OI Monitor for Sunquest

The user interface manual

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OI Monitor for Sunquest

Ol Monitor general instructions.

For troubleshooting directions, common issues, and help in general visit the support page:

http://www.olmonitor.com/support.html

For more information about specific issues, frequently asked questions, and the most up-to-date information, visit the OlMonitor blog at:

<u>http://olmonitor.com/blog/</u> (the blog also contains answers about specific issues that don't belong in a user manual.)

Or try out the new OlMonitor forum at:

http://olmonitor.com/phpBB/

There are some instructional videos on the download page and the youtube channel:

http://www.olmonitor.com/download.html <-- Go here if you are installing for the first time.

http://www.youtube.com/user/synapsonic

The structure of the OI Monitor for Sunquest

Main window

Options Window - general

Options window - Misc tab

Options window - Sort tab

Options window - Filter tab

Options window - TAT/Alerts tab

Options window - Advanced tab

Options window - PL tab

Options window - HRP tab

Smarterm window

Options window - HMS

Options window - CPL

Troubleshooting

Installing

Security

Main window

http://www.olmonitor.com/download.html <-- Go here if you are installing for the first time.

The structure of the Main window

Ol_Monitor Main window
File menu
Options menu
Action menu
Help menu
Sunquest Ip address selector
Quick filters
Messagebar

OI_Monitor Main window



The main display.



Smiley



Many people have expressed confusion about the signifigance of the smiley icon. *It does not indicate in any way that the program is functioning or not functioning.*

The smiley face changes expression depending on workload.

After a refresh of data, if the number of tests has increased, it will show a sad face :(

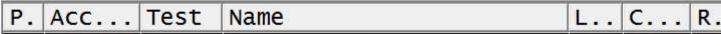
If the number of tests has decreased, it will show a happy face :)

If the number of tests stays the same, it will show an inexpressive face :|

Finally if by some miracle the log clears entirely and there are no tests to list, it will show a face with sunglasses on.



Column headers



Column headers display the name of the field in the list below. You can select which fields will be displayed such as Collect time, Accession, and test name.

Note: Normally OlMonitor automatically calculates the correct size for the columns. However you can resize the columns if you like. After you have resized the column OlMonitor will store the column width you set and skip automatic sizing of that column.

To change the arrangement (order) of the columns, simply click and drag any column to the desired location.

NEW: Sunquest Smart information such as Batch ID number, Rack/slot etc can now also be displayed if present.

Refer to the options window help for a complete list of available fields.



List view

OI_Monitor IS PAUSED, TO UN-PAUSE PRESS RESUME File Options Action Help Filter toggle Resume R. Test Name S 06 S S S S W S W 06 S ANN ANN S #0:1

The list of tests from your outstanding log are displayed here. An extremely flexible and easy system of filtering gives you full control over what tests are displayed. Turn-around-times can be defined for specific tests, all tests, or a combination of both. Tests can be given different colors if they exceed the defined turn-around time. A wave file can also be specified to sound for each TAT.

OL Log

Analyzed: SCRAMBLED.TXT Analysis Complete.



The progress bar shows how much time is left until the next refresh.



Refresh time

Analyzed: SCRAMBLED.TXT Analysis Complete.

Starting with version 1.76, the refresh time is now a calculated value. The interval between each log refresh is recorded. Using the average of these times, the estimated time to refresh is calculated.

To set the delay between refreshes, see the refresh time in options.



Log date and time

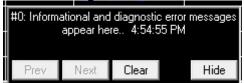
OL Log time: 06:22 OL Log date: 02/12/2002

The time and date is extracted from the current log, if it is not current, you may be looking at old information

If you are using the PL and/or HRP module, the date and time from the PL log also appears here.



Messagebar



MessageBar:

The messagebar shows informational messages, errors, and messages from the macro. Sometimes it's really important information like letting you know your password is about to expire.

Other times it's just fyi info.

You can clear the message, skip to the next message, or if you don't want it to be blocking your view you can press the hide button and it will shrink into a little box with an exclamation mark in the corner.

Once you clear all the messages the box will disappear entirely until another messagbar message comes across.

*Versions 1.89j and above: Certain messagebar messages will automatically clear after 15 minutes.



Pause button

Resume

The pause button will suspend OL Monitors automated activities such as:

- -Checking for operation of and launching Smarterm.
- -Checking for new logfiles.
- -Updating the ETR/Refresh time
- -Playing TAT sounds.
- -Auto-scrolling the display

This is useful during troubleshooting or if you're trying to scrutinize one of the tests and the display keeps scrolling and refreshing, or if Smarterm is on the fritz and you don't want it to keep getting launched.



Filter Toggle

Filter toggle

This feature can quickly turn on/off individual filters from the main window. This might be useful to handle workload during different times of the day or shifts. This feature is available in versions 1.89k and higher.

More info

File menu



Standard file menu



Save Log

If you want to save the currently displayed log for some reason you can do so here.



Open

You can manually open a captured log for testing here.

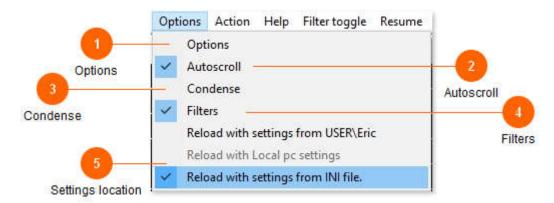


Print

You can print the currently displayed log here.

*Versions 1.88k and above only.

Options menu



The options menu give you quick access to a number of features.



Options

Click options to bring up the options configuration window.



When autoscroll is checked, the list will automatically scroll down so that the entire list is displayed before the next refresh cycle.

There are more ways to affect autoscroll behavior in the options window under the Advanced tab.



If a patient has not been collected, their respective list of tests can be condensed to a single line, thus saving space on the list. The full list of tests can be displayed by hovering the mouse pointer over the test field.

In current versions the condense option has been moved to the Advanced tab in the options window and this item exists as an indicator only.

If there is a checkmark next to the Condense option, condensing option is active. See options menu for more details.



If this is unchecked none of your filters will not be applied and the entire overdue log will be displayed. To disable/enable individual filters use the Filter Toggle option.

Changing this option will be apparent on the next refresh of the list or by clicking 'Reprocess' from the action menu.



Reload with settings from USER\Eric

Keload With Local pc settings

Reload with settings from INI file.

'Reload with settings...' is the **safe way** to tinker around (<u>switch</u>) settings locations without overwriting any of the other settings locations.

Alternatively, When you want to modify, overwrite, copy, import, or export settings, use the <u>'Save</u> settings to' section of the Misc tab.

For maximum flexibility, your custom settings can be stored in 3 different locations:

User section of registry:

Settings stored here will be loaded only for the current user in Windows. Different users can have different settings. In a Windows-networked environment the user's settings will be synced to any pc the user logs onto.

Local pc section of registry:

Settings stored here will be available for all users of the current pc. Any new users who load the program will start off with the local pc settings. Individual users can still define custom settings for themselves.

*Local pc is disabled in Windows 7.

INI file:

With the constant threat of viruses and spyware, network admins may resort to locking down user permissions to modifying the registry. If this is the case you may encounter errors when trying to save your settings to the registry.* You can either request to be given administrative rights or use an INI file to store your settings. The INI file resides in the OLMonitor folder and circumvents any issues with registry permissions. The settings in the INI file are available to all users of the pc. The INI file can also prove useful for copying settings from one pc to another.

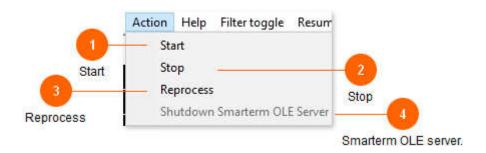
There is more complete info about working with options in the options window here.

