Lasernet 10.

Lasernet Client 10

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Formpipe.

Contents.

1 Introduction.

1.1 Who Should Use This Guide?

This guide is written for everyone who works with Lasernet.

2 Terms of Use.

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3 Lasernet Client

3.1 Purpose

Lasernet includes an API, which gives third parties the ability to create custom solutions which can interact with the Job Engine and Job Database in Lasernet. As part of the upgraded suite of Lasernet products, the stand-alone client has been developed to take full advantage of the new API.
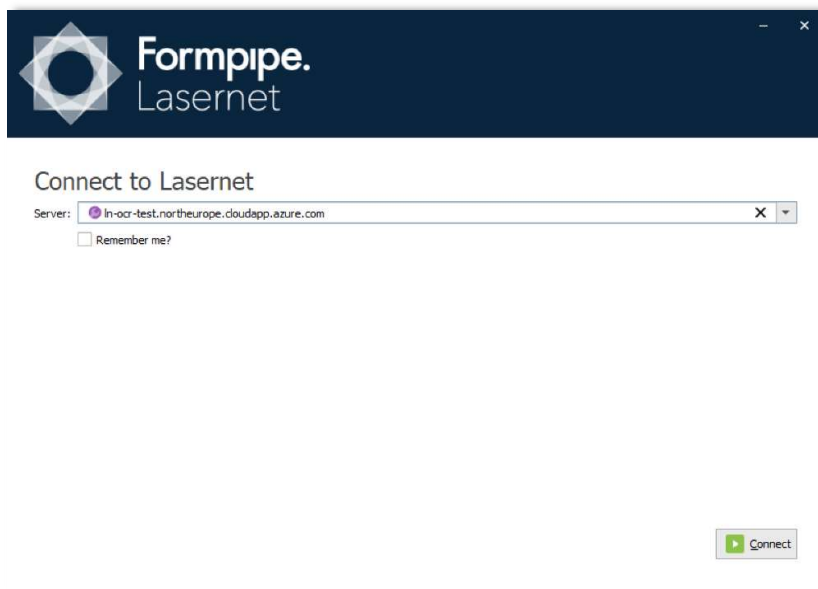
Together the API and Client now make it possible to view job queues and perform basic tasks such as: editing JobInfos, re-scheduling, searching, viewing and removing and releasing paused jobs.

You must ensure that your Lasernet Client and Lasernet Server versions are in sync. The Lasernet Client will only work if it is running the same version of the software as the Lasernet Server.
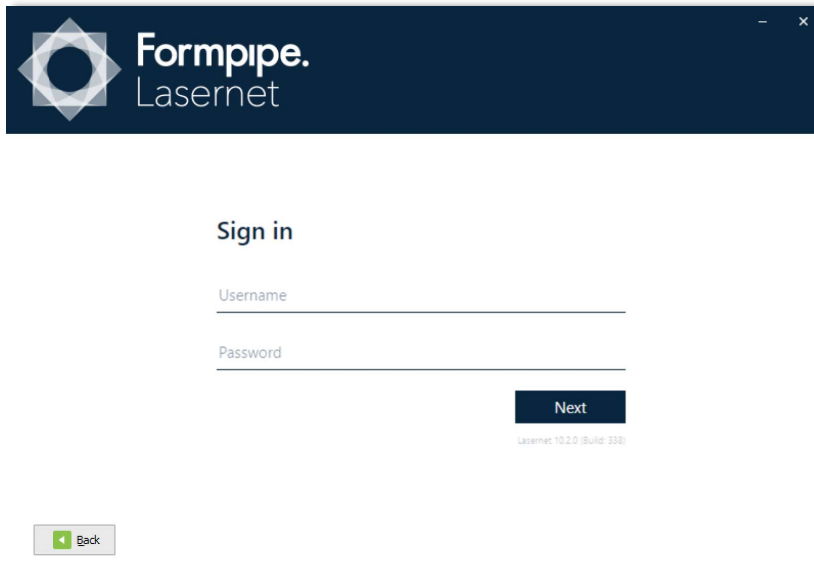
3.2 Client/server
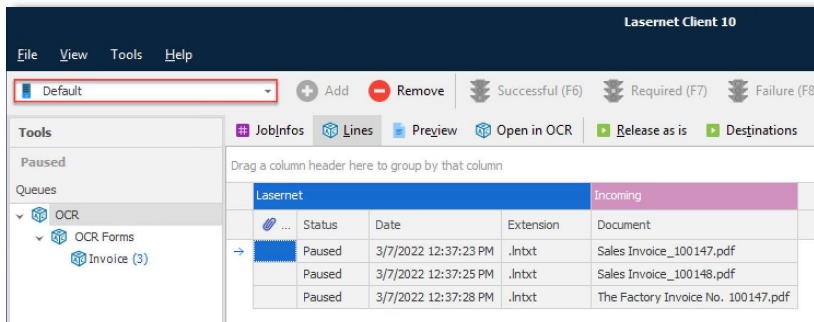
3.2.1 Getting started

Before you can retrieve paused, scheduled or failed jobs from the Lasernet Server, connect to a Lasernet Config Server.

Sign in with your credentials.
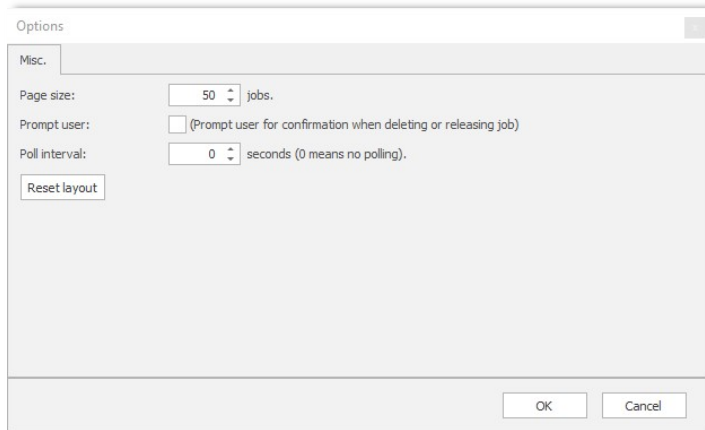
Select a server instance from the Lasernet server.

You can now view the jobs and metadata stored by the Lasernet Server.

Note: If you are running the Lasernet Client on a different machine to your Lasernet Server, please ensure that that the correct port number is open in your server's firewall.

