *Note: the button “Delete current cache” does not delete the files on the disk. It simply unlinks the folder from Med Archive (the studies will not be visible in the interface but will still be present on the disk).*

### 7.2 File import from the cache

If the configured folder was an existing Med Archive cache, the studies it contains will be imported after clicking on the save button.

**⚠ Warning:** the file import process can take a lot of time for a large volume of data.

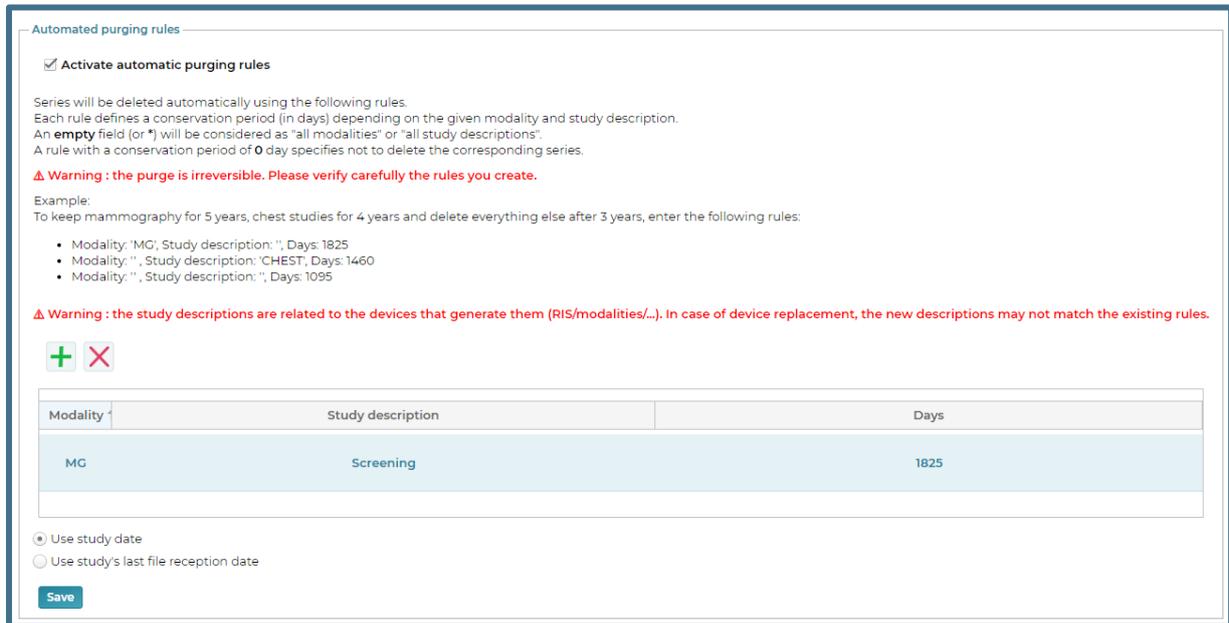
### 7.3 Automatic cache purging configuration (Med Archive LITE)

If the installation of Med Archive is a "LITE" version, the cache can be automatically purged.

This means that studies can be automatically deleted, based on specific rules.

**⚠ Warning:** recovering deleted studies is **impossible**. Please carefully verify the purge configuration.

The rules configuration appears in the window only if the installation is a “LITE” version:



Automated purging rules

Activate automatic purging rules

Series will be deleted automatically using the following rules.  
Each rule defines a conservation period (in days) depending on the given modality and study description.  
An empty field (or \*) will be considered as "all modalities" or "all study descriptions".  
A rule with a conservation period of 0 day specifies not to delete the corresponding series.

**⚠ Warning : the purge is irreversible. Please verify carefully the rules you create.**

Example:  
To keep mammography for 5 years, chest studies for 4 years and delete everything else after 3 years, enter the following rules:

- Modality: "MG", Study description: "", Days: 1825
- Modality: "", Study description: "CHEST", Days: 1460
- Modality: "", Study description: "", Days: 1095

**⚠ Warning : the study descriptions are related to the devices that generate them (RIS/modalities/...). In case of device replacement, the new descriptions may not match the existing rules.**

+ X

Modality	Study description	Days
MG	Screening	1825

Use study date  
 Use study's last file reception date

Save

To activate the automatic purge for the cache, check the « Activate automatic purging rules » box.



