

Lasernet 10.

Lasernet Monitor 10

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1 Introduction.

1.1 Who Should Use This Guide?

This guide is written for the Lasernet system administrator. It explains how to use the Lasetnet Monitor application.

2 Terms of Use.

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3 Lasernet Monitor

3.1 Purpose

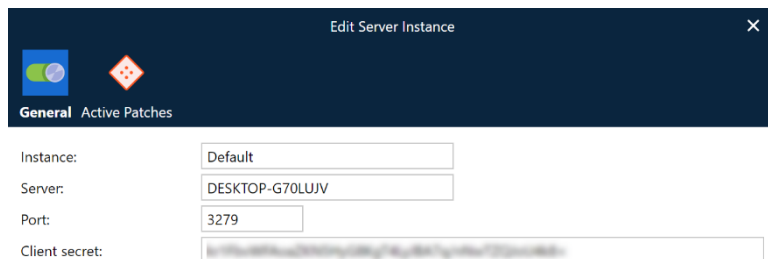
The Lascript Monitor can be used by system administrators to determine the status of the processes and forms flow within the Lascript Server. It can also be used for maintenance tasks such as starting or stopping the service and retrying failed jobs.

3.2 Working with Lasernetet Monitor

Log processed by the Lasernetet 10 service can be viewed in the monitor window. This can either be the live log for jobs currently being processed, or log data which has been saved to disc for older jobs that have already been processed.

3.2.1 Monitoring Servers

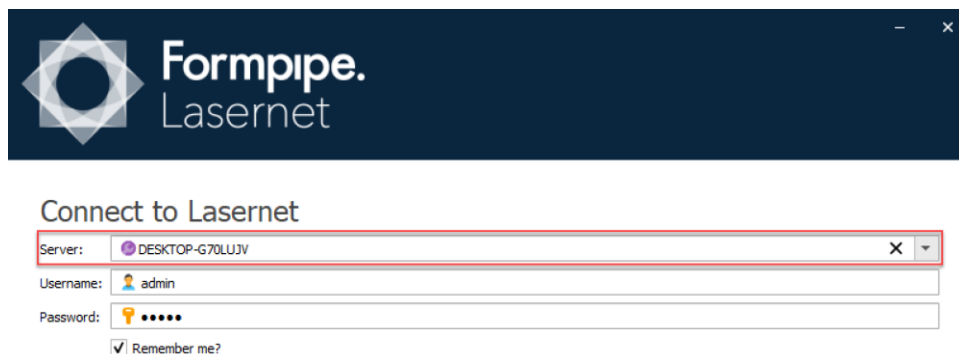
From the Lasernetet Monitor you can connect to Lasernetet servers in your local network. Communication between the monitor and the Lasernetet services is established via an encrypted TCP/IP connection on the port number defined in the Server Instance settings of the Lasernetet Config Server.



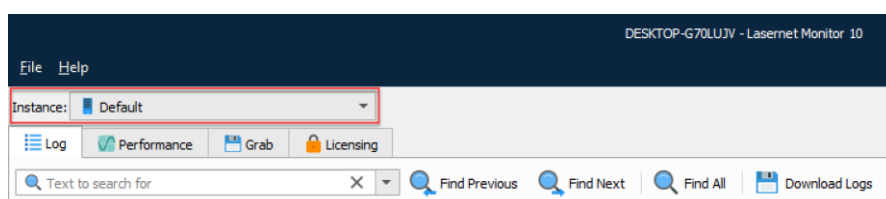
If the monitor is installed on a different computer to that of the Lasernetet service, please check that your server firewall settings will allow the monitor to connect to the service via the defined port number.

3.2.2 Connect to Lasernetet

To monitoring the server log it is required that you start the Lasernetet Monitor, connect to the Lasernetet Server with your credentials, select an accessible server in the dropdown in the Connect to Lasernetet login screen



and then select an Instance from the Lasernetet Monitor application.



You are now ready to access the monitor log, search for log and fetch oldest and newest messages.

DESKTOP-G70LUJV - Lasernet Monitor 10

File Help

Instance: Default

Log Performance Grab Licensing


Text to search for [X] Find Previous Find Next Find All Download Logs Fetch oldest Fetch newest Clear log


Type	Time	Module	Thread	Message
Debug	2021-05-25 10:25:30.018	Form - Sample Forms	19028	Processing page 2...
Debug	2021-05-25 10:25:30.018	Form - Sample Forms	19028	Processing page 3...
Debug	2021-05-25 10:25:30.018	Form - Sample Forms	19028	Processing page 4...
Debug	2021-05-25 10:25:30.018	Form - Sample Forms	19028	Processing page 5...
Debug	2021-05-25 10:25:30.019	Form - Sample Forms	19028	Generating PDF...
JobInfo	2021-05-25 10:25:30.072	Form - Sample Forms	19028	Set JobInfo DataFormat[0] = PDF
Job	2021-05-25 10:25:30.078	Form - Sample Forms	19028	Running modifier 'Set PDF Extension'
JobInfo	2021-05-25 10:25:30.078	Form - Sample Forms	19028	Set JobInfo Extension[0] = [binary data (4)]
Job	2021-05-25 10:25:30.079	Form - Sample Forms	19028	Running modifier 'Set PDF Extension'
JobInfo	2021-05-25 10:25:30.079	Form - Sample Forms	19028	Set JobInfo Extension[0] = [binary data (4)]
Job	2021-05-25 10:25:30.079	Form - Sample Forms	19028	Running modifier 'Set PDF Extension'
JobInfo	2021-05-25 10:25:30.079	Form - Sample Forms	19028	Set JobInfo Extension[0] = [binary data (4)]
Job	2021-05-25 10:25:30.083	Form - Sample Forms	19028	Applying post-processing module JobInfos to DESKTOP_G70LUJV_SAMPLE_FORMS_24CF28C4_14B4_4A7B_82E4_63688FAC8EC8
Job	2021-05-25 10:25:30.083	Form - Sample Forms	19028	Passing job DESKTOP_G70LUJV_SAMPLE_FORMS_24CF28C4_14B4_4A7B_82E4_63688FAC8EC8 to File Output
Debug	2021-05-25 10:25:30.085	Form - Sample Forms	19028	Public inserted; FK_Job=125280 FK_Job_Public=125276
Job	2021-05-25 10:25:30.088	File Output - File Output	19028	Applying pre-processing module JobInfos to DESKTOP_G70LUJV_FILE_OUTPUT_A85B1DB5_404B_4B0C_8D67_F11ACB7F8517
Job	2021-05-25 10:25:30.088	File Output - File Output	19028	Writing jobs to file C:\LaserNet\Output\INVOICE_35534-123456-7.pdf
Debug	2021-05-25 10:25:30.089	File Output - File Output	19028	Searching for EMF header...
Debug	2021-05-25 10:25:30.089	File Output - File Output	19028	No EMF header was found.
JobInfo	2021-05-25 10:25:30.089	File Output - File Output	19028	Set JobInfo CombinerCount[0] = 1
JobInfo	2021-05-25 10:25:30.089	File Output - File Output	19028	Set JobInfo CombinerIndex[0] = 1
JobInfo	2021-05-25 10:25:30.090	File Output - File Output	19028	Set JobInfo ActualOutputFilename[0] = C:\LaserNet\Output\INVOICE_35534-123456-7.pdf
JobInfo	2021-05-25 10:25:30.090	File Output - File Output	19028	Set JobInfo DetailInformation[0] = C:\LaserNet\Output\INVOICE_35534-123456-7.pdf
Debug	2021-05-25 10:25:30.093	File Output - File Output	19028	Deleting Job 'DESKTOP_G70LUJV_FILE_OUTPUT_A85B1DB5_404B_4B0C_8D67_F11ACB7F8517' from database...
Transaction	2021-05-25 10:25:30.106	File Output - File Output	19028	Committed job DESKTOP_G70LUJV_FILE_OUTPUT_A85B1DB5_404B_4B0C_8D67_F11ACB7F8517
Debug	2021-05-25 10:25:30.108	Form - Sample Forms	19028	Deleting Job 'DESKTOP_G70LUJV_SAMPLE_FORMS_24CF28C4_14B4_4A7B_82E4_63688FAC8EC8' from database...
Transaction	2021-05-25 10:25:30.121	Form - Sample Forms	19028	Committed job DESKTOP_G70LUJV_SAMPLE_FORMS_24CF28C4_14B4_4A7B_82E4_63688FAC8EC8
Debug	2021-05-25 10:25:30.126	Form - Sample Forms	19028	Deleting Job 'DESKTOP_G70LUJV_SAMPLE_FORMS_476C6801_1BCE_4921_A150_70B87FCAFE30' from database...
Transaction	2021-05-25 10:25:30.138	Form - Sample Forms	19028	Committed job DESKTOP_G70LUJV_SAMPLE_FORMS_476C6801_1BCE_4921_A150_70B87FCAFE30
Debug	2021-05-25 10:25:30.141	Form - Sample Forms	19028	Deleting Job 'DESKTOP_G70LUJV_SAMPLE_FORMS_0D1D9F62_24AA_47E2_B927_5FF4F156389E' from database...
Transaction	2021-05-25 10:25:30.155	Form - Sample Forms	19028	Committed job DESKTOP_G70LUJV_SAMPLE_FORMS_0D1D9F62_24AA_47E2_B927_5FF4F156389E
Debug	2021-05-25 10:25:30.158	File Input Worker - XML Input	19028	Deleting Job 'DESKTOP_G70LUJV_XML_INPUT_EF7A25CF_7710_4C9F_ADEE_434D9C61D55A' from database...
Transaction	2021-05-25 10:25:30.170	File Input Worker - XML Input	19028	Committed job DESKTOP_G70LUJV_XML_INPUT_EF7A25CF_7710_4C9F_ADEE_434D9C61D55A