If you are using Windows 7, the Local pc option is disabled since this portion of the registry has been locked down for the most part.

*Note: On the first run of OLMonitor a test of the read/write abilities to the registry is performed and displayed. This should give you an idea of which location to use.

There is now a special program you can use to manage your settings: Ol Monitor Settings Manager

Action menu



*Sunquest/CPL versions of OI Monitor only. HMS version does not utilize Smarterm.



Instead of waiting for the refresh cycle to count down, you can click Start to immediately refresh the list. If Smarterm has not been launched yet, this will begin the process of launching it.



This will stop the refresh countdown. You will have to click start again or press Resume to start processing again.



Reprocess

The logfile will be reprocessed. Useful for testing new filters, new TAT's, new Sorts, or changed options without having to wait for the next refresh.



Smarterm OLE server.

Shutdown Smarterm OLE Server

Esker Smarterm is used to pull the outstanding log from Sunquest. If you believe the script has hung up, is out of sync, or malfunctioning, you can shutdown and restart the Smarterm OLE server. The shutdown process may take a bit.

It begins by sending a message to the Smarterm macro to shut down. Ol Monitor will wait a few seconds to get an answer back from the macro.

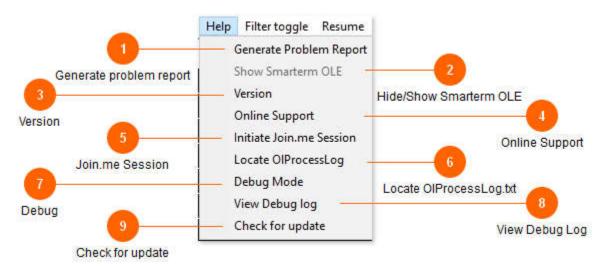
If the macro is frozen, inactive, or Smarterm is in an error state the message will never be received.

Ol Monitor will wait about 5 more seconds and if Smarterm is still active it will attempt to forcibly shut down the Smarterm window.

Sometimes this works, other times it may be necessary for the user to use Windows Task Manager to kill Smarterm.

OlMonitor is programmed to detect if there is a problem with server and will usually notify you with a message, and in many cases attempt to restart the server automatically.

Help menu



The help menu contains a variety of ways to get help with OlMonitor.

The Problem Report is the best way to begin getting live help with your problem, it will send the configuration information and logfiles that are vital for understanding the problem you are having. The problem report uses Smarterm to aggregate and send this information. If Smarterm is not functioning at all this will not be possible, and you will have to manually locate the olprocesslog file.



Generate problem report

Generate Problem Report

If you have emailed or called for support with a problem, you will often be asked to send a 'Problem report'.

It sounds difficult, but I have tried to make the process as simple as possible.

You can also generate a problem report and have it *sent by ftp** if you don't want to hassle with having to email or call support. Be sure to include some contact info if you want to be called/emailed back about the issues you are having.

See the Support page for detailed instructions on Problem Reports.

When you click 'Generate problem report', you will see this form. (v1.76 and above)

If you are having issues with the program a problem report can be generated. The problem report consists of saved logs, the error/debugging log, registry settings, and an explanation of the problem. The program can attempt to automatically send the report to olmonitor.com via ftp.* If the ftp process fails (usually due to hospital system firewall restrictions) you will be notified and you will need to send me the report file via email. The file will be saved to your desktop titled prbrpt.zip.

A problem report is also automatically created after certain types of errors with the program.

^{*}Sunquest/CPL versions of OI Monitor only. HMS version does not utilize Smarterm.



Hide/Show Smarterm OLE

Show Smarterm OLE

You usually do not have to interact with the Smarterm server so the Smarterm window can be made invisible and runs in the background. If you do have a need to interact with the server or see what it is doing, you can click Show to see the server. However if the script is completely hung up it will never get the message and Smarterm will remain hidden. In this case the solution is to shut it down and restart completely.



Version

Version

Shows OlMonitor version.



Online Support

Online Support

Click this to launch the support webpage of OlMonitor.com.



Join.me Session

Initiate Join.me Session

Basically this just launches the Join.me website. Join.me is a screen-sharing app that has proven to be the simplest to install and use.

You will need to contact me to setup a time to do the screen-sharing/web meeting.

I have found that screen-sharing is often the fastest way to troubleshoot.



Locate OIProcessLog.txt

Locate OlProcessLog

"OlProcessLog.txt" is the most useful file for troubleshooting. This is the file I will usually ask you to send me if you have an issue that doesn't have a quick answer.

A "problem report" contains several other files in addition to the OlProcessLog, but if you just want to quickly get to this file it will open the folder.

If you are not familiar with digging around on a pc and emailing files, it *might* be easier to just download and run the <u>OverSeer</u> companion app.



Debug

Debug Mode

Clicking this will open up 3 boxes of diagnostic use on the main screen.

They contain settings path info, the raw list data, and patient lines from scanned logs.



View Debug Log

View Debug log

The "Debug log" and OLProcessLog.txt are one in the same.

You can view the text outputted to the log in real time. It will appear in front of the test list display. Click again to hide the debug log.

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Check for update

Check for update

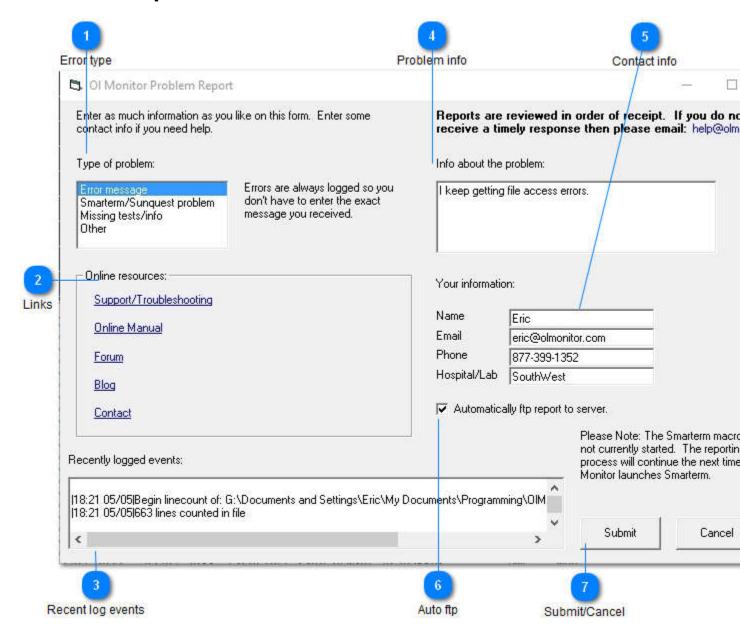
Click to launch the OlMonitor auto-updater.

At this time there are some issues with the auto-updater. You may get some error messages in the update wizard asking if you want to continue updating, click yes past these. Also it may seem to take a very long time to check for updates. Contact me if you would like to avoid using the updater and download directly.

The structure of the Help menu

Problem Report form

Problem Report form



*Note: These days typically the firewall will Block the automatic ftp report. In that case you will need to attach the problem report file to an email. More info here: When there are problems with the problem report.

Only versions 1.76 and later will have the form displayed above.

After you click Submit, if Smarterm is running already, the report process will begin and you will see a messagebox saying

"An error was previously found in the macro and it needs to be reported. Please press OK to continue or press cancel to abort this process."*

Another window will come up saying the files are being transferred and zipped, finally after that is done the ftp process will begin.

Smarterm is utilized to ftp reports, another Smarterm window may come up during the ftp process and you can see the files being uploaded to the server. You may see some ftp errors that are unavoidable, but if the ftp process fails entirely you will get a message stating this clearly.

1.87e and above: Behind the scenes, the problem reporting process has been improved especially for Windows 7 users. A lot of the problem report process such as batch file compression of the report was only working in Windows XP. Also there was a lot of unecessary duplication happening which has been eliminated.