› Note: if the cache is full (i.e., the disk space limit has been reached) and the purge is disabled, the DICOM files reception will be impossible.

**⚠ Warning:** the first level of automatic purging is based on **storage size** and is not visible in the interface. **The allowed cache size is defined in the license key**. If the current cache size exceeds this allowed size, older studies will be deleted, **regardless of rules defined in the interface**.

The second level of automatic purging is based on **periods of conservation** (in days) for a given **modality** and **study description**.

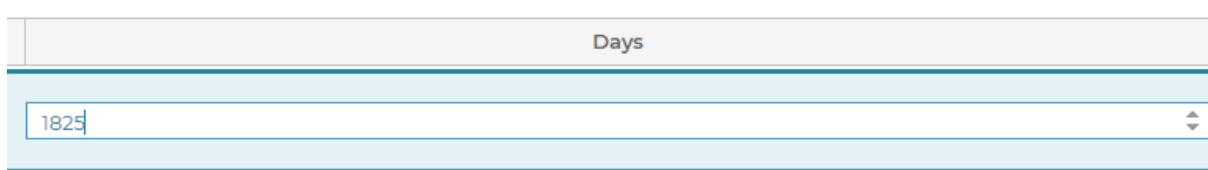
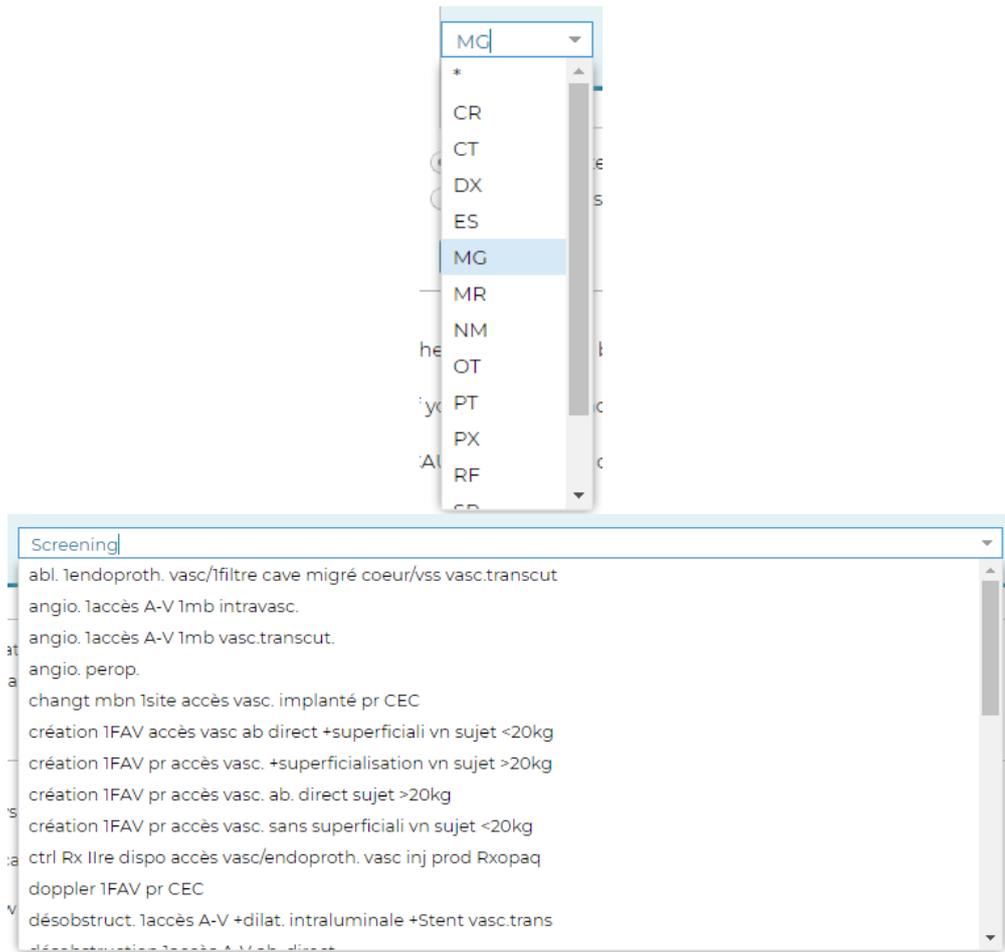
Click on this button to add a new rule in the table:



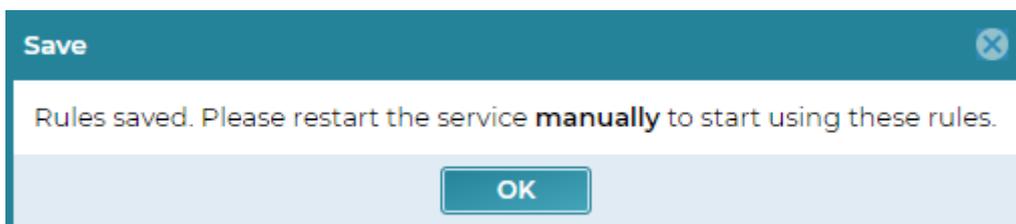
Click on this button to delete the selected rule from the table:



Double-click on a rule field to edit it:



Click on this button to save the rules, once they are correct:



A message indicates to restart the Medecom service manually (“Windows Services” tab) to apply the new rules, as an additional confirmation.

Example: to keep mammography for 5 years, chest studies for 4 years, and delete everything else after 3 years, enter the following rules:

Modality	Study description	Days
MG		1825
	CHEST	1460
		1095

› Note: an empty value (or \*) will be considered as "all the modalities" or "all the study descriptions".

› Note: the fields are not accent sensitive nor case sensitive.

To prevent specific series from being deleted, enter the value “0” for the number of days. For example, to delete all radiography series after 3 years, but not chest radiography series, enter the following rules:

Modality	Study description	Days
DX	Chest	0
DX		1095

It is also possible to choose the date to use for these rules:

Use study date  
 Use study's last file reception date

- **Use study date:** the study date will be used.
- **Use study's last file reception date:** the last file reception date will be used. It can be different from the study date in some cases, for example when:
  - The reports are not validated the day the study is performed.
  - The study has been re-pushed on the archive.
  - If the cache has been imported, the reception date corresponds to the import date.

## 8 Router configuration [Med Archive]

The router is a powerful module from Med Archive to **dispatch** studies to several DICOM nodes based on rules that are configured in the router tab:

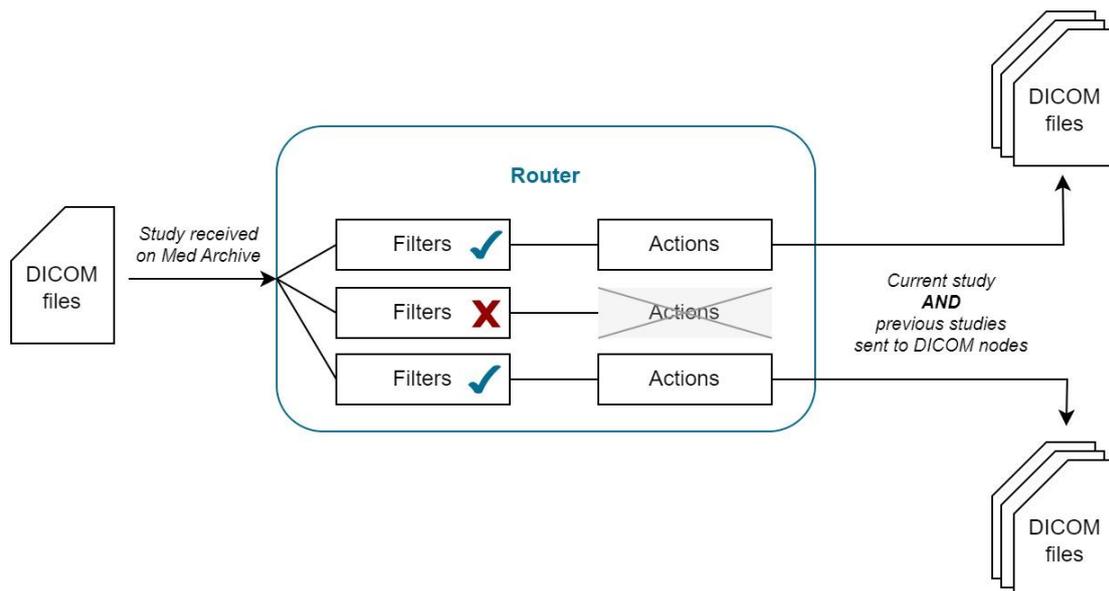


Rules		DICOM Nodes			Action	Filters	
Name ↑	Priority	Name	AET	Address	Configuration	Operator	Item
MAMMO	Low	Mammo	mammo	192.168.0.1:104	PUSH AUTO FETCHING (3 MG ; 2 US) PRE FETCHING (3 MG ; 2 US)	Any	Modality=MG
POUMON	Low	Radio	POUMON	192.168.0.1:104	PUSH PRE FETCHING (CR BodyPart=Chest ; DX BodyP.	Any	RequestedProcedureD