Misc
The Misc settings contain various settings to control the behaviour for viewing documents in the Lasernet Client.

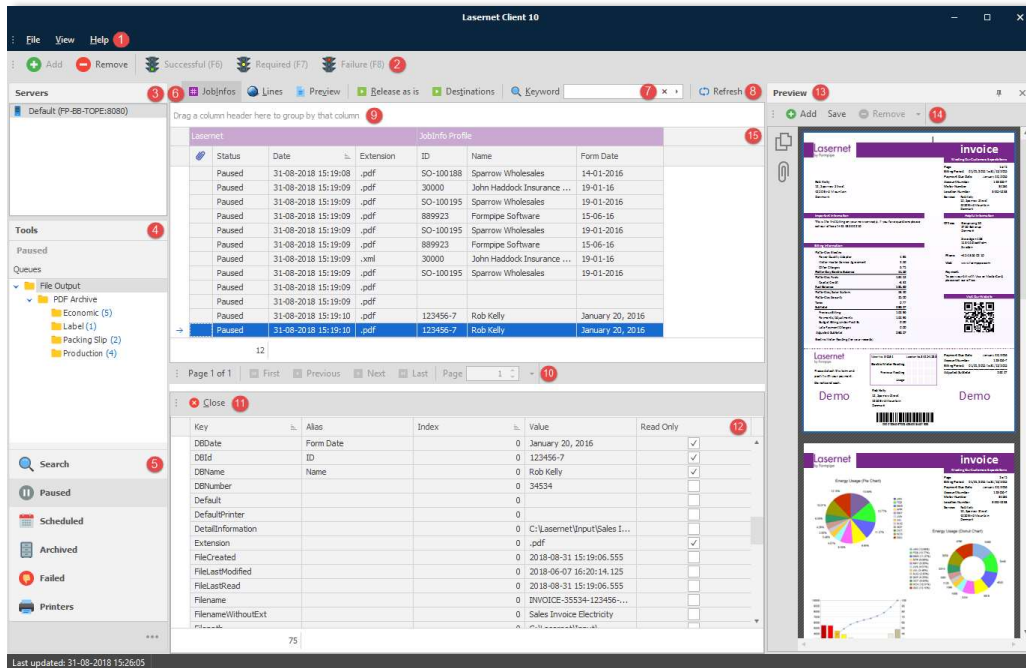| Page size	Queues can contain thousands of jobs. Paging is used to limit how many jobs are actually retrieved and shown. Increasing the page size can severely reduce performance of both the Lasernet Server and the Lasernet Client.
Trust untrustedRoot	Activate to accept that self-singed certificates with an untrusted root are valid.
Prompt user	Activate (Default) to prompt user for confirmation when deleting or releasing job.
Reset layout	Will reset the layout of docked windows in the application and bring them back to their default position.

3.3 Overview

The Lasernet Client has an intuitive interface for viewing and managing the jobs stored in Lasernet.

1. File menu containing basic commands for **Closing** the application, activating the **Preview Job** window and the **About** box.

2. Toolbar for upper (9) and lower (12) window. **Add** a new Job/JobInfo or **Remove** a selected Job(s). Select **Successful**, **Required** or **Failure** for validation of fields in upper (9) or lower (12) window.

3. **Servers** and added connection strings. Right click in the window to **Add**, **Edit** or **Remove** server from list.

   Please notice: The Add and Remove buttons on the tool bar are only for managing queue jobs and cannot be used to add or remove servers from list.

4. Tree view showing <u>only</u> **Queues** containing jobs and how many jobs are stored in them.

5. The client has four main queues which can be viewed on the corresponding tabs. Depending on the job status the Archived queue can also be used to show successful jobs.
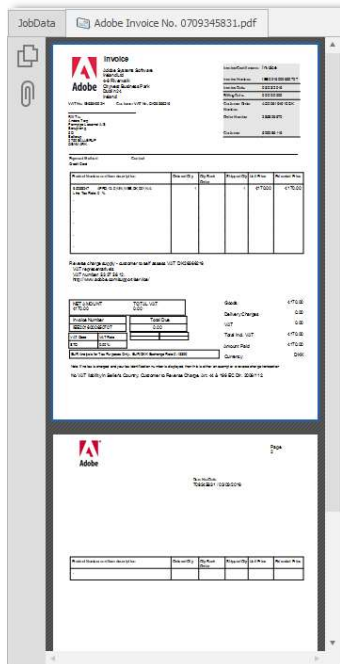
   The queue types are:

• **Paused**: Jobs which must be manually released (unpaused) by the user;

• **Scheduled**: Jobs which are awaiting automatic release at a predetermined time;

• **Successful**: Jobs which have been processed successfully. This queue will only show metadata but will not preview jobs. Queue is only visible if there are succeeded jobs in database.

• **Failed**: Jobs which have failed somewhere in Lasernet.

• **Search**: Search is not a queue type. Search works across all queue types and shows jobs independently of their status.

• **Printers**: Printers is not a queue type. It shows the Windows printer statuses for Lasernet Printer Output modules added to the Lasernet configuration on the connected server.

6. Toolbox for upper (9) window. Click **JobInfos** to show additional JobInfos (metadata), saved via JobInfo profiles in any Lasernet module. Click **Lines** to show additional JobInfos saved via Item Lines in the Lasernet OCR module. **View** opens the job in an application associated with the configured extension. Click **Release as is** to release the selected job from the selected queue. Click **Destinations** to select an alternative destination for the selected job (requires that an alternative destination has been configured for the selected job).

7. Type a **Keyword** to search for the value in any column and any queue. Keywords cannot be found in JobData.

8. Click **Refresh** to retrieve new jobs from server and update list view for jobs.

9. **Main window** contains jobs stored in the selected queue. The **Status** column will show queue type and additional columns will show names and values defined in the JobInfo Profile. JobInfo Profiles are configured in Lasernet Developer and activated when the job is stored. A field can have 5 different colors depending on the status type:

☐	Standard	Standard field if no special action is taken.
☐	Selected	The field is selected and actions in tool box can be taken.
🟥	Failure	Field value has a failure and must be validated and corrected by the user.
🟨	Tentative	Field value is tentative and must be validated and corrected by the user.
🟩	Successfully	Field value has been successfully validated by the system or the user.

10. Navigate to **First**, **Previous**, **Next**, **Last** or specific **Page** number.

11. The paging only works chronologically. It is not affected by how the view is sorted in the Lasernet Client. This means the first page will always contain the oldest jobs and the last page the newest jobs.