Ready to process jobs.


3.2.3 Server Status

The server status is present at the bottom of the monitor.

 **No response from Service.** Service is not running

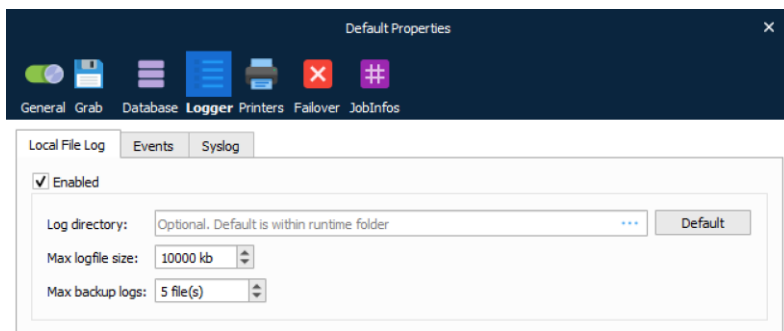
 **Configuration not loaded.** Service is running, but configuration is not loaded. Common reasons are:

- Service is started without a configuration
- Cannot load a valid configuration
- Processing not started because server is part of failover setup

 **Ready to process jobs.** Service is running and ready to process jobs

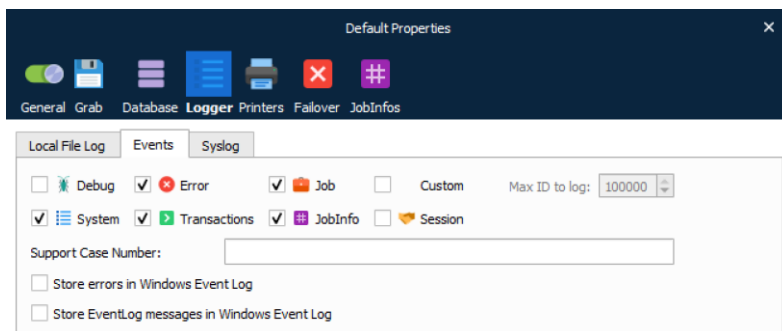
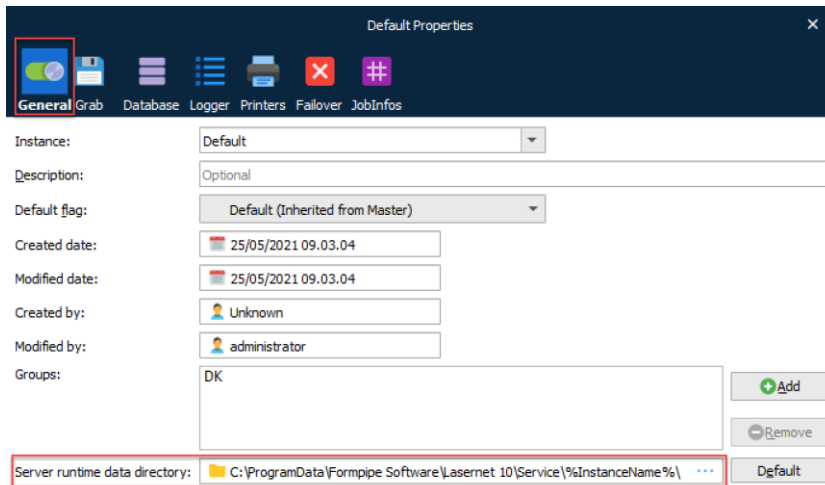
Configuring the Log

The Lasernet Developer allows you to set the options for where the log files are stored on the server as well as settings for the number of log files to be saved, file sizes and log event types.



Log data can be used for debugging, error handling, job tracing etc. You can customize the log events you want to monitor and save, which can reduce the number of log lines saved to file and shown in the monitor window.

The log directory is as default set to the value of the server runtime folder and it is optional to set to a custom value. The default server runtime data directory folder can be found in the General tab of the Instance.



You can also create your own log messages and levels from script. More info about the logger class is available in the Scripting manual.

The logger class supports a list of predefined log numbers or you can create a range from 100 and above for your own personal use.

EID_SYSTEM = 0

EID_DEBUG = 1

EID_ERROR = 2

EID_JOB = 10

Values below 100 are reserved for future use, but values from 100 and above may be used for any custom message you want.

```
logger.logEvent(EID_DEBUG, 'The value is now: ' + job.getJobInfo('value'));
```

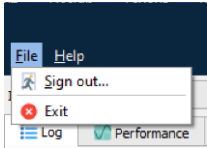
```
logger.logEvent(999, 'My custom message');
```

In the logger settings, defined in the Lasernet Developer, you can turn an event ID higher than a defined number on or off via the setting “Max ID to log”. This is very convenient in a live/test environment, where user defined logs are mostly used for testing.