Also the problem report prompt coming from the Smarterm macro has been changed to a countdown box that proceeds unless you press cancel.

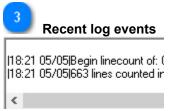
*Sunquest/CPL versions of OI Monitor only. HMS version does not utilize Smarterm.



Optional: Select the type of problem you are having.



Direct links to online resources.

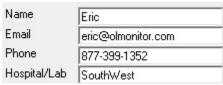


For your information only, this shows the current contents of the error log buffer. If you have just had an error it may be shown here.



Optional: Enter as much information as you like about the problem you are having.





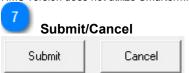
An email address is helpful, the rest is optional.

Enter some contact information if you would like a response to your report.



When completed the report can be automatically ftp'd to the server. This is the easiest option but may fail if IT has blocked the ftp protocol.

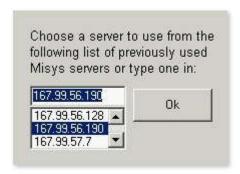
*Sunquest/CPL versions of OI Monitor only. HMS version does not utilize Smarterm.



If OL Monitor has already launched Smarterm, the report process will begin when you press Submit.

*Note After clicking Submit, if the auto-ftp process fails you will get some message boxes about the failure. If this happens you will need to <a href="mailto:emailto

Sunquest Ip address selector

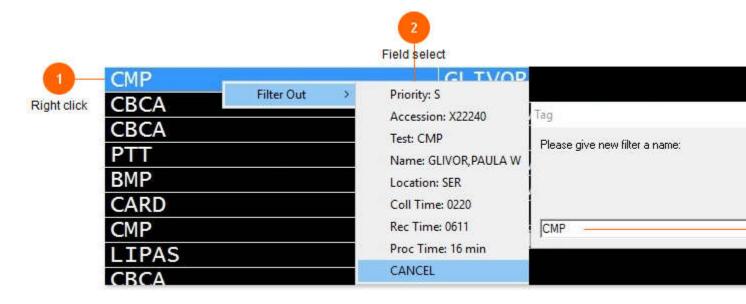


Normally you won't ever see this.

If you have not already entered a Sunquest IP address to connect to, OlMonitor will search for any previously used ip's from Smarterms session files. This box appears during the first load of Smarterm and only if there is no ip address setting, or if the ip address stored is on the 'bad ip list'. This also happens on installs and updates because the old Olmonitor.stw session file may have been overwritten. Newer versions of Ol Monitor (1.86 and above), have some code to prevent the saved ip address from being lost after an update.

^{*}Sunquest/CPL versions of OI Monitor only. HMS version does not utilize Smarterm and no ip address is required.

Quick filters



A quick exclusive filter of any field on the display can be created simply by right-clicking on a test.



When you right click on any test, a pop-out menu will display a list of fields you can filter on.



Select the field to filter on from the list.

You can filter on any field. The filter created will be an Exclude type filter.

*Note: The 'Tag' input box will show after you have selected a field.

After creating the filter, anytime text in that field matches the text you selected, it will be filtered out. You can always go back and modify or delete filters in options under the Filter tab.

Click 'CANCEL' to abort creating the filter.

Although you can create a Coll Time, Rec Time, or Proc Time filter here, it will not work the way you think it will. See <u>filters</u> options for info on creating Time filters.



Name filter



The filter text will default here.

You can rename the filter if you like.

You cannot create a filter with a blank space name.



Click filter



Click OK to save the filter or Cancel to abort.

Voila! With only 3 clicks you have created a filter! The filter is **exclusive** and will filter out any test matching the field you chose.

So if you clicked 'Test: WCBCA' you will no longer see 'WCBCA's on the list. If you clicked 'Accession: X22280' you will no longer see that accession on the list. Quick filters are handy for filtering out specific tests that linger on the list uncompleted but otherwise theres nothing left to do about them. They are also useful for creating a starting point for defining more complex <u>filters from the options menu</u> later on. *Click reprocess to apply the filter.

Messagebar



The messagebar is a less intrusive alternative to the messagebox. Unlike the messageBOX, which pops up with a critical messages requiring immediate attention or an unhandled error.

In contrast this messageBAR will not interrupt processing.

MessageBar:

The messagebar shows informational messages, errors, and messages from the macro.

Sometimes it's really important information like letting you know your password is about to expire. Other times it's just fyi info.

You can clear the message, skip to the next message, or if you don't want it to be blocking your view you can press the hide button and it will shrink into a little box with an exclamation mark in the corner. Once you clear all the messages the box will disappear entirely until another messagbar message comes across.

*Versions 1.89j and above: Certain messagebar messages will automatically clear after 15 minutes.



Message number



Messages are numbered sequentially.



Each message contains a timestamp.



Allows you to scroll through the list of messages.



After reviewing the message you can clear it. After all messages have been reviewed the messagebox will disappear automatically.



The messagebox will be minimized down to a tiny square button with an exclamation point.

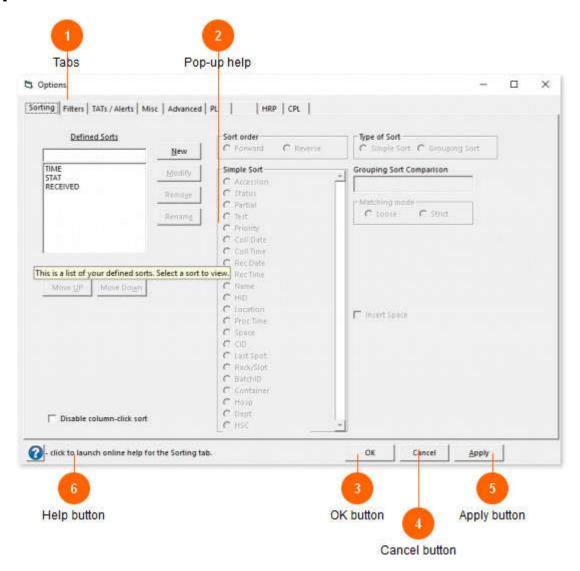
Options Window - general

General notes on the options window.

The structure of the Options Window - general

Options window - General

Options window - General



The options window is where you configure all your custom settings.



Click the tabs above to choose which category of options to work with. It is not necessary to save your settings every time you switch tabs.



Hovering your mouse over most any button or control will display help or information about the option.



Click Ok to save changes and exit.



Click Cancel to discard any changes to your settings.



Click Apply to save changes without exiting the options window.

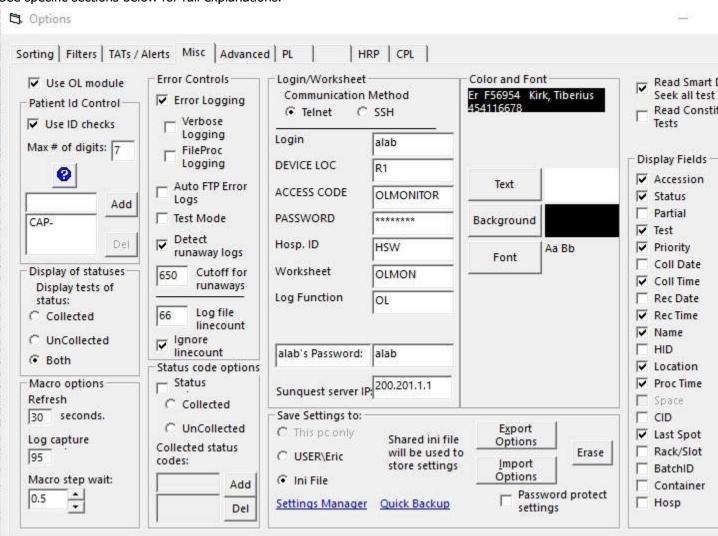


V1.89q and above: Clicking the help button will launch the online help for selected tab.