12. Toolbox for lower window. Click **Close** to close list of additional JobInfos or Lines for selected job.

13. If JobInfo mode is selected the **lower window** will contain columns for additional JobInfos (key column) including columns for alias name, index number, value and security settings (read/write).

    In Line mode, the toolbox for the lower panel will include a 🌐 Unified button to change between mixed and grouped listings for line item types. Only Item Lines/fields extracted by the Lasernet OCR module will be listed in Line mode.

14. Activate **View → Preview Job** to show selected job in **Preview** window. The Lasernet Client is able to preview the following formats in the Preview window: PDF, XLS, XLSX, DOC, DOCX, RTF, TIF and XML. EMF/LnEMF can be previewed in PDF format if activated on server site.
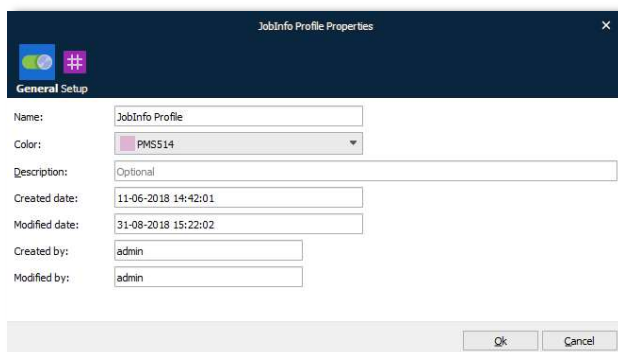
    The preview window is not guaranteed to be 100% accurate and compatible with the specifications for the listed formats. If you want to confirm that the job looks as expected you must open it in external application, like Microsoft Word, Microsoft Excel, Internet Explorer or Acrobat Reader. Ensure that the extension is associated with the mimetype/application and then double click on the selected job to open it.

15. Click **Add** button in **Preview** window to add additional attachments to paused or scheduled jobs.

Click **JobData** tab to view the primary stored job and click **Save** to store a copy in a folder. Select other tabs to view or save each attachment stored with the primary job. Supported viewing formats are Word, Excel, TEXT, PDF, XML and TIFF. Select the attachment and click **Remove** button to delete it. The attachment will no longer be attached to the primary job and cannot be restored again. Attachments added <u>manually</u> by a user in Lasernet Client and released to the server, are added by the system to the following JobInfos:

```
Added JobInfo MailAttachment[0] = [binary data (26771)]

Added JobInfo MailAttachmentFileName[0] = Adobe Invoice No. 0709345831.pdf

Added JobInfo MailAttachmentMimeType[0] = application/pdf
```

16. The bandings contain a group of JobInfos. The first group named 'Lasernet' contains the system information for the number of attachments, job status and a timestamp for the job. It has a fixed color defined by system. User defined colors can be configured for other groups of JobInfos that all belong to a JobInfo Profile. The color for each JobInfo Profiles are maintained in the Lasernet Developer → JobInfo Profiles → General tab.
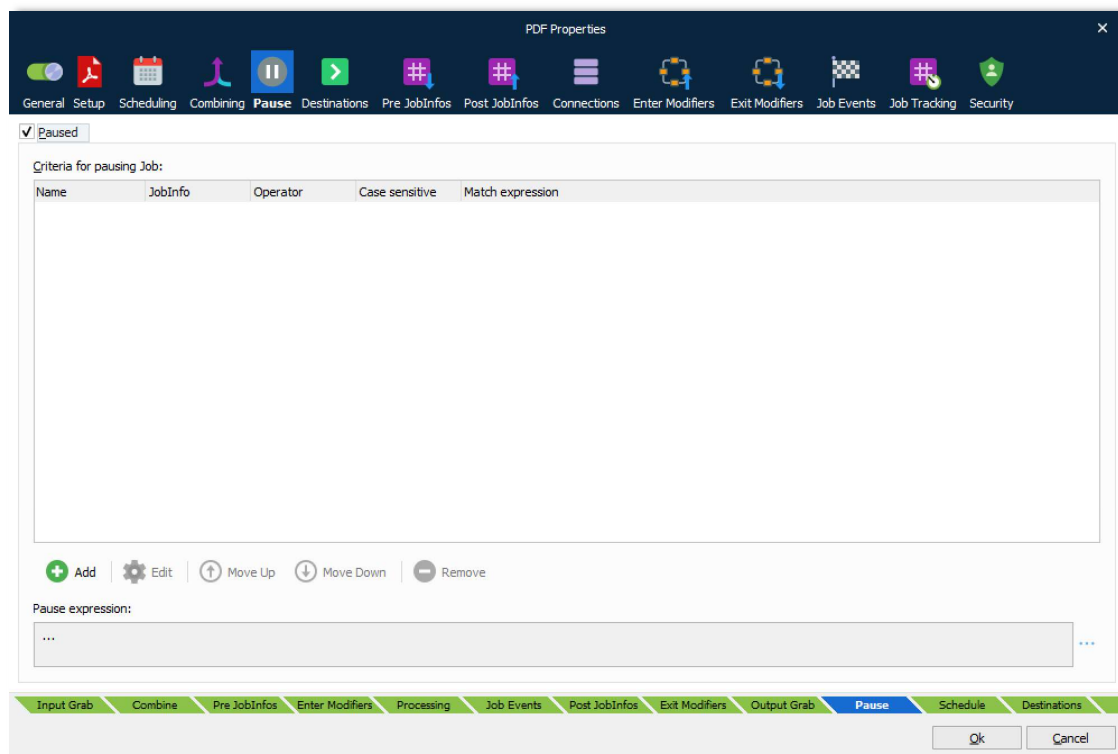
3.3.1 Paused Jobs

Pausing is usually added to verify that the output from a module looks correct before releasing it to its output destination(s).

Paused jobs require manual release (unpausing) by a user before they can continue. Jobs can be paused at any level in Lasernet:
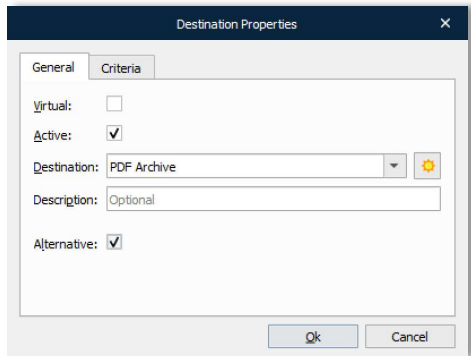
• Input Modules and Engines: Pausing is done on the output side of the module.