3.2.4 Menu Bar Options

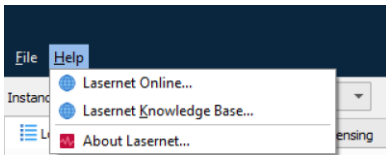
File

From the menu bar you can Sign out or Exit the monitor. More information about these options can be found in the section about the Toolbar options.



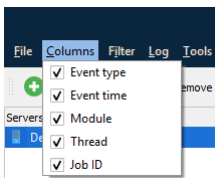
Help

This option redirects to the Lasernet site as well as showing information about the current Lasetnet version.



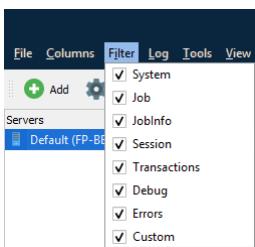
Columns

This option makes it possible to select the columns to be displayed in the live log.



Filter

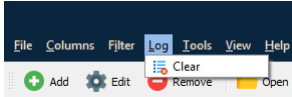
This option makes it possible to filter log records according to their types.



These settings will only affect the log event lines which are listed in the logger window. The filtered log events will still be received by the monitor, but will be hidden. Turning off the filter log will show all log events created after the filter was turned off.

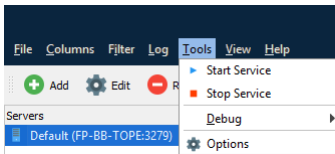
Log

This option contains the command to clear the live log.



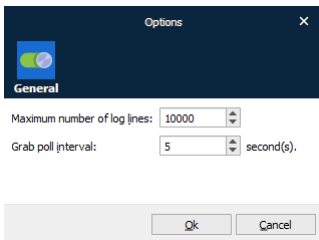
Tools

These options make it possible to start/stop the Lasernet service and turn grab mode on/off remotely.



More info about Start/Stop Service and Start/Stop Grab functionality can be found in the section about the Toolbar options.

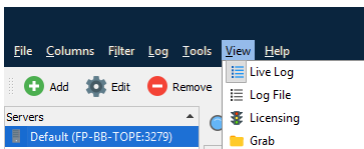
In the Options menu the setting for maximum number of log lines is defined. By increasing this value you will be able to view older log lines, but it will affect (increase) loading times when opening stored log files from disc.



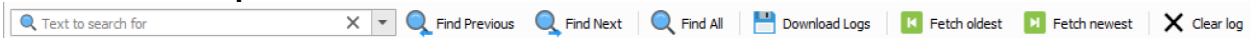
The other options on this menu item are intended for Lascript developers and are outside the scope of this document.

View

This menu option makes it possible to select what is displayed in the Monitor window.

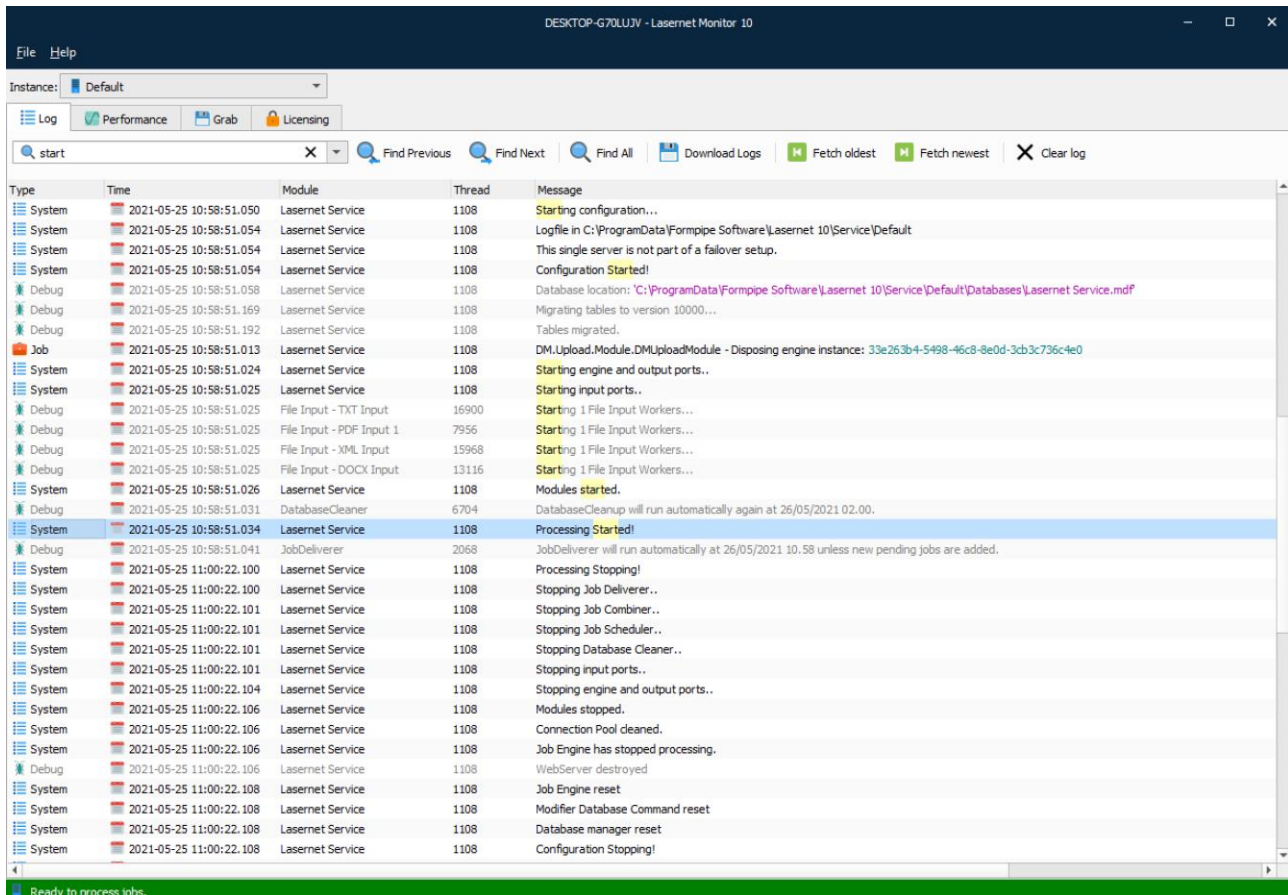


3.2.5 Toolbar Options



Text to Search For

Type a text to search for in the monitor log. Text strings are not case-sensitive. Click X to clear the field.