Options window - Misc tab

The options window where all your settings are configured.

See specific sections below for full explanations.

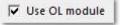


The structure of the Options window - Misc tab

Use OL module
Patient Id Control
Error Controls
Status code options
Display of statuses
Login/Worksheet
Save Settings to:
Display Fields

Macro options, Refresh interval and IP Color and Font

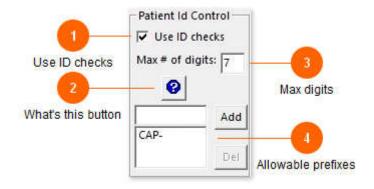
Use OL module



This is enabled by default and should be left alone unless you have decided to use the HRP or PL modules without the OL log.

*Notes: This checkbox added in version 1.89. There was briefly a bug where after upgrading to 1.89 the log might produce no data because the checkbox was defaulting to disabled. This has since been fixed.

Patient Id Control



Patient ID control ensures the patient id is read correctly from the log.

*Sunquest versions of OI Monitor only. CPL/HMS does not have this.



Use ID checks

✓ Use ID checks

Checking this box enables the id-checking logic.

Entries from the captured log that do not have an id matching the number of digits will be excluded.

*Sunquest versions of OI Monitor only. CPL/HMS does not have this.



What's this button



Click here for a quick explanation of the control.

*Sunquest versions of OI Monitor only. CPL/HMS does not have this.



Max digits



ID number styles can vary from site to site. Enter the standard number of digits for patient ID numbers at your site.

*Sunquest versions of OI Monitor only. CPL/HMS does not have this.



Allowable prefixes



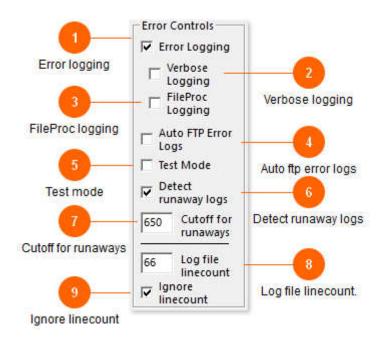
ID numbers usually consist of numbers only. However in some cases they may be prefixed with a letter or letters. ie "CAP", "T", "OS-", "OSO-" etc.

If this is the case with your site you may include these prefixes here, otherwise they will be regarded as invalid.

The program will still only display the numeric portion of the ID number, but at least the test will not be disqualified.

*Sunquest versions of OI Monitor only. CPL/HMS does not have this.

Error Controls



Error detection and logging options.



Error loggii

▼ Error Logging

A log with debugging information can be kept for troubleshooting purposes.

Check this box if you are having issues and would like to submit an error report. You should check the box first and then allow the program to run awhile until the error occurs. This log is essential for tracking down problems.

If you are not having any issues you can un-check this box and performance will be improved slightly. However it might be better to disable 'FileProc Logging' or enable 'NO pid in processlog' (located under the advanced tab).

The error (debug) log is stored in the Smarterm 'Sessions' folder or in Windows 7 the 'OlMonitor' folder in Public.

You can locate the log from the main window.



Verbose logging will log the actions of the program at just about every possible point. In some situations this may be useful if Ol Monitor is freezing and has to be closed using Task manager, we would have a log of everything it did up until that point. It should be disabled otherwise.



FileProc logging

FileProc Logging

Ol Monitor logs every record it processes from the Overdue Log.

This is useful data for working any problems with data not showing up, showing up in the wrong field, or tests not showing up at all.

This option is almost identical to the 'No PID in processlog' option under the <u>Advanced</u> tab. You should disable FileProc logging to improve performance if you have very large logfiles (>500Kb), an older, slow computer, or simply if OL Monitor appears to be lagging when refreshing.

*(Versions 1.89k and higher: OlMonitor will turn off FileProc logging temporarily during log processing when it detects a very large OL log)



Auto ftp error logs

Auto FTP Error

Check here if you would like to have the program attempt to automatically ftp the problem report to olmonitor.com.

The problem report can only be initiated by the user. After files are automatically gathered the auto ftp will attempt to send the files to olmonitor.com server.

The attempt often fails however since ftp may be blocked by most site's firewalls.

*Sunquest/CPL versions of OI Monitor only. HMS version does not utilize Smarterm.



Test mode

Test Mode

This option is enabled by default in new installations to allow new users to demo the software.

In normal operation you should leave this option un-checked unless you are testing out some new settings, filters, etc.

In test mode the program only analyzes existing test logs and does not attempt to pull new logs.

In newer versions, a sample logfile with dummy information is included in the OlMonitor. Although the logfile is not updated, the time is artificially incremented rather quickly so that you can test your turn-around-times and filters that have a time condition. IE: The dummy tests will appear to get progressively older with each refresh.



Detect runaway logs

Detect runaway logs

At least one site was having problems with 'runaway logs' - a outstanding log that for some reason would print only one patient per page, resulting in a huge file that was also missing about half the information. The program can detect and compensate for this intermittent problem if necessary.

If on the other hand your system normally has a lot of tests on the Overdue Log, you should disable this option.

If OlMonitor is having intermittent problems with not updating for long periods of time, then working fine for the next few rounds, etc, you might want to check for the runaway log issue. Click on Help-Locate OlProcessLog and look for files named 'Test.tx1, Test.tx2, etc...' These are the captured logfiles. Normal filesize is 200kb - 700kb. Some sites with a large amount of data have files >1000kb. If the

size of the Test.tx files seems to vary, such as several 300kb and then one or two being 1200kb, you may have the runaway log problem.

*Sunquest versions of OI Monitor only. CPL/HMS does not have the runaway log problem.



Cutoff for runaways



If the logfile exceeds 650 kilobytes or so it is probably a 'runaway logfile'. This box allows you to tweak this cutoff if necessary.

(Some sites have a lot of tests and can routinely run >1000kb logfiles)

*Sunquest versions of OI Monitor only. CPL/HMS does not have the runaway log problem.



Log file linecount.



At some point Sunquest changed the number of lines in the outstanding log from 66 to 67. The program will let you know if this number is not correct.

The Log file linecount is useful for verifying the integrity of the log capture in most instances... At some sites however the linecount is inconsistent, especially with long logfiles. So if the program detects an invalid linecount it will prompt you about whether to ignore the linecount in the future.

*Sunquest versions of OI Monitor only. CPL/HMS does not have this.



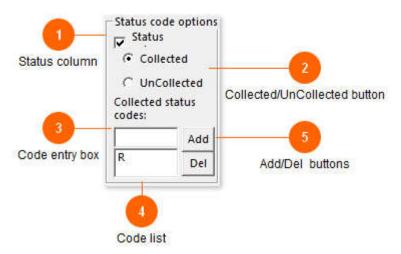
Ignore linecount



Ver 1.42 and above. Although the linecount is usually a surefire way to know if the captured logfile is complete, some sites get captured logs that are off by a few lines, especially if you typically have larger logs. If you get linecount errors but the data seems to be ok, you can check this option to stop the errors.

*Sunquest versions of OI Monitor only. CPL/HMS does not have this.

Status code options



Status code controls

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.



Note that I often end up advising users to leave "Status" unchecked and allow OL Monitor to automatically determine status. Reason: **If you are having problems with **tests not showing**, or having to have <u>both statuses</u> selected in order to see tests, it is better to just disable the status column option. Sunquest can sometimes be inconsistent with giving tests a status code.

Having said that, it can sometimes be useful to define the statuses. If you are using the HRP module for example and employs special statuses besides the vanilla 'R' or 'U' for those entries.

A status column, usually displaying 'R' for received specimens and 'U' for unreceived specimens is used by many sites. If your site does not use a status column the received or unreceived status can be determined by whether or not a collect time is present. Check the "Status" box if your site uses a status column.