• Output Modules: Pausing is done on the input side of the module.

Printing devices can also be paused so that all jobs passed to them are held, regardless of where they are sent from.

It is possible to use JobInfo criteria to determine if a job is paused or not.

When a paused job is released by a user it is passed to the job destination(s) specified in the module. It is possible to mark a pre-defined destination as an 'Alternative'. Alternative destinations are skipped unless the Lasernet Client user specifically chooses to release a job to them.
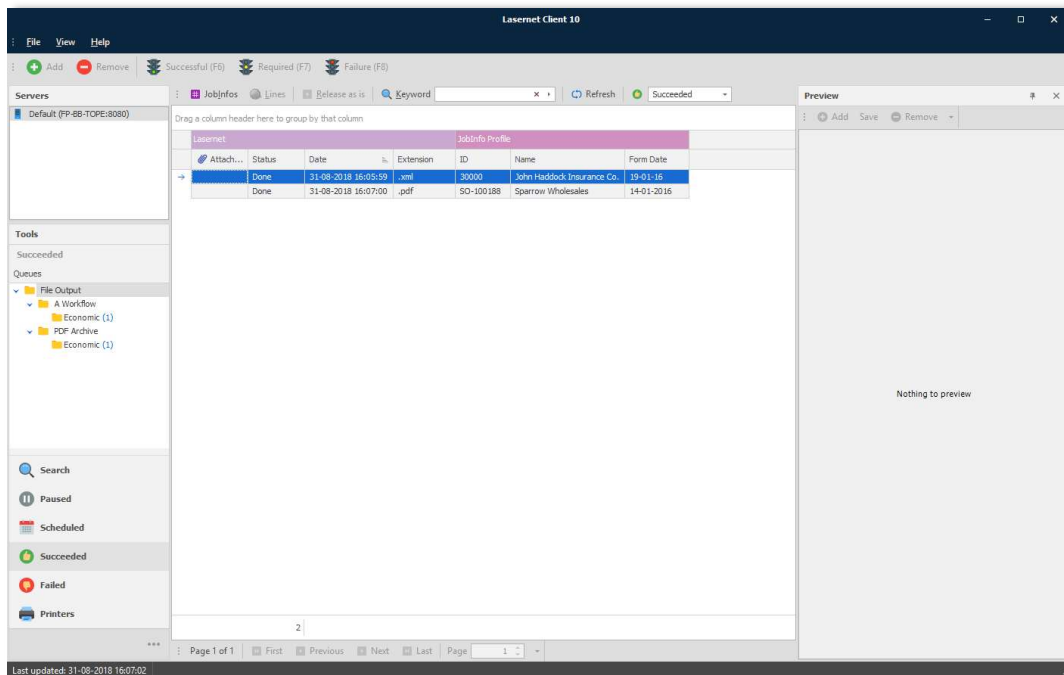
When a module (queue) is paused or scheduled, job tracking becomes available.

3.3.2 Scheduled Jobs
Unlike paused jobs, scheduled jobs are automatically released by the system from their paused state after a specified period. Alternative destinations are not configurable for scheduled jobs.
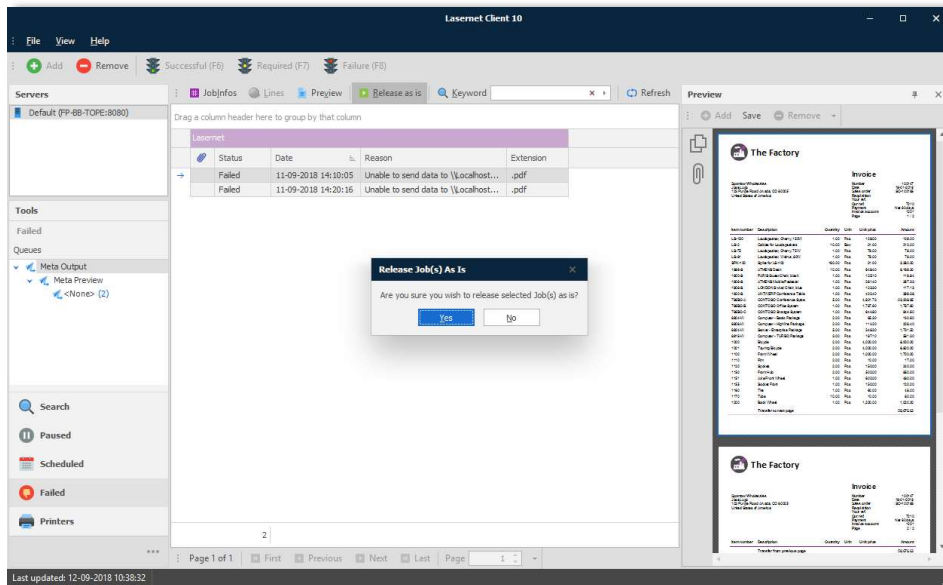
3.3.3 Succeeded Jobs
This queue is visible as soon as Lasernet successfully processes any jobs. Only metadata is stored for successful jobs, therefore there is no data to preview.

The server automatically maintains the Succeeded Job queue and as such you cannot manually remove jobs from it. However, you can define the period of time the server should keep successful jobs in the database for, before removing them.