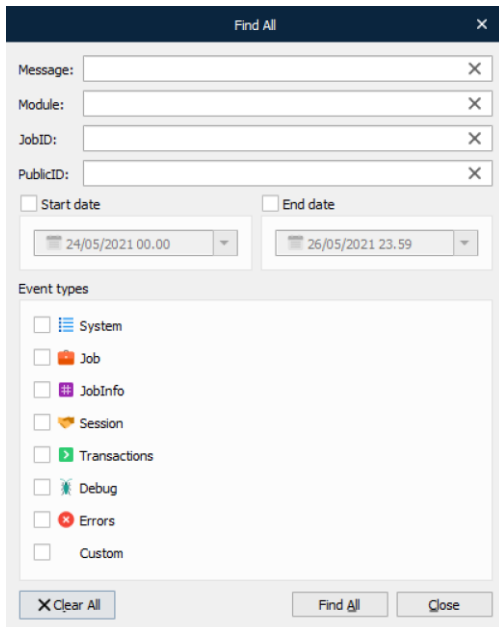


Find Previous and Find Next

Click Find Previous to scroll monitor log to previous found string or click Find Next to scroll to next found string.

Find All

Click Find All enter an enhanced search and filter function. A Find All dialog will appear for more accurate results.



The 'Find All' dialog box contains the following elements:

- Search fields: Message, Module, JobID, PublicID (each with a clear 'X' button).
- Date range filters: Start date (24/05/2021 00.00) and End date (26/05/2021 23.59).
- Event types list:
 - System
 - Job
 - JobInfo
 - Session
 - Transactions
 - Debug
 - Errors
 - Custom
- Buttons: Clear All, Find All, Close.

Click the Find All button in the Find All dialog and a lower pane will show all the find results sorted with the newest log entries first in the list. Double click on each message line in the lower pane to bring focus on the log message in the upper pane.

DESKTOP-G70LUJV - Lasernet Monitor 10

File Help

Instance: Default

Log Performance Grab Licensing

start Find Previous Find Next Find All Download Logs Fetch oldest Fetch newest Clear log

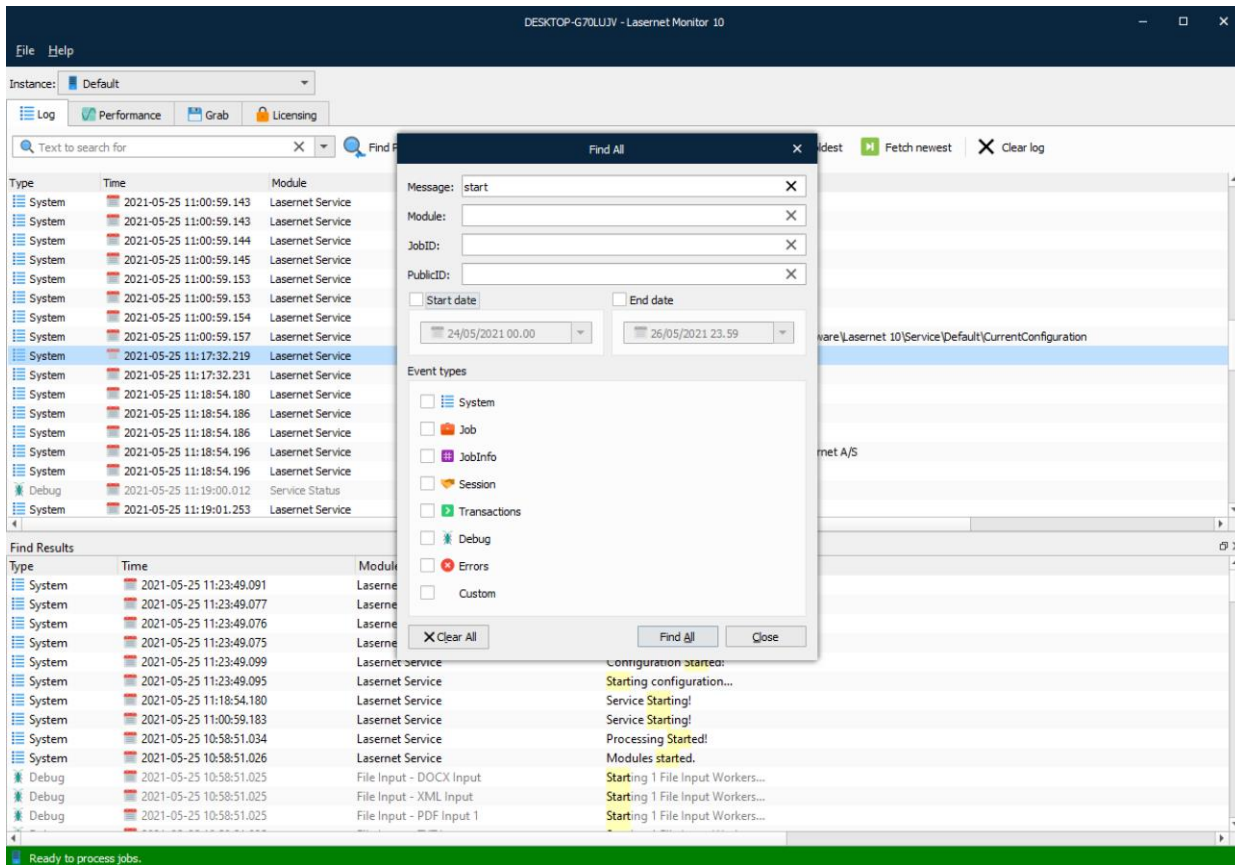
Type	Time	Module	Thread	Message
System	2021-05-25 10:58:51.173	Lasernet Service	1108	Loading configuration from 'C:\ProgramData\Formpipe Software\Lasernet 10\Service\Default\Configuration\j8ace119-6157-414d-b0ae-ae9f3b498
System	2021-05-25 10:58:51.001	Lasernet Service	1108	Configuration loaded
System	2021-05-25 10:58:51.001	Lasernet Service	1108	Installing font resources
System	2021-05-25 10:58:51.050	Lasernet Service	1108	Starting configuration...
System	2021-05-25 10:58:51.054	Lasernet Service	1108	Logfile in C:\ProgramData\Formpipe Software\Lasernet 10\Service\Default
System	2021-05-25 10:58:51.054	Lasernet Service	1108	This single server is not part of a failover setup.
System	2021-05-25 10:58:51.054	Lasernet Service	1108	Configuration Started!
Debug	2021-05-25 10:58:51.058	Lasernet Service	1108	Database location: 'C:\ProgramData\Formpipe Software\Lasernet 10\Service\Default\Databases\Lasernet Service.mdf'
Debug	2021-05-25 10:58:51.169	Lasernet Service	1108	Migrating tables to version 10000...
Debug	2021-05-25 10:58:51.192	Lasernet Service	1108	Tables migrated.
Job	2021-05-25 10:58:51.013	Lasernet Service	1108	DM.Upload.Module.DMUploadModule - Disposing engine instance: 33e263b4-5498-46c8-8e0d-3cb3c736c4e0
System	2021-05-25 10:58:51.024	Lasernet Service	1108	Starting engine and output ports..
System	2021-05-25 10:58:51.025	Lasernet Service	1108	Starting input ports..
Debug	2021-05-25 10:58:51.025	File Input - TXT Input	16900	Starting 1 File Input Workers...
Debug	2021-05-25 10:58:51.025	File Input - PDF Input 1	7956	Starting 1 File Input Workers...
Debug	2021-05-25 10:58:51.025	File Input - XML Input	15968	Starting 1 File Input Workers...
Debug	2021-05-25 10:58:51.025	File Input - DOCX Input	13116	Starting 1 File Input Workers...