*A bug in the status code handling was fixed with version 1.66.



Select which codes to load into the listbox below.

So if you select "Collected" here, all definde status codes corresponding to Collected status will load in the box

If the box appears empty, you will need to define some status codes.

"R" typically stands for collected.

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"U" typically stands for uncollected.



Add the status codes used by your site, ie 'R' for received/collected specimens. Multiple codes can be added if your site uses more.

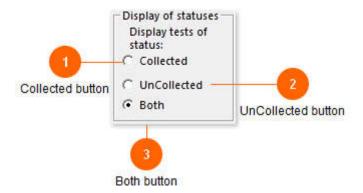


The list of associated codes is displayed here. In this example the collected code list only contains one code: "R".



Use the add and del buttons to add or delete codes in the list.

Display of statuses



The status display control allows quick filtering of the list based on the status of tests.

This option works along with the **Status code** option.

If you are having trouble getting this option to work, try disabling 'Status column'

It is also possible to use <u>filters</u> to hide collected or uncollected specimens, this option is just a little more convienient.



Collected

Check this button to display only collected specimens.



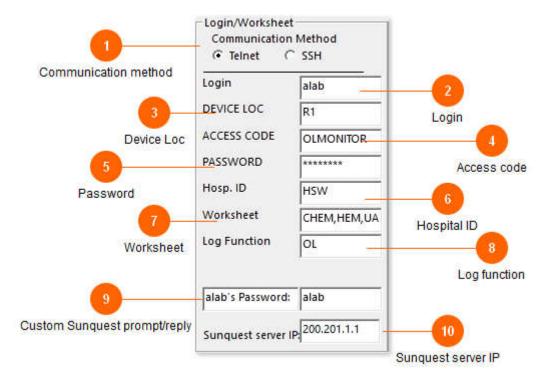
C UnCollected

Click this option to display only uncollected/unreceived tests.



Select this option to have both received and unreceived tests show up on the list.

Login/Worksheet



The program needs a logon and password to logon to Sunquest just like any other user. Most labs setup a special user in Sunquest that only has permissions to pull the OL log.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.



Ver 1.46 and above. Telnet is the default method. The process of going to SSH is not as simple as a simple option click, but the program does all it can to set it up from it's end. See special instructions for setting up SSH sessions here: http://ericainsworth.com/olmonitor/blog/?p=75



The first prompt, 'Login' varies widely from site to site and is the first prompt when telnetting to Sunquest. Instead of 'Login' some sites receive a 'Username' prompt.

CPL lab see this topic for Login section.



Device Loc

R1

The 'DEVICE LOC' prompt in Sunquest.

CPL lab see this topic for Login section.



Access code

OLMONITOR

Your Sunquest username. Most sites create a limited user with no mail and error reporting solely for pulling the outstanding log.

CPL lab see this topic for Login section.



Password

Password for the Sunquest user specified. Your password is stored encrypted in the registry or ini file.

CPL lab see this topic for Login section.



Hospital ID

HSW

If this field is left blank, all hospitals in your system will be pulled. Othewise specify a hospital for the outstanding log.

CPL lab see this topic for Login section.



Worksheet

CHEM, HEM, UA

A group worksheet containing all the tests you want to monitor is usually created just for OL monitor. Alternatively you can use any other worksheet or leave blank to pull all tests in the lab.

You can enter multiple* worksheets separated by a comma. EX:

CHEM, HEMO

- *Versions below 1.88t: Only 2 worksheets are supported.
- *Versions above 1.88t: Up to 4 worksheets are supported. It should be possible to add support for more worksheets into the macro, if you need this please contact me.

Many labs are using a Group Worksheet to control what shows up on their OL logs.

CPL lab see this topic for Login section.



Log function

OL

OL is the program name to directly pull the oustanding log. If your site does not have this Sunquest program tag defined the outstanding log can usually be pulled using 'LO' instead.

CPL lab see this topic for Login section.



Ver 1.63 and above. Some sites may have an additional server login prompt. Copy or type exactly the login prompt that appears and the appropriate response to send (ie: password or login string).



The server IP is the ip address Smarterm uses to connect to the Sunquest server.

If you know the IP address of the Sunquest server enter it here.

If you have already been using Smarterm to connect to Sunquest you can leave this blank and the program will search for your previously used IP's the first time it loads Smarterm.

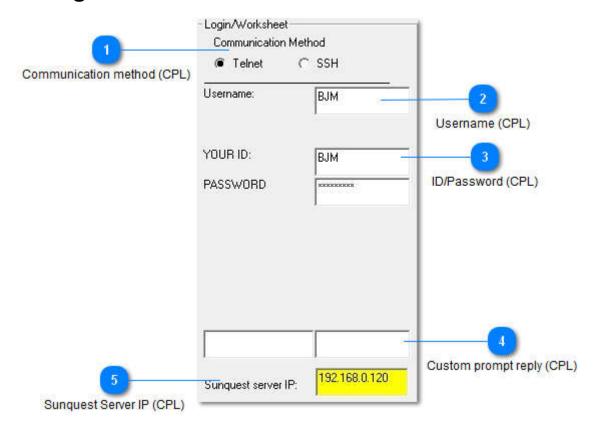
The field will highlight in yellow if this is the first time you are running Ol Monitor or if the saved ip is on the 'bad ip list'.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.

The structure of the Login/Worksheet

CPL Login

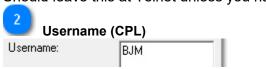
CPL Login



CPL (Antrim/Sunquest commercial) has a simpler login configuration.

1	Commu	ınicatior	n method (CPL)	•
(6	Telnet	C SSH		
Sho	ould leave	this at 7	Γelnet unless you have s	pec

cial security consideration.



Username that you use to login to Sunquest.

For security you should setup a special user with limited access just for use with Ol Monitor.



ID and password to complete login to Sunquest.

Custom prompt reply (CPL)



CPL, you probably will never need this.

Ver 1.63 and above. Some sites may have an additional server login prompt. Copy or type exactly the login prompt that appears and the appropriate response to send (ie: password or login string).



Sunquest Server IP (CPL)

Sunquest server IP:

192.168.0.120

(CPL hint: it's probably 200.10.10.10)

The server IP is the ip address Smarterm uses to connect to the Sunquest server.

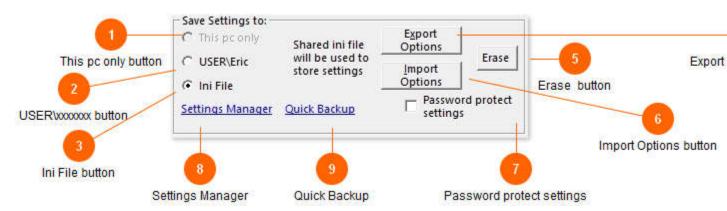
If you know the IP address of the Sunquest server enter it here.

If you have already been using Smarterm to connect to Sunquest you can leave this blank and the program will search for your previously used IP's the first time it loads Smarterm.

The field will highlight in yellow if this is the first time you are running Ol Monitor or if the saved ip is on the 'bad ip list'.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.

Save Settings to:



Where your settings are stored.

For maximum flexibility, your custom settings can be stored in 3 different locations.

*Note: On the first run of OLMonitor a test of the read/write abilities to the registry is performed and displayed. This should give you an idea of which location to use.

**Note: When you switch the settings location and click 'OK', all settings that are present on the screen will be saved to the new location and will overwrite any existing settings.

To load settings from another location see the section <u>'Reload with settings'</u> option from the menu bar in the main screen.

'Reload with settings' is the safe way to tinker around with settings locations.

(you also may have to reload from your new location even after changing the settings location and clicking OK).