3.3.4 Failed Jobs

If a job has failed in Lasernet it is often because communication cannot be established between an output module and the external environment (e.g. an email server). You can retry a failed job by selecting the queue or jobs you want to release and then click Release as is. Lasernet will process the job again from the same state as where the job failed and try to re-connect and send the job again.
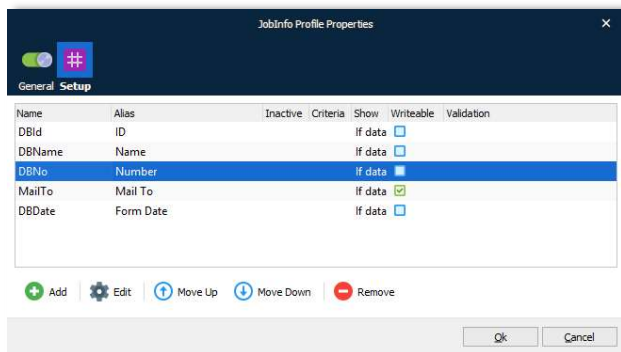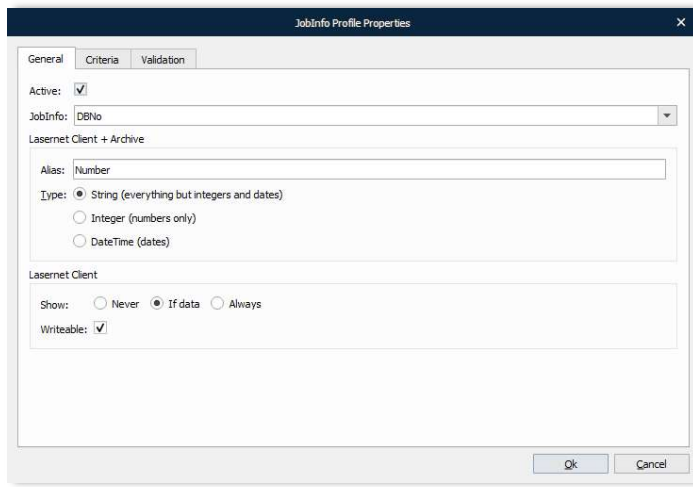

If the job is successful, it will be registered as a succeeded job and will be removed from the failed job queue.

Alternatively, click 'Remove' to delete jobs from the failed job queue.

3.3.5 JobInfo Profiles

JobInfo profiles can be used to display a list of relevant JobInfos in the Lasernet Client. Once configured, the key data is shown in columns for the job. JobInfo profiles can be used to show useful information such as invoice numbers or names and email addresses of clients, etc.

JobInfos do not always contain user friendly names, therefore it is possible to specify an alias if desired. The alias will show as a column name in Lasernet Client when documents are listed in rows.

Two types of JobInfos are supported and handled, these are: String and Integer.

The 'Show' property specifies whether or not a JobInfo should be shown as a column in the Client. As all stored JobInfos are searchable, it is not always necessary or desirable to make them visible in the client.
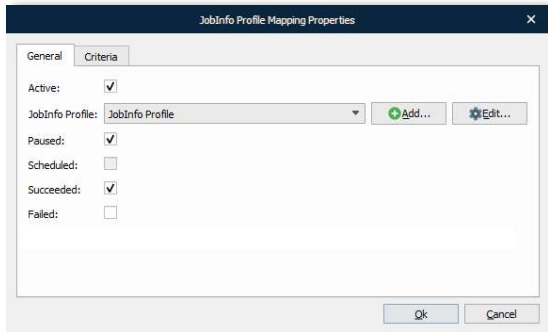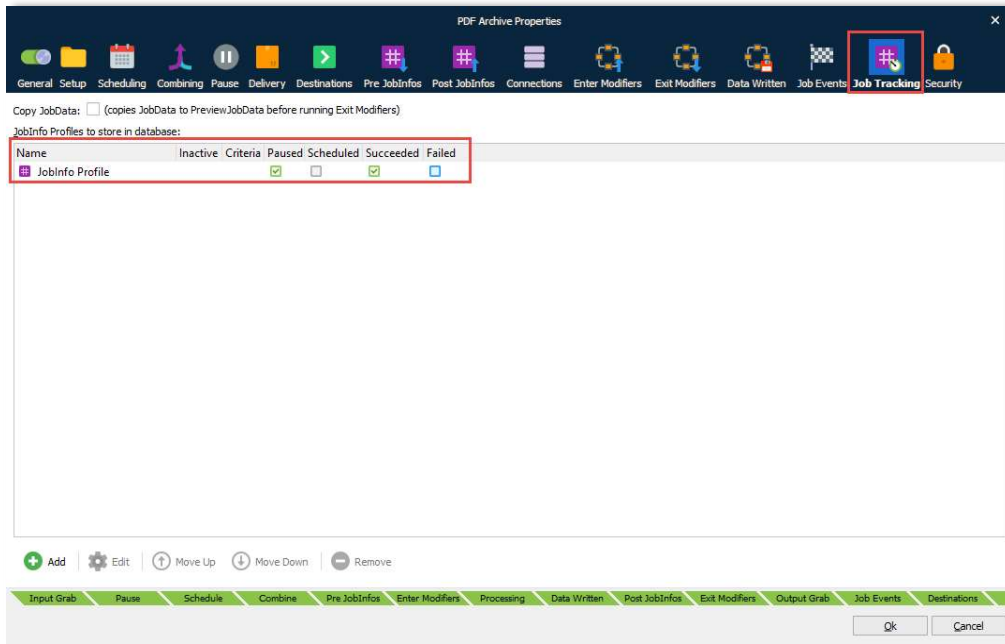
The Criteria tab can be used so that only JobInfos matching specified conditions are stored.
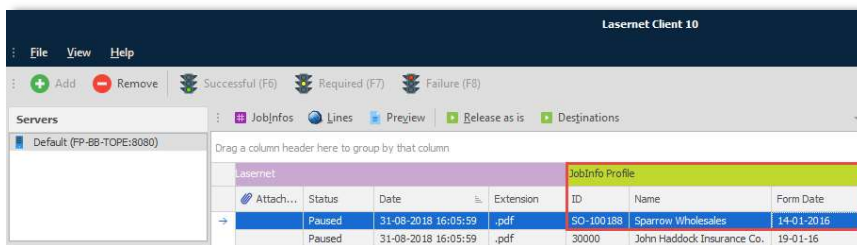
3.3.6 Job Tracking

When a module is configured to pause (Pause tab) or to use scheduling (Scheduling tab), it is possible to specify which JobInfos should be stored for viewing later in the Lasernet Client. Job tracking for Archiving is only selectable if archiving is activated and configured in the server database settings.

Job Tracking is achieved by first creating one or more JobInfo profiles and then mapping them to the module on the Job Tracking tab. More than one JobInfo profile can be added to the same queue and a JobInfo profile can be used on several different queues.

Job Tracking is available for a wide range of job events, like Paused, Scheduled, Succeeded, Archiving and Failed. It is possible to use different JobInfo profiles based on criteria for all event types.

The image from the Lasernet Client below shows a sample scenario when using a JobInfo profile with a range of user defined JobInfos (metadata) for paused, succeeded and archived jobs.
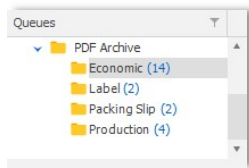
3.4 Functions

3.4.1 Queues

For each of the different queue types: paused, scheduled and failed, there is a tree of queues that contain jobs. If there are no jobs in a queue or the queue type is successful/archived, it is not displayed.