Find Results

Type	Time	Module	Message
System	2021-05-25 11:23:49.091	Lasernet Service	Processing Started!
System	2021-05-25 11:23:49.077	Lasernet Service	Modules started.
System	2021-05-25 11:23:49.076	Lasernet Service	Starting input ports..
System	2021-05-25 11:23:49.075	Lasernet Service	Starting engine and output ports..
Job	2021-05-25 11:23:49.064	Lasernet Service	DM.Upload.Module.DMUploadModule - Disposing engine instance: dbbadd1a-04ae-48c9-b420-b32584b039fb
System	2021-05-25 11:23:49.099	Lasernet Service	Configuration Started!
System	2021-05-25 11:23:49.099	Lasernet Service	This single server is not part of a failover setup.
System	2021-05-25 11:23:49.099	Lasernet Service	Logfile in C:\ProgramData\Formpipe Software\Lasernet 10\Service\Default
System	2021-05-25 11:23:49.095	Lasernet Service	Starting configuration...
System	2021-05-25 11:23:49.052	Lasernet Service	Installing font resources
System	2021-05-25 11:23:49.052	Lasernet Service	Configuration loaded
System	2021-05-25 11:23:48.197	Lasernet Service	Loading configuration from 'C:\ProgramData\Formpipe Software\Lasernet 10\Service\Default\Configuration\c77b91f
System	2021-05-25 11:23:48.228	Lasernet Service	Switching to transferred configuration..

Ready to process jobs.

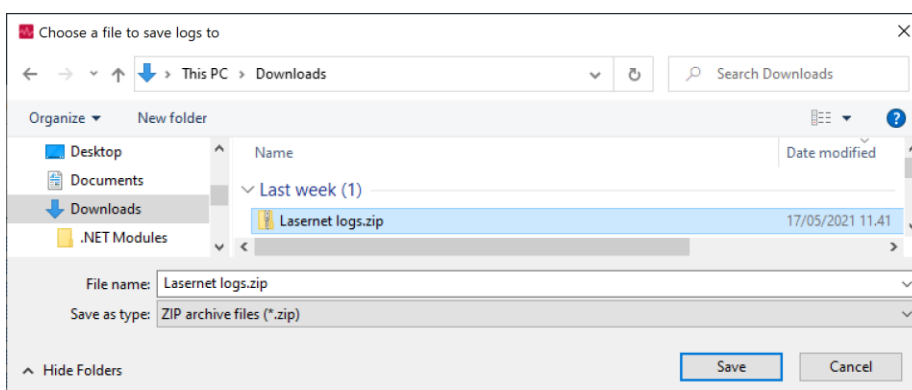
To filter the find results in the lower pane, type any message, module name, JobID and/or PublicID that may occur in the log. You can also specify a start date and/or end data to filter the find results or select to show specific type of events.



Click the Clear All button to reset entered values in the Find All dialog.

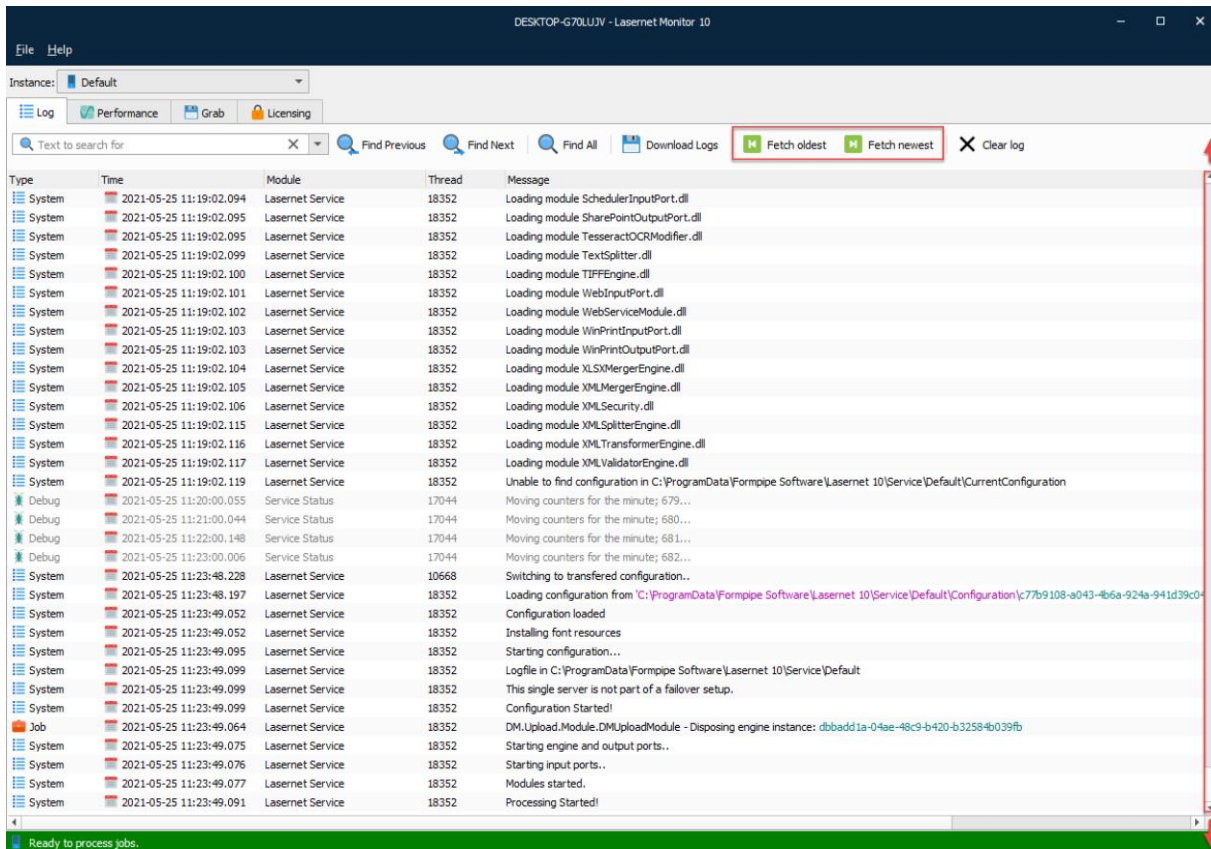
Download Logs

This tool will download the log files from the server/instance to the local computer as a zip file.



Fetch Oldest / Fetch Newest

Click Fetch oldest to scroll monitor log to the oldest log present on the server and Fetch newest to show the newest created log messages.



Drag the scroll bar up to fetch the previous log messages or scroll bar down to fetch the next log messages.

Clear Log

Clears log messages from the view.