There is now a special program you can use to manage your settings: Ol Monitor Settings Manager



This pc only button

C This poonly

Local pc section of registry:

Settings stored here will be available for all users of the current pc. Any new users who load the program will start off with the local pc settings. Individual users can still define custom settings for themselves.

Note: If you are using *Windows 7* this option is grayed out (disabled) since the 'ALL USERS' portion of the registry is locked down for the most part.



USER\xxxxxxx button

C USER\Eric

User section of registry:

Settings stored here will be loaded only for the current user in Windows. Different users can have

different settings. In a Windows-networked environment the user's settings will be synced to any pc the user logs onto.



Ini File button

(Ini File

INI file:

With the constant threat of viruses and spyware, network admins may resort to locking down user permissions to modifying the registry. If this is the case you may encounter errors when trying to save your settings to the registry.* You can either request to be given administrative rights or use an INI file to store your settings. The INI file resides in the OLMonitor folder and circumvents any issues with registry permissions. The settings in the INI file are available to all users of the pc. The INI file can also prove useful for copying settings from one pc to another.

*On rare occasions there were some issues with OlMonitor being able to access the "C:\Users\Public\Documents\OlMonitor" folder, where the ini file resides. Newer versions of OL Monitor attempt to detect this condition and advise to change the folder properties to allow access.



Export Options button

Export Options

Detailed tutorial on backing up settings: Step 3: Two ways to backup

Notes on exporting/backup settings:

I like to recommend backing up your settings "Remember you should always backup your settings before installing or updating!"

Quickest way to do this is click 'Quick Backup'.

*Don't have 'Quick Backup' because you are running an older version? Just click 'Export Options'. The window that pops up next can be confusing so read <u>this topic</u>.

Also you can <u>download</u> the <u>Settings Manager</u> program, it sets up quickly (ClickOnce app) and you can do the quick backup from there. It works with all versions of Ol Monitor.

Export Options button:

Click the Export Options button to export registry settings to a .reg file. This is useful for backing up your settings or transferring your settings to another computer.

When you click a window will open for you to choose a filename.

Some have encountered issues with using this function in Windows 7. If this happens to you try using the Quick Backup and/or Settings Manager application.



Erase button

Erase

Click this button to erase all settings from the registry. When the program is uninstalled your settings are normally left behind incase you are upgrading. If you want to completely erase the settings from the registry use this button.



Import Options button

Import Options

Click this to import settings from a previously exported .reg file. Alternatively settings from a .reg file can be imported simply by double clicking the file itself.



Password protect settings



You can prevent users from making changes to options unless they know the password.

Below version 1.59: Since most would prefer not having yet another password to memorize, the same password is used for both the Sunguest login and the settings password.

Above version 1.59: Separated Sunquest login and settings password. Added password entry box where password entered is hidden

If this option has been enabled you will also need the password to disable it.

If this option has been enabled users will also not be able to change the settings location withouth the password using the options drop-down menu on the main window.



Settings Manager

Settings Manager

There is now a special program you can use to manage your settings: Ol Monitor Settings Manager

The settings manager is built-in to Ol Monitor versions 1.81 and above.

You can also download the Settings manager here: http://www.olmonitor.com/SettingsManager/publish.htm

Settings manager is useful for working with your settings outside of OL Monitor, making quick backups, and moving specific settings from one location to another.



Quick Backup

Quick Backup

Detailed tutorial on backing up settings: Step 3: Two ways to backup

Starting with version 1.81 and above you can make a quick backup of settings by clicking this link.

This utilizes the quick backup feature of settings manager.

Clicking the link will launch Settings Manager with a command to backup immediately and then close.

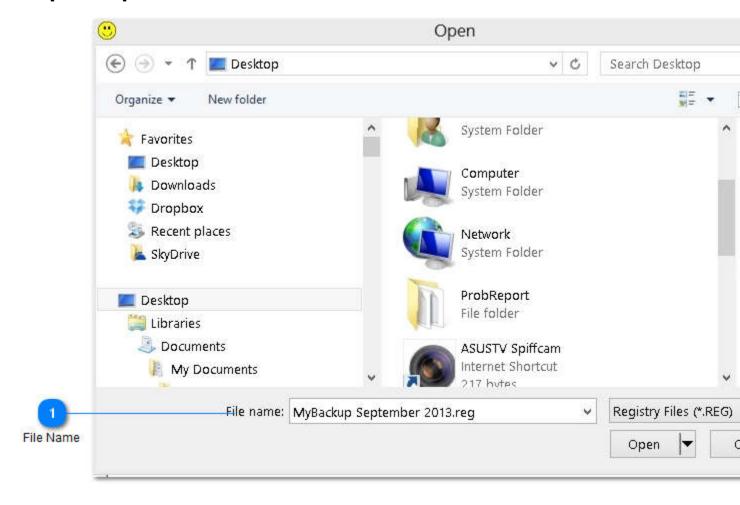
The files will be backed up to your My Documents folder in a subfolder with the current date. Example:

"C:\Documents and Settings\Eric\My Documents\10 1 2012"

The structure of the Save Settings to:

Export Options window

Export Options window



When you click export options this window pops up.

Browse to the location where you want to store your backup file.

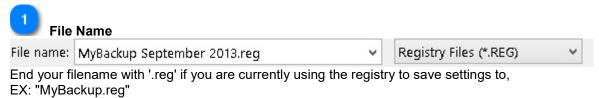
Type in a filename.

The filename should end with '.reg' if your settings location is 'Current user' or 'All users'

The filename should end with '.ini' if your settings location is 'ini file'.

Click 'Open' to save the file (Unfortunately I cannot change the 'Open' button to say something more logical like 'Save').

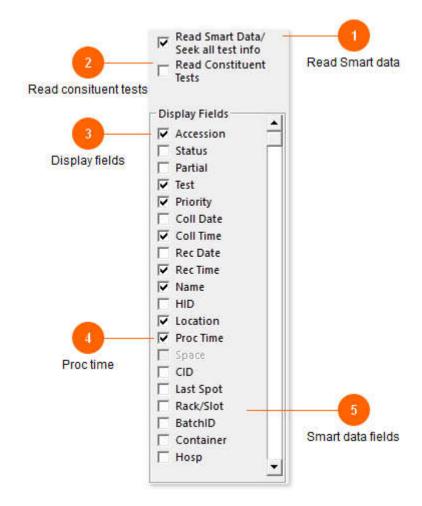
Detailed tutorial on backing up settings: Step 3: Two ways to backup



or end with '.ini' if you are using the ini file to save settings.

EX: "MyBack.ini"
Trying to save your ini file settings to a reg file or vice versa will not work here.

Display Fields



You can pick which fields to display.



If your site is not on Smart it's best to un-check the read smart data option.

If you do have Smart and you are not seeing fields you want like "LAST SPOT", enable this option.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.

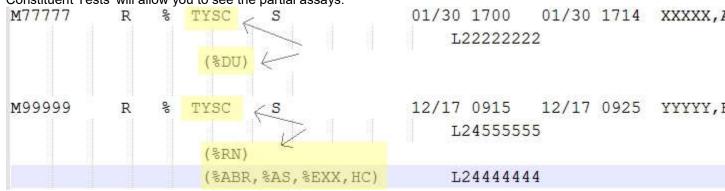


Normally most labs are only interested in the panel names, not listing every individual assay. However in some situations this can be very useful, listing the partially completed tests in an area such as

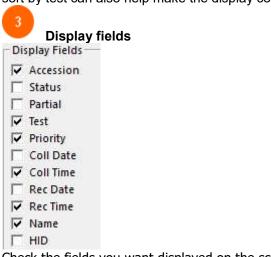
Blood Bank for example.

*Note: If you enable this feature and constituent tests still do not show up, try also enabling the 'Read Smart data' option, even if your site does not have Smart.