There are three queue levels in the tree:

• **Top**: Module type.

• **Middle**: Module instance.

• **Bottom**: Instance grouped by the JobInfo FormType.

The higher you go in the tree; the more queues are covered and more jobs are shown.

The FormType JobInfo is a special JobInfo which is used to group jobs in a queue in separate lists. If no FormType is specified for a job, it will automatically be in the list called '<None>'.

FormType is stored by default, so a JobInfo profile does not need to be created to use this feature.

A popup menu is available for the queues when right-clicking;

It is possible to release all jobs at a selected tree level to their default destinations. Failed jobs are then retried.
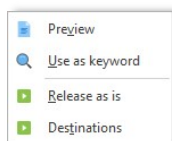
It is also possible to remove all jobs from any queue at any selected tree level.

3.4.2 Queue

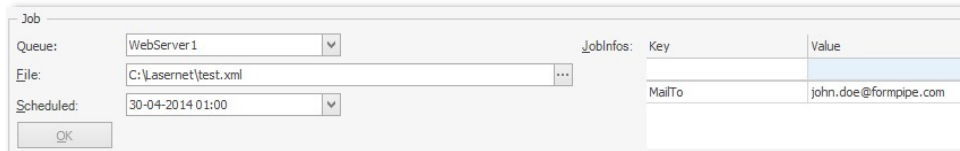The contents of the queue are shown on the right-hand side.

All stored JobInfos that are marked with 'Show' are shown as columns.

A range of actions are possible via the buttons or popup menu.

3.4.2.1 Add

A job can be added manually to the Web Server Input module specified during setup or to any other input module accepting jobs from the Lasernet Client.

It is possible to add a list of JobInfos, with scheduling enabled, to the job.
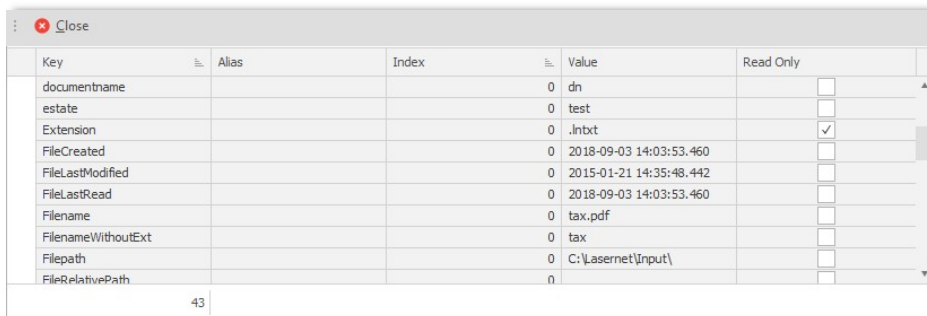
3.4.2.2 Remove

The job will be removed from the Queue.

Note: It is not possible to recover a removed job.

3.4.2.3 JobInfos

All of the available JobInfos for a job are not always shown in the JobInfo profiles attached to a queue. It is possible however, to view these JobInfos through the JobInfos function. There are two choices:
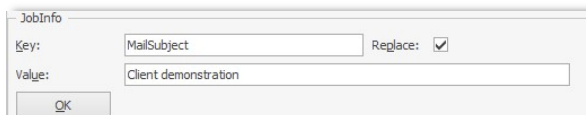
• **All**: All the JobInfos are read from the actual job.

• **Database**: Only the JobInfos chosen to be stored via Job Tracking are shown.

JobInfos that are marked as Read-Only in the JobInfo profile are not editable.

It is possible to add more JobInfos to the job or change the values of existing JobInfos.

Note: JobInfos with system status are only visible if you are logged with administrator rights in the Lasernet Client.

3.4.2.4 View

The View action opens the job in the application associated with the file type specified in the JobInfo 'Extension'. The extension must be specified with a dot (.) in front, for example '.PDF' or '.LnEMF'.

LnEMF files are opened in the Lasernet Viewer (if installed).

3.4.2.5 Use as keyword
This action copies the content of the cell to the keyword field and searches for it. This saves the user from manually copying or setting a value into the search field and searching.
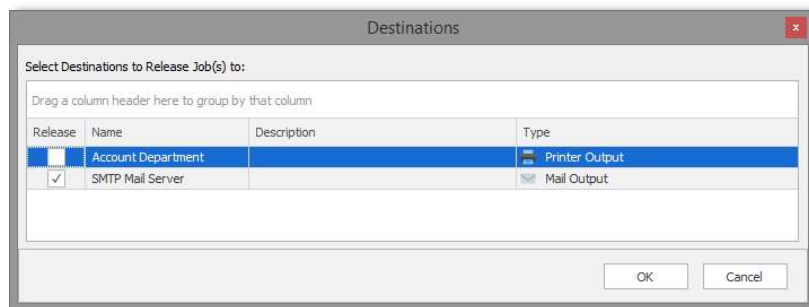
3.4.2.6 Release as is
This action instructs Lasernet to release the job for further processing. According to the status of the job the following actions will be performed on it:

• **Paused**: The job is sent to destination.

• **Scheduled**: The job is sent to destination immediately instead of when originally scheduled.

• **Failed**: The job is retried.

When releasing a paused job containing a ▢ tentative or ▮ failure status field, the JobInfo **OCRValidated** will be set to **0** (false). The JobInfo can be used as a condition, in the Lasernet configuration, to define a special action for jobs containing tentative or failure fields. It is recommended that they are configured to be stored in the same queue again.
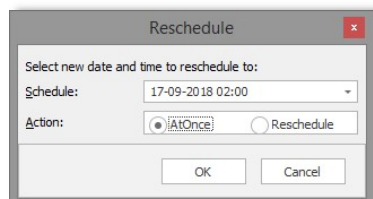
3.4.3 Destinations
The destinations dialog allows the user to choose which destinations a job should be released to when pressing OK. This can be useful if a job is configured with multiple or alternative destinations.

Default destinations are automatically checked and alternative destinations are unchecked.

3.4.4 Reschedule
A scheduled job can be rescheduled to another date and time.

The reschedule action specifies what to do if the job cannot be released at the scheduled time because Lasernet is offline.

• **AtOnce**: The job is released when Lasernet comes online again.