3.2.6 Tools in the Log Window

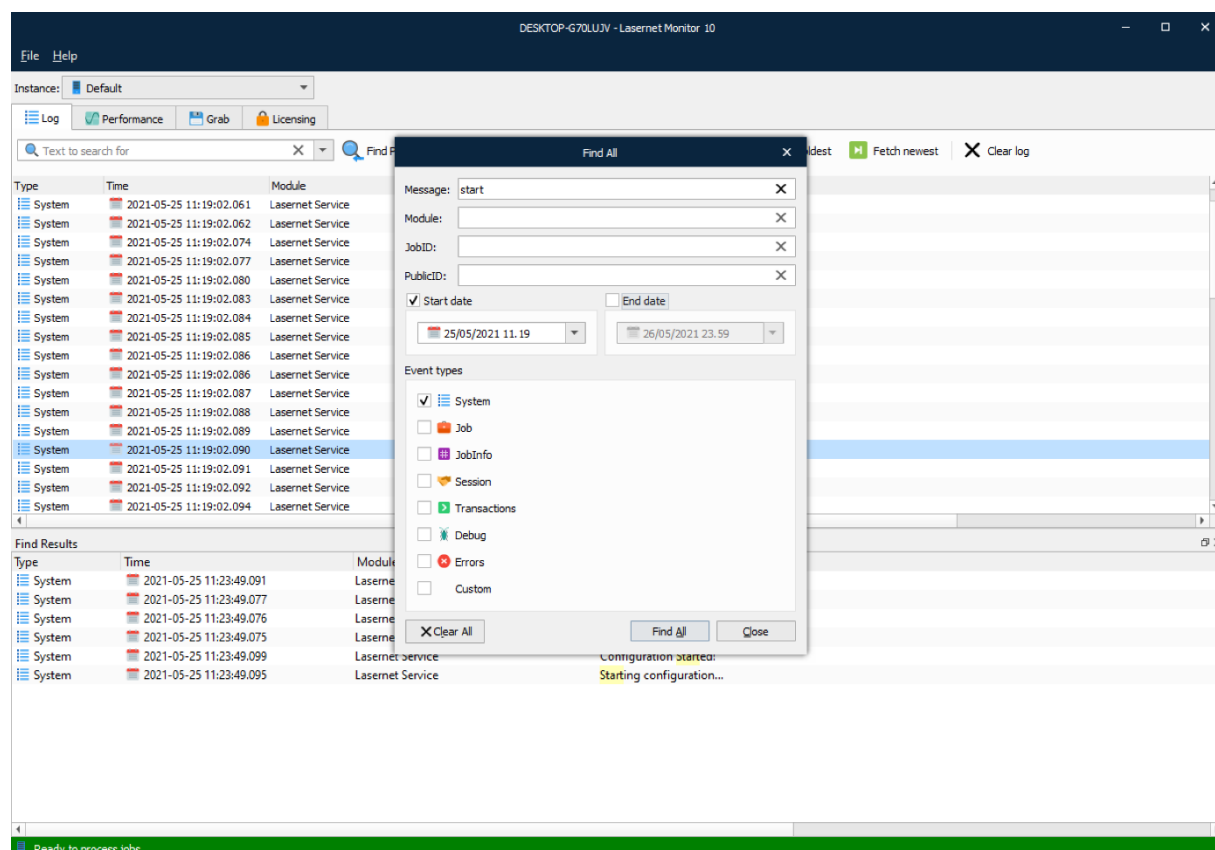
Type	Time	Module	Thread	Message
System	2021-05-25 11:00:59.143	Lasernet Service	1236	Loading module WinPrintOutputPort.dll
System	2021-05-25 11:00:59.143	Lasernet Service	1236	Loading module XLSXMergerEngine.dll
System	2021-05-25 11:00:59.144	Lasernet Service	1236	Loading module XMLMergerEngine.dll
System	2021-05-25 11:00:59.145	Lasernet Service	1236	Loading module XMLSecurity.dll
System	2021-05-25 11:00:59.153	Lasernet Service	1236	Loading module XMLSplitterEngine.dll
System	2021-05-25 11:00:59.153	Lasernet Service	1236	Loading module XMLTransformerEngine.dll
System	2021-05-25 11:00:59.154	Lasernet Service	1236	Loading module XMLValidatorEngine.dll
System	2021-05-25 11:00:59.157	Lasernet Service	1236	Unable to find configuration in C:\ProgramData\Formpipe Software\Lasernet
System	2021-05-25 11:17:32.219	Lasernet Service	1236	Service Stopping!
System	2021-05-25 11:17:32.231	Lasernet Service	1236	Service Stopped!
System	2021-05-25 11:17:32.231	Lasernet Service	18352	Service Starting!
System	2021-05-25 11:17:32.231	Lasernet Service	18352	Listening on https://localhost:3279/inservice
System	2021-05-25 11:17:32.231	Lasernet Service	18352	Listening on https://desktop-g70lujv:3279/inservice
System	2021-05-25 11:17:32.231	Lasernet Service	18352	This version (10.0.0) of Lasetnet is licensed to: Formpipe Lasetnet A/S
System	2021-05-25 11:17:32.231	Lasernet Service	18352	License type is 'Test/Dev 2'
Debug	2021-05-25 11:17:32.231	Service Status	17044	Moving counters for the minute; 678...
System	2021-05-25 11:19:01.253	Lasernet Service	18352	Loading module AzureServiceBusModule.dll

Select Copy to Clipboard to copy any message to the clipboard to be able to paste the content in to other apps.

Filter on This

You can right click on any column/value in the upper pane, select Filter on this or Filter from/until, and the selected value will be captured and inserted in the Find All dialog.

You can right click on any line and column and press “Filter on this”. Only lines which contain an exact match in the selected column will be listed in the log window.



You can continue to select more columns to reduce the number of matched lines.

Copy Message

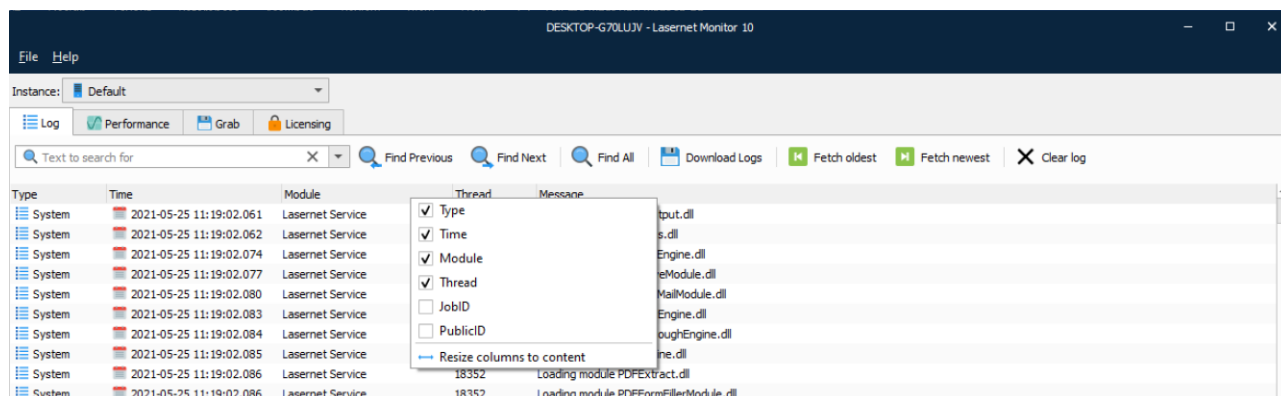
By right clicking on a log line, the message can be copied to the clipboard. Only one line can be selected and copied at the same time.