A routing rule is built with two components:

- **Filters:** the received DICOM files must match conditions for the rule to activate.
- **Actions:** push tasks to perform for studies.

The following diagram illustrates the routing process:

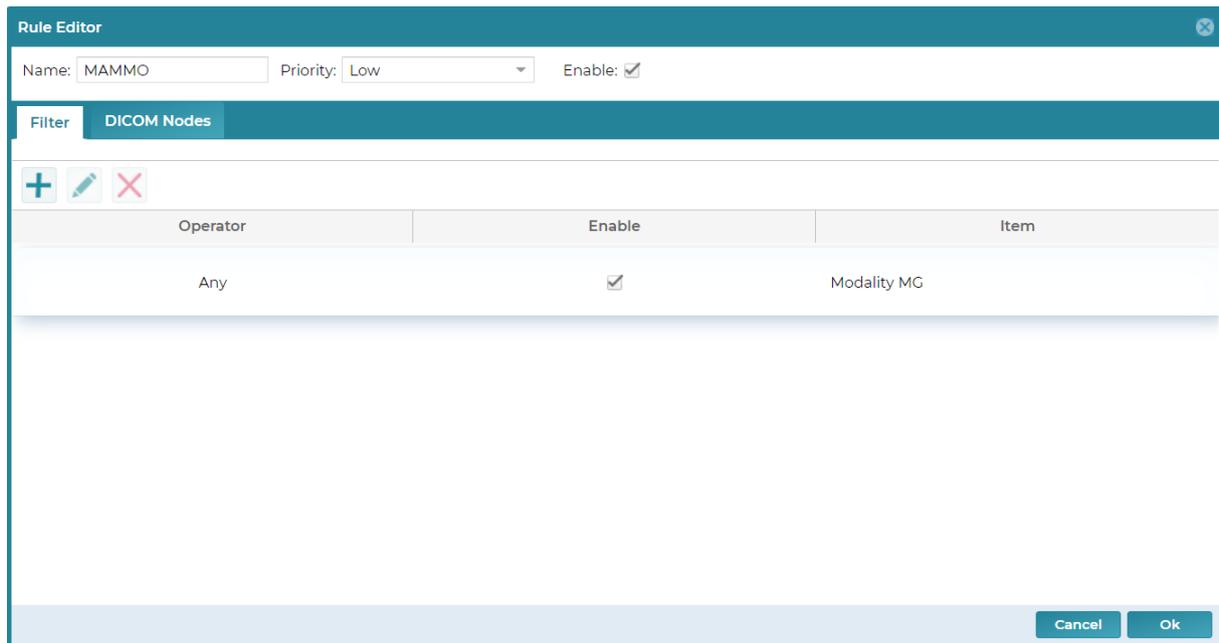


### 8.1 Creating a routing rule

Creating a rule is possible with this button in the toolbar:



A window appears to configure the rules:

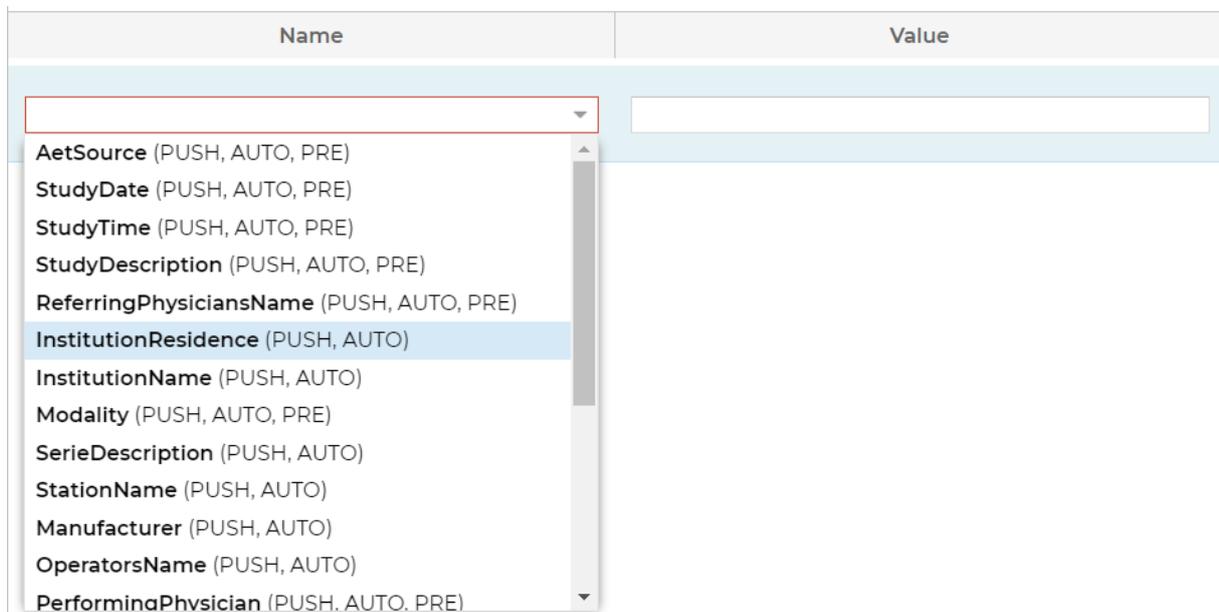


First, write a name for the rule and select a priority. Also make sure that the checkbox “Enable” is checked.

### 8.1.1 **Configuring filters for the rule**

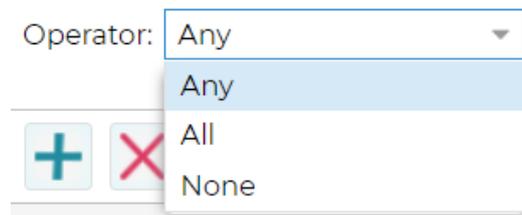


In the filter tab, add and remove filters using the buttons in the toolbar.



Select the DICOM tag(s) to use for the filter and the corresponding value(s) to match.

The operator defines the logic for combining the filters:



- **Any:** the rule activates if at least one item matches.
- **All:** the rule activates if all the items match.
- **None:** the rule activates if no item matches.

### 8.1.2 Configuring actions for the rule



In the DICOM nodes tab, add and remove actions using the buttons in the toolbar.

For each action, first select the DICOM node to push to:



Then, define the tasks for this DICOM node:

Enable	Action
<input checked="" type="checkbox"/>	PUSH
<input checked="" type="checkbox"/>	AUTO FETCHING (3 MG ; 2 US)
<input checked="" type="checkbox"/>	PRE FETCHING (3 MG ; 2 US)

- **Push:** simply push received studies.
- **Auto-fetching:** push previous studies for the same patient when receiving studies.
- **Pre-fetching:** push previous studies for a patient when receiving the worklist entry (for example at the beginning of the day), to save time.

The auto-fetching and pre-fetching tasks can be configured in more details by clicking on the button:



This will open a window to define the prior studies to push:

Name:	PRE FETCHING
Configuration:	DX StudyOld<12 ; 2 CT BodyPart=Lung

Select the type (auto-fetching or pre-fetching).

Then, define which prior studies to push with the following syntax:

**nb|modality**

Multiple definitions can be separated with a “;”:

**nb|modality ; nb|modality ; nb|modality**

Examples:

<b>1 DX</b>	Push one prior DX study
<b>3 MG ; 2   US</b>	Push three prior MG studies and 2 prior US studies.

> Note: this is the modality for the **prior studies**, which is different from the modality filters. Examples:

Filter	Action	Meaning
Modality=MG	AUTO FETCHING (2 US)	When receiving MG studies, auto-fetch two prior US studies.
Modality=CR Modality=DX	PRE FETCHING (3 CR ; 3 DX ; 1 CT)	When receiving CR or DX studies, pre-fetch three prior CR study, three prior DX study and one prior CT study.