In the example below, typically the panel 'TYSC' only would display for both patients. However the first patient just needs a DU and the other a full Type and Cross. Enabling 'Read Constituent Tests' will allow you to see the partial assays.



A good idea if using this option is to enable the 'Condense tests' option on the Advanced screen. Ol Monitor will attempt to list the parent panel first, then the assays, all on the same line. Finally using a sort by test can also help make the display consistent. Contact me if you need any help on this one.



Check the fields you want displayed on the screen.

With newer versions of Ol Monitor you may see a lot of fields you do not recognize.

These fields were added for the HRP and PL reports in Sunquest, the CPL (Sunquest commercial) labsystem, and the HMS labsystem.

The extra fields that your labsystem and HRP/PL report option do not support will be disabled.

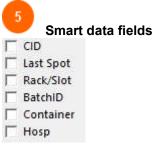


Proc time

▼ Proc Time

The process time is a calculation that is not present on the outstanding log, it is added by OL Monitor. The process time is calculated from the receive or collect time. If the specimen is received the process time is the number of minutes from the time the specimen was received to the current time. If the specimen has not been collected the process time is the number of minutes from the collect time to the current time.

You can force the time to be calculated always one way or the other on the Advanced tab.



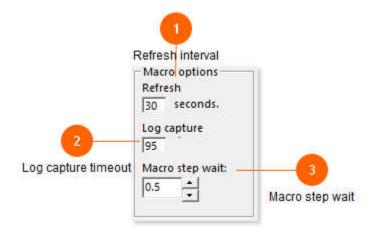
Here you can select to display the various new fields shown by Smart.

If you are a Smart site you can enable this. For some reason somtimes some of the fields don't appear on the OL log. If this happens you might want to contact Sunquest.

However, if you know a field is appearing on the OL log but it is not picking up on OL Monitor, contact me for a fix.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.

Macro options, Refresh interval and IP





The number of seconds to wait before refreshing the outstanding log.

Decrease this number to have a more real-time accurate display of tests.

Increase this number if you are worried about the load you may generate on the Sunquest server.

A very low number below 10 seconds may cause the script to get out of sync.



(Versions 1.87j and above)

The setting controls how many seconds the Smarterm macro will wait for log capturing to complete. The actual capture is the last step of the macro script.

Normally this setting would be irrelevant as the log capture completes as soon as the end is detected. However if you are having problems with runaway logs, or occasionally refreshing taking an eternity, you may want to play with this option.

HRP users: The HRP log may take a long time to generate and retrieve for some sites. So for HRP the default was previously set all the way up to 720 seconds to give Sunquest time to return the report.



(Versions 1.87j and above)

Since the advent of Waystring, users have noticed that the OI Monitor Smarterm macro does not step through the menu as quickly as before. The extra wait was added to make sure Sunquest and the macro stay in sync.

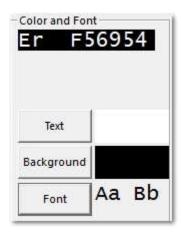
You can attempt to speed up log generation by adjusting this value. It is the number of seconds that the macro waits before detecting it's location in the menu and sending another response.

You may also want to try slowing it down if you are having trouble with the macro getting out of sync with Smarterm, particularly when the Sunquest server is busy or doing a nightly backup, it can become quite sluggish.

Therefore use this setting with caution, it may work fine for you to speed the macro up in your testing during the day but later cause problems if you have it set too low during the late night server bogdown.

*NOTE: If it appears the macro is taking much longer for each step than what you have input here, there may be another issue. Try disabling Error Logging to see if that speeds up the Smarterm macro. If so, the Smarterm macro is getting bogged down each time it tries to write to the Error log

Color and Font



You can change the color and font of the text on the display here.

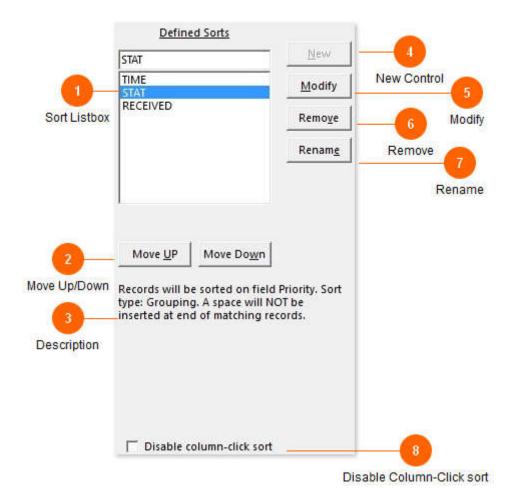
You can also change the background color of the list. Due to limitations of the Microsoft Listview, only one background color is possible.

Options window - Sort tab

The structure of the Options window - Sort tab

Sorts Sort options

Sorts



Sort listbox



This is a list of existing sorts.

In the top box you can type the name of your new sort or rename the currently selected sort.



To acheive the right order of sort it may be necessary to move a sort up or down. This is especially true if you are using a mix of quick and grouping sorts.

The LAST sort takes precedence over the previous sorts. This is because the sorts are processed in order from top to bottom, thus the bottom sort gets the 'last word'.

Having more than a couple of 'simple' sorts can produce confusing results, since every simple sort kind of 'messes up' the previous sorts.

Put the simple sorts at the top of the list, add the 'Grouping' sorts to the bottom.

Grouping sorts are great because they try to preserve the order of the previous sort, so if you have a sort defined to sort by time, the grouping sorts that follow will preserve that order if possible.

In this example you can see the TIME sort is a simple sort on Proc Time, and is at the top. The STAT and RECEIVED sorts are grouping sorts. The STAT sort will move all stats to the top of the list. Then the RECEIVED sort will act last and move all R status tests to the top while preserving the previous STAT and TIME sorts.



An automatically generated description of the selected sort is displayed here.



Click this button to start defining a new sort.



Click here to modify the currently selected sort.



Click to delete the currently selected sort.



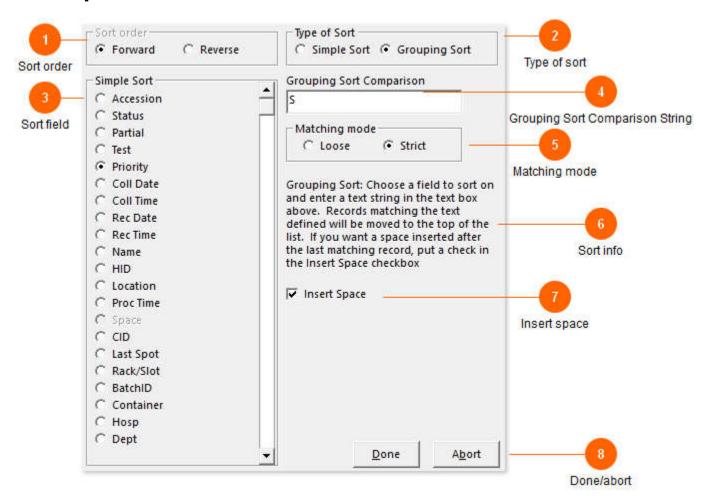
Click to rename the current sort.



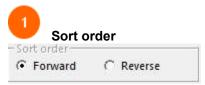
While in the main window, it is possible to click the column headers to sort on that column. When you do that click sort it will override the saved sorts until the program is restarted.

If this is a nuisance and techs are accidentally clicking the column headers you can disable that behavior.

Sort options



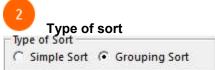
Options for selected sort.



You can change the direction of the sort if it is a Simple sort.

Sort order is not applicable to Grouping sorts.

So for example a Simple sort on Proc Time with Forward sort order will move the highest proc times (oldest tests) to the top. If you were to select Reverse sort order the newest tests would move to the top.



A simple sort is a quick alphabetical/numerical sort applied to the selected field.