• **Reschedule**: The job is rescheduled according to the rules of the module.
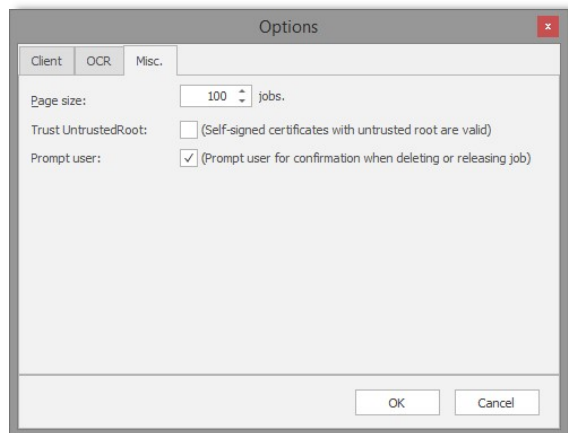
3.4.5 Keyword

The list of jobs can be filtered by a keyword. The keyword is matched against the JobInfo values stored via job tracking.

When a keyword is used, only jobs which match this keyword are shown.

3.4.6 Paging

Since Queues can contain thousands of jobs, paging is used to limit how many jobs are actually retrieved and shown.

To change how many jobs are shown on a page, edit Server Options and select Performance tab.

Note: Increasing the page size can severely reduce performance of both the Lasernet service and the LasernetClient.

Below the list of jobs, there are controls for moving to another page.

• **First**: Jumps to the first page of jobs.

• **Previous**: Jumps to the previous page of jobs if not currently on the first page.

• **Next**: Jumps to the next page of jobs if not currently on the last page.

• **Last**: Jumps to the last page of jobs.

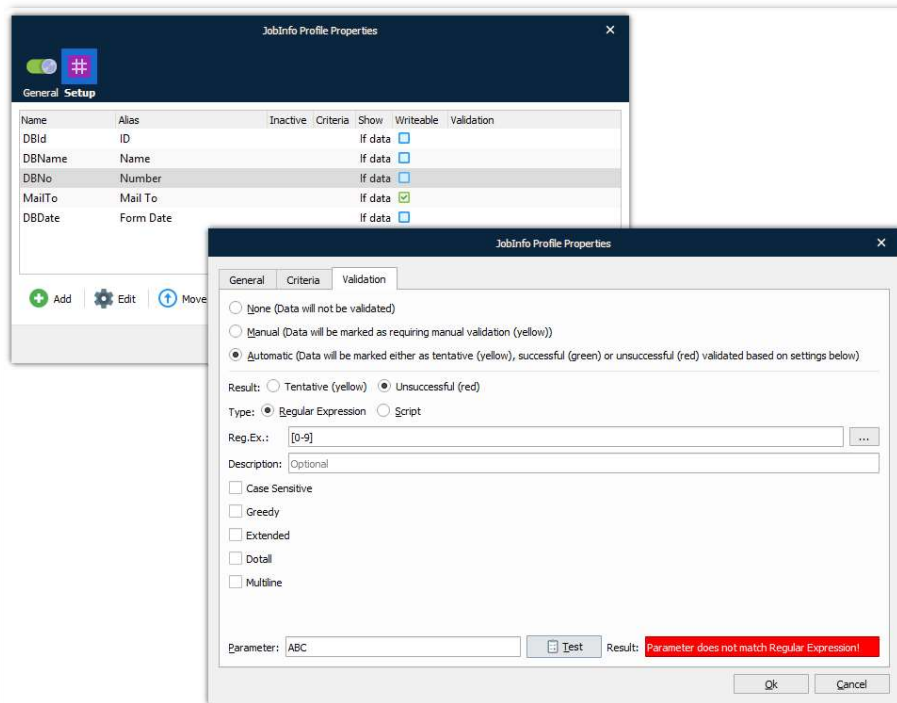• **Page**: Jumps to a specific page.

3.4.7 Search

Search is not a queue type. Search works across all queue types and shows jobs independently of their statuses. The status of the job determines which actions are possible.

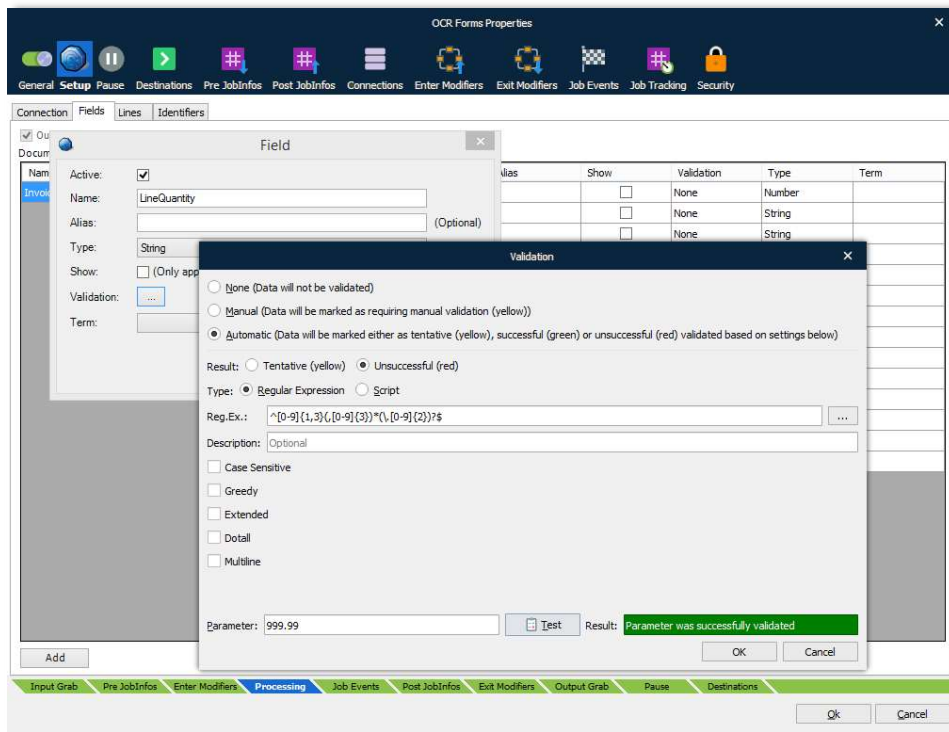It is not possible to search for a date, a status or a failure reason.

The most recent searches are shown on the left for easy access.