## 9 Study types definition [Med RIS]

The study types (or procedures) performed in the radiology center can be configured in the study types tab:



Actions	Code	Description ↑	Study duration	Associated equipment
×	B001	BASSIN	20 minutes	LOCAL MEDXR2 Other Ultrasound room
×	M001	MAMMOGRAPHIE	30 minutes	MAMMO Mammo room
×	R001	NOTASSIGNED	30 minutes	
×	P001	POUMONS	15 minutes	LOCAL MEDXR2 Other Ultrasound room
×	B002	tset	60 minutes	MEDXR MEDXR2 Radio room Ultrasound room

Study types are used:

- To schedule visits with studies in the worklist.
- To associate report templates to specific study types so that the correct template is automatically opened when creating a report.

### 9.1 Creating a study type

Creating a study type is possible with this button in the toolbar:



Fill the following information on the new line:

- Code: the code, or ID, identifying the procedure.
- Description: the name of the procedure.
- Study duration: the duration of the study, in minutes.
- Associated equipment: the DICOM nodes that can acquire this study (these DICOM nodes must have the **worklist SCU** service checked).

The information is saved automatically.

### 9.2 Deleting a study type

Deleting a study type is possible with this button:



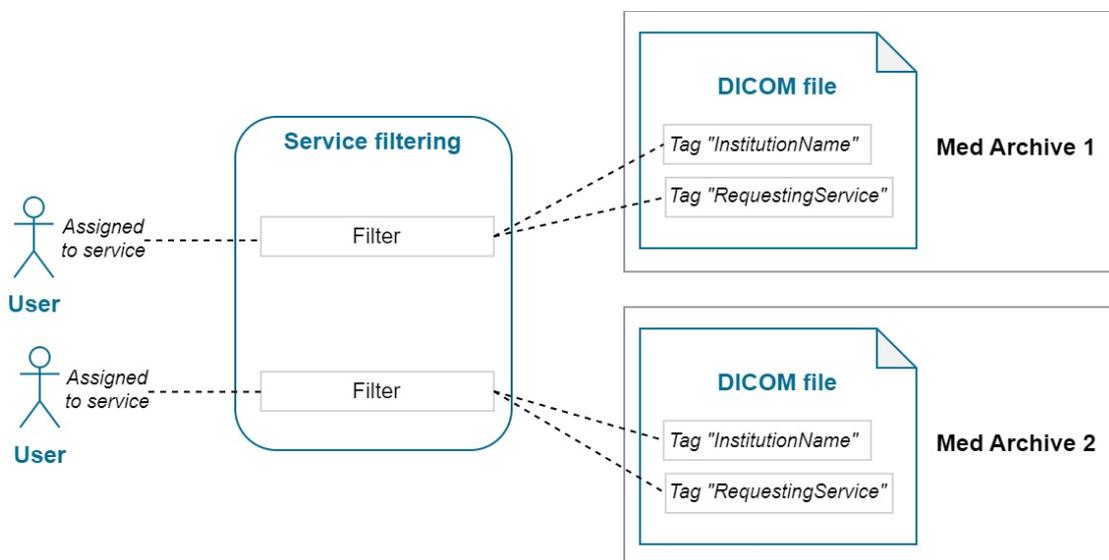
## 10 Service filtering [Clipper]

The services filtering tab allows to define filters so that users assigned to services/sites only have access the corresponding studies.



Name ↑	Connector	Filter
REPORT-DEMO	Database	("RequestingService": "REPORT-DEMO")

The following diagram illustrates how access to studies is handled based on the defined filters:



› Note: Clipper can be connected to multiple Med Archive systems. Two Med Archive systems are showed here as an example, but the process is the same for one, two, three, or more.

The first level of filtering is at the **connector** level. A **connector** is a connection between Clipper and a Med Archive system. This means that, when Clipper is used for a group of radiology centers with different Med Archive systems, a user can be assigned to just one of them.

The second level of filtering is at the **service/institution** level. The following DICOM tags are used to filter the studies:

- Institution name (**0008,0080**)
- Requesting service (**0032,1033**)

This means that, inside one radiology center, a user can be assigned to just a subset of studies.