Theoretically the simple sort is faster than a grouping sort.

You cannot opt to insert a space with the simple sort.

A grouping sort will move all fields matching the text you type in the box to the top of the list.

With grouping sorts you can have the program insert a space between matching and non-matching fields to help organize the list.

You have the option to sort in Forward or Reverse order (simple sorts only).



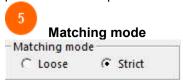
Choose which field to sort on.



With a grouping sort, text matching this string will be moved to the top. The previous sort order is preserved with grouping sorts.

Say you want to sort by location and have all tests from ER at the top of the list. If your ER location is 'ER1' you would enter 'ER1' here.

If you additionally want to sort by priority, putting all stats to the top, you can add another sort below or above the ER sort. You would enter 'S' for stat (or whatever your stat code is), and it will move all the 'S' priorities to the top of the list.



There are two ways for the grouping sort to work. With strict matching, the comparison string must

match exactly for the sort to apply. So for example if you specifically want a location, say 'ER1', to be sorted to the top you would use strict matching. 'ER1' location will sort to the top, while any other locations such as 'ER11' would not.

Strict matching can be useful if your sort is putting stuff you don't want at the top. So if you have a priority sort 'S' but one of your low priority codes was 'SD', strict would keep those 'SD's from sorting to top along with the 'S' stats.

With loose matching a single sort can match on a portion of the string. So for example if you have multiple ER locations but do not want to define multiple sorts, you could use loose matching. If your ER locations are 'ER1, ER2, ERS, ERM...' you could simply put 'ER' as the comparison string, and all those locations will be pulled to the top since they match on the first two letters.

The Matching Mode option is available in versions 1.78 and above.



Sort info

Grouping Sort: Choose a field to sort on and enter a text string in the text box above. Records matching the text defined will be moved to the top of the list. If you want a space inserted after the last matching record, put a check in the Insert Space checkbox

Brief instructions or information about the sort will be displayed here.



Insert space

✓ Insert Space

You can have the program insert a space between matching and non-matching fields to help organize the list.

Insert space only works with Grouping type sorts.



Click Done to save your sort, or abort to discard changes.

Options window - Filter tab

Filters can be defined to filter in or filter out tests.

Filters can be very complex.

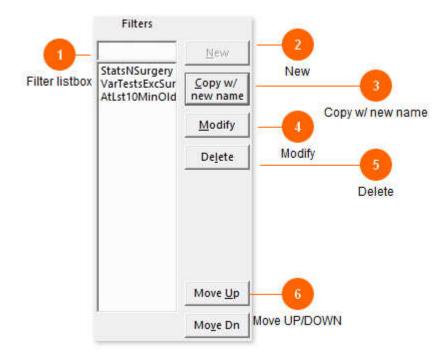
With VIM the process of creating and managing filters has been made as easy as possible. The new filtering logic is extremely flexible, optimized for speed, and was created exclusively for OLMonitor. Remember you can also create a quick filter by right-clicking any test on the main window and choosing which field to filter out. This filter can later be modified in the options window.

The <u>Filter examples</u> section shows some great examples of filters ranging from simple to complex. Also this <u>blog post</u> is a good read on using filters and worksheets to efficiently control what shows up.

The structure of the Options window - Filter tab

Filter list
Department filter
Filter definition
Exclusive/Inclusive
Filter examples

Filter list



This listbox contains the list of defined filters.

You can create a single, complex filter or create several filters for managability.

The order of the filters is important so for multiple filters some experimentation may be required.



List of defined filters

Click in the above box and type a name for your new filter.

In this quick example list of what you can do with filters, we have a StatsNSurgery inclusive type filter to get Stats only and also surgery locations.

After that the VarTestsExcSur filter excludes various tests unless they are from surgery.

Finally the AtLst10MinOld is a ProcTime filter that excludes any test that has not been in the lab at least 10 minutes.

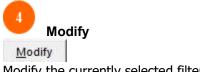
For more info see the Filter example topic.



Click New to define a new filter



A workaround since simply renaming a filter caused issues, you can copy the current filter to a new filter with a new name, then



Modify the currently selected filter.



Delete the currently selected filter.



Move the selected filter up or down on the list. The order of the filters can effect how they work together.

Department filter



This is an old feature that only exists in current versions for compatibility. Instead of using Departmental Filters you can use the "Dept" field in your regular filters. See 'new field added' section here:

*Old versions (lower than 1.79) only:

You can 'filter in' specific departments quickly using departmental filters. If this box is unchecked and/or the list is empty, all departments will be included.



Old versions (1.79 and lower) only:

Delete

You can add or delete the list of departments to view.

The department name is listed at the top of every page on the Overdue log.

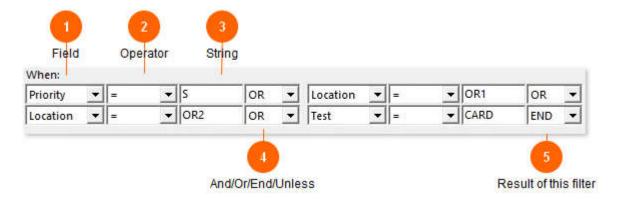
The department filters work off of whatever code appears at the top of the Overdue log page:

02/28/2012 Whatever HealthCare, Inc. PAGE

08:14 OVERDUE TEST LOG FOR Chemistry\: WHE1

So here the chemistry department code is WHE1.

Filter definition



Here is where you set the criteria for the filter to match on. Any field can be used, all logical operators can be utilized, and as you can see the filter can be made very complex and specific if necessary. Ver 1.58 and above: Unlimited filter definition is now possible.



Choose the field to filter on. Test, priority, location, etc.



Equal to, not equal to, greater or less than, or contains.

- = : will match if the field matches the text you enter
- <> : will match if the field is not equal to the text you enter
- > : < : greater or less than will match if greater or less than the text or number you enter contains : will match if the field contains the text you enter. IE. A test named "ARUP Oxycontin Q" will match if you entered "ARUP" or "Oxy" in your filter definition here.

Added in version 1.90c: NOTCONTAINS: this can be useful depending on your logic. See filter examples for an idea of what it could be used for.



This is the text to match for filtering.

So for example if you wanted to filter out MDIFF's enter "MDIFF" here. Then you would select the field "Test", Operator "=", and at the bottom filter type "Exclude".



And/Or/End/Unless



If you click END the filter will end here.

Clicking any of the other operators will open up a new set of boxes.

So using the AND operator you can require multiple criteria match.

Using the OR operator a match can occur with either criteria.

The unless operator gives you a chance to still exclude or include a test if some other criteria matches.

So for example if your goal is to only see stat tests from ER you would create an inclusive filter and connect the criteria 'ER' and 'S' with the 'And' operator.

If you want to filter out a bunch of tests you don't care to see, you would create an exclusive filter and connect a long list of testnames with the 'Or' operator.

Filters can be complex and you can use any variety of operators and fields. The logic is not checked though and it's possible to create a filter that doesn't work they way you intended. See the <u>filter</u> example for an explanation. If you need help designing filters feel free to contact me.



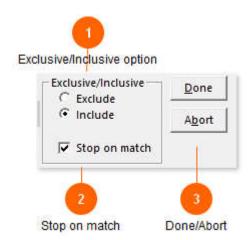
Result of this filter



So in the example above it is an <u>inclusive</u> type filter. We want to see Stats but also any tests from OR1 or OR2. Also we're trying to get heart certification so we want to see all CARDiacs. We've connected all these qualifiers with 'Or' operators so that if any of the conditions are met the test will get included (filtered-in).

More example of filters are on This page.

Exclusive/Inclusive





A filter can either be exclusive or inclusive in nature. An exclusive filter excludes test matching the criteria. An inclusive filter includes any test matching the criteria.