3.4.8 Validation rules

If validation of JobInfos in a job is required it must be configured in the Lasernet Developer. In the validation tab for a JobInfo Profile you can define your validation rules for jobs and embed them for any module except the OCR module.
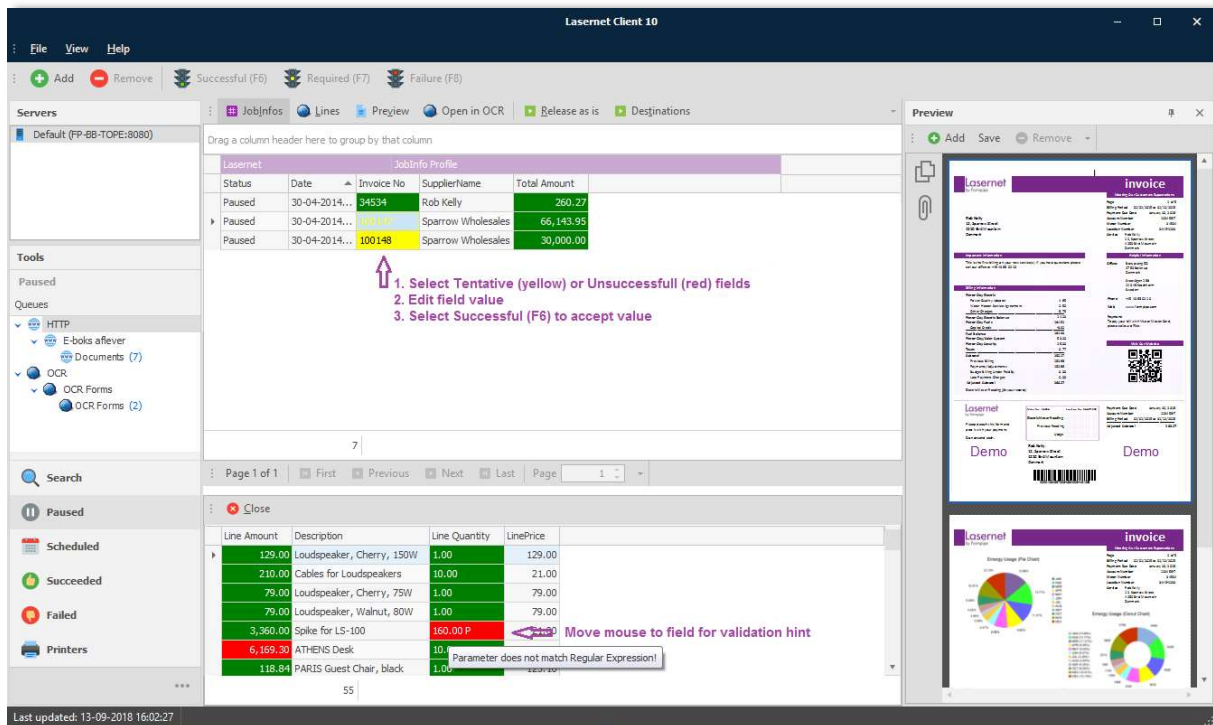

If you want to validate OCR fields, extracted by the OCR module, it is necessary to define the validation rules of each OCR field in the settings of the OCR Module.

For more information about how to configure validation rules, please read the manuals for **Lasernet OCR** and **Lasernet Developer**.

3.4.9 Validation tools

You can select any job or field in the grid that has write permissions or is marked with a yellow or red validation code and edit the contents.
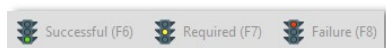
If the job contains item lines created via the OCR module, click the '**Lines**' button to view them in the lower view. You can navigate around the grid via arrow keys and hit return to edit a field. When a field is marked as **tentative** (yellow) or **failure** (red) you can change the contents to the correct (expected) value. In the preview window you can see a copy of the original document.

The validation color codes are:

🟥	Failure	Field value has a failure and must be validated and corrected by the user
🟨	Tentative	Field value is tentative and must be validated and corrected by the user
🟩	Successful	Field value has been successfully validated by system or user

The tool bar has three validation tools:

Press F6-key to mark a validation field as successful (green)

Press F7-key to mark a validation field as required (yellow)
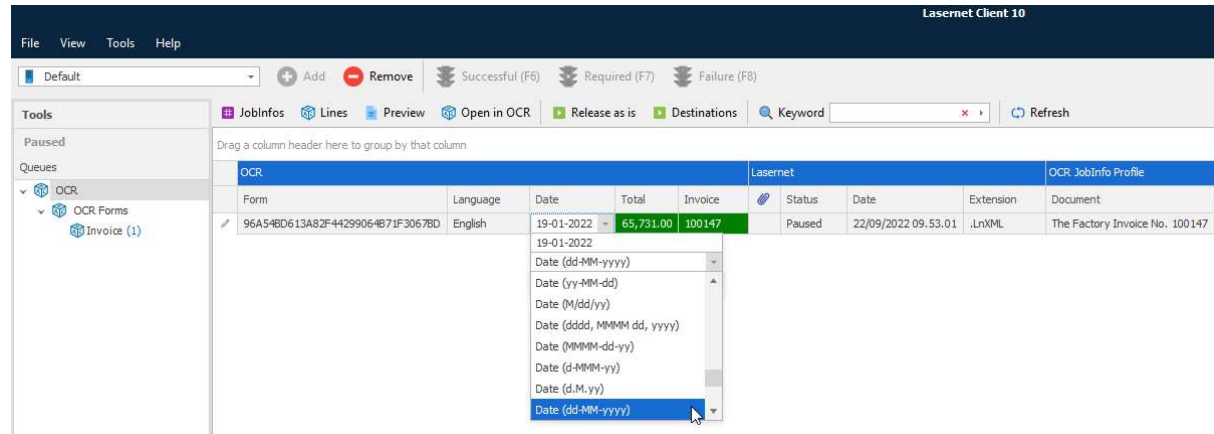
Press F8-key to mark a validation field as failed (red)

Before selecting **Release as is** it is recommended that all the validation fields have a successful (green) status, both in the upper view (main fields) and lower view (item lines). If there are any fields still marked with a tentative or failure status, it is recommended that the validation fields are validated by another user or by a 3rd party workflow system.

3.4.10 Dates and regional profiles

Select a column presenting a date format (OCR Forms only), to define a regional profile, which match the listed value. Any value selected will automatically be updated in the OCR Form, which have extracted the date value and created the regional profile.

Next time the same OCR Form is being processed, the selected regional profile is used to match the date format.