## 10.1 Creating a filter

A filter can be created using this button in the toolbar:



- First, write a **name** for the filter. This will help identifying filters when assigning users to them.
- Then select the **connector**, i.e., the Med Archive system.
- Finally, configure the **filter** for the institution name and requesting service, with the following format:

```
{ "InstitutionName": "...", "RequestingService": "..." }
```

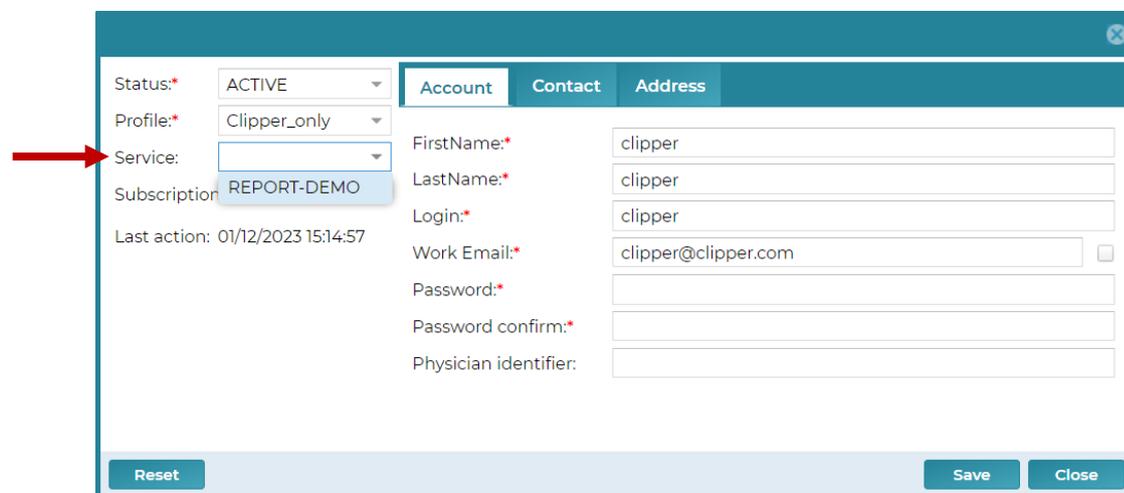
Both parameters are optional.

Examples:

{ }	No filter for institution/service.
{ "InstitutionName": "Center A" }	The user will only have access to studies from center A.
{ "RequestingService": "Service B" }	The user will only have access to studies from service B.
{ "InstitutionName": "Center A", "RequestingService": "Service B" }	The user will only have access to studies from service B of center A.

## 10.2 Assigning a user to a service

Once the filters are configured, users are assigned to services from the user edition window, in the user list:



The screenshot shows a user profile form with the following fields and values:

- Status: ACTIVE
- Profile: Clipper\_only
- Service: REPORT-DEMO (indicated by a red arrow)
- Subscription: REPORT-DEMO
- Last action: 01/12/2023 15:14:57
- Account tab selected with fields:
  - FirstName: clipper
  - LastName: clipper
  - Login: clipper
  - Work Email: clipper@clipper.com
  - Password: (empty)
  - Password confirm: (empty)
  - Physician identifier: (empty)

Buttons at the bottom: Reset, Save, Close.

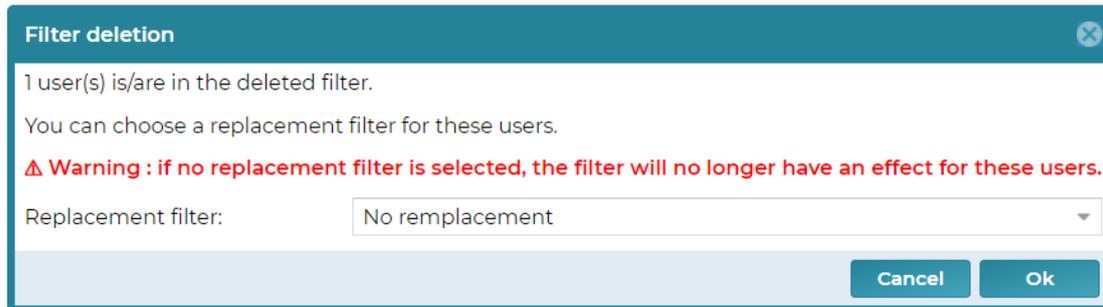
Users can be assigned to several services.

### 10.3 Deleting a filter

Deleting a filter is possible with this button in the toolbar:



If some users are currently assigned to the filter being deleted, a window will appear to select a new filter for them, or to remove the filter without replacement:



**Warning:** if no replacement filter is selected, the filter will no longer have an effect for these users, meaning they will have access to the studies previously filtered.

## 11 Revision

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Manual last revision date: **2025-04-08**