Clear Log

Clear the currently viewed live log.

3.2.7 Log

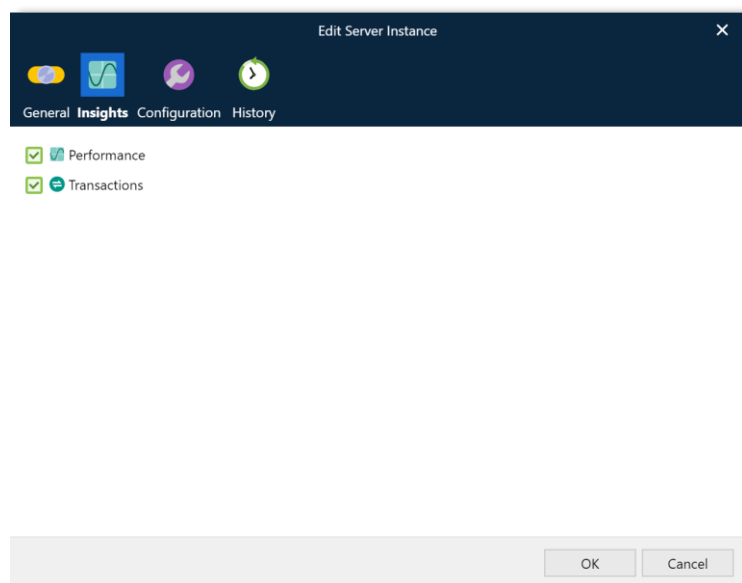
The Log tab displays the current log stored on the server for the selected instance.



Right-click on the header of the rows and activate which columns to show in the monitor log. Click Resize columns to auto align the size of each column base on content for each column.

3.2.8 Insights (Performance and Transaction Counters)

To show Performance and Transactions counters you must log in to the Lasetnet Config Server and activate Insights for each server instance.



Insights will collect system details for the selected server instance when running jobs through Lasetnet. To see this data, start Lasetnet Monitor, select the server instance, then click the **Performance** tab to show system details for the latest 24 hours.

Important: You must manually restart the Lasetnet Server Instance, in the Windows Services app, before the settings will have impact on the selected Lasetnet Server instance.

Information for users of Lasetnet 10.7 and later: Since December 2023, Microsoft Defender has been flagging the LnMonitor.exe software as Trojan:Win32/Znyomn!pz or Phonzy malware. However, this is a "false positive", and Microsoft has confirmed that this is the case.

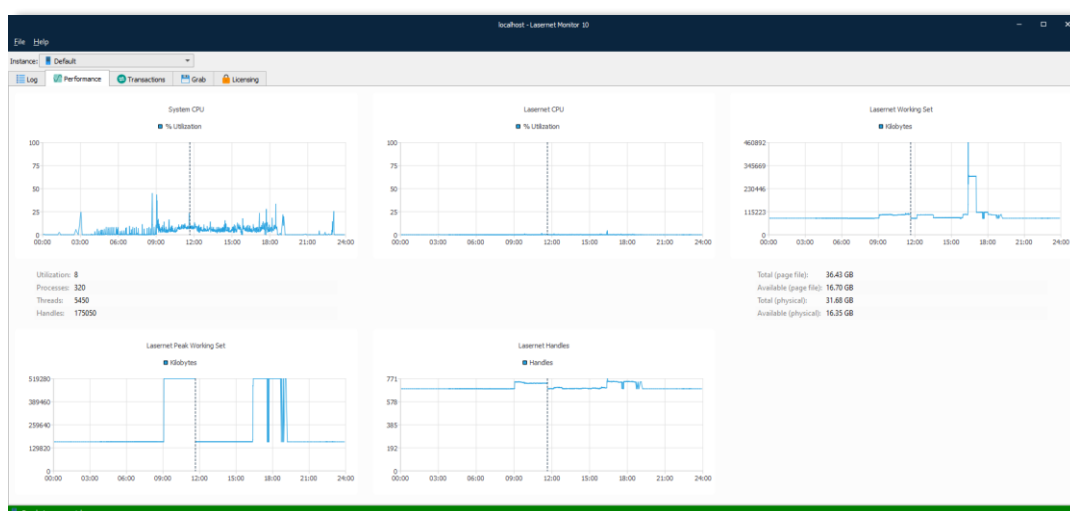
For more information, see: <https://support.formpipe.com/news/posts/lasetnet-monitor-exe-file-detected-as-malware-by-microsoft-defender>

The issue is due to the software that generates the Insights charts on the **Performance** and **Transactions** tabs. To be able to deliver security patches and fixes for users of Lasernet 10, Formpipe Software has decided to exclude the **Performance** and **Transactions** tabs, and also the functionality embedded in those tabs, from Lasernet 10.7 onwards to prevent Lasetnet Monitor being flagged as malware.

3.2.9 Performance

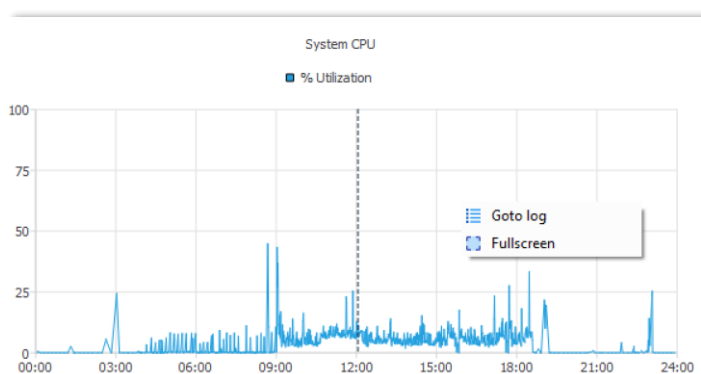
Before reading this chapter, see “Information for users of Lasetnet 10.7 and later” on page 18.

Click the **Performance** tab to view system details for CPU, workset, memory and handles for the latest 24 hours or since last start of Lasetnet service instance.



- Lasetnet CPU
- System CPU
- Lasetnet Workset Set
- Lasetnet Memory Load
- Lasetnet Handles

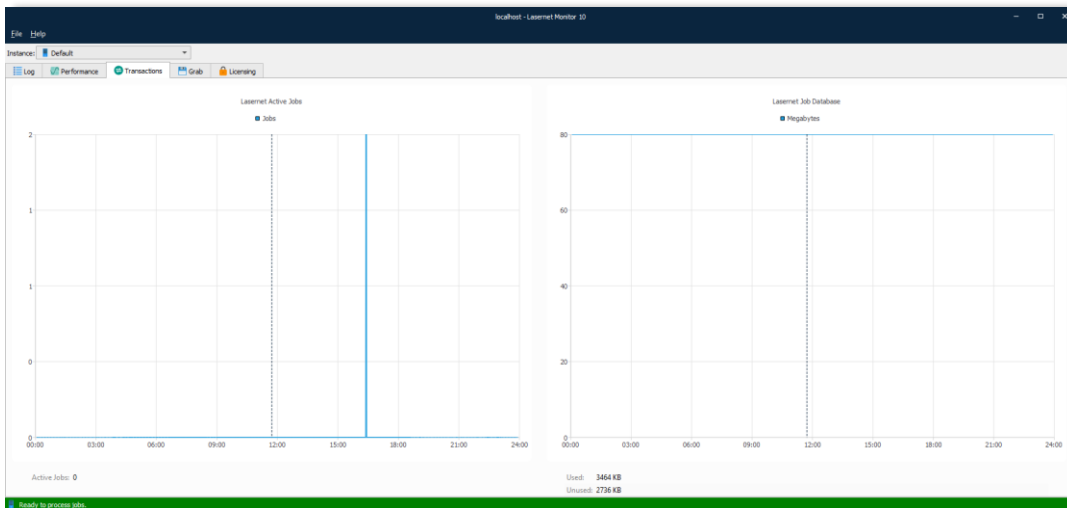
Tip: Right click on a time stamp, in any of the graphs, to go to a specific time event in the Log tab or to show the selected graph in fullscreen mode.



3.2.10 Transactions

Before reading this chapter, see “Information for users of Lasernet 10.7 and later” on page 18.

Click the **Transactions** tab to view system details for number of active jobs running and the size of the job database for the latest 24 hours or since last start of Lasetnet service instance.

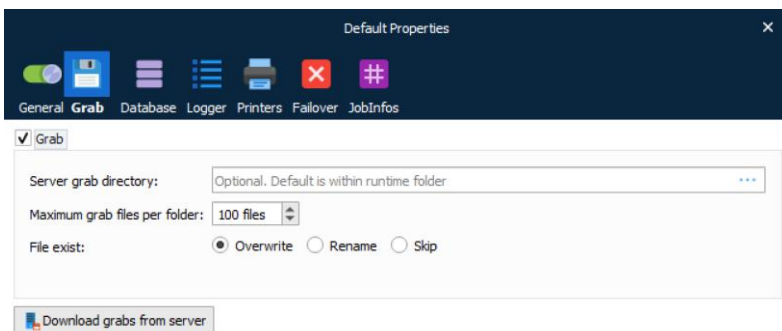


- Lasetnet Active Jobs
- Lasetnet Job Database (Monitor app only)

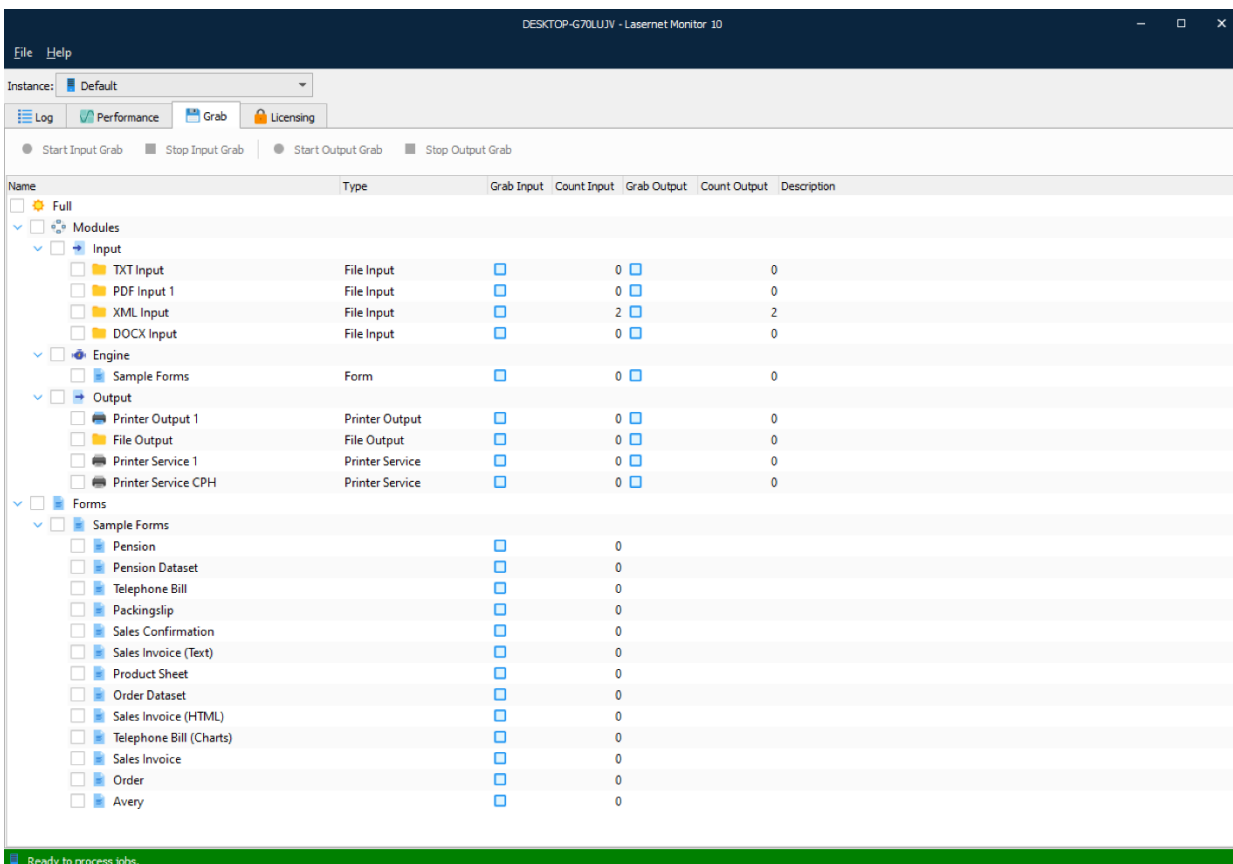
3.2.11 Grab

Grab mode is used by the Lasernet Server to store a copy of the job data in a user defined server grab directory. Grab files are required by the Form Editor as input data for designing forms, or by the XML Transformer Editor to modify XML data. To inspect your job data in more detail, it can be useful store a copy of it before or after it is processed through a module.

When an instance of a Lasernet service is restarted, it will use the default settings as defined in the Lasernet Developer → Server → Grab tab. When a configuration is updated to the server with the Grab setting activated, this will be the preferred mode at service start.



From the Grab tab you are able to temporarily activate/de-activate grab events for each module and form attached to the Overlay, Form and XML Transformer modules.



Select 'Full' to select all modules and forms. Use the Grab tool bar to start and stop the grab mode for selected modules.

Select a single or multiple modules or forms. Use the Grab tool bar to start and stop the grab mode for selected modules.

Activate Grab Input or Grab Output column to enable grab for a specific module or form, without using the Grab tool bar.

Columns for Count Input and Count Output will report on how many grab files the Lasernet service instance has currently stored in the grab directory for each module or form.

Grab Tool Bar

The Grab tool bar has buttons to start and stop the grab mode. The monitor does not have to run on the same computer as the Lascript service instance to send grab mode signals.



Start Input Grab

This button will start the grab mode for selected modules or forms at grab input level. This level is before a module or form starts to process the job.

Stop Input Grab

This button will stop the grab mode for selected modules or forms at grab input level.

Start Output Grab

This button will start grab mode for selected modules at grab output level. This level is after a module has processed the job.

Stop Output Grab

This button will stop grab mode for selected modules at grab output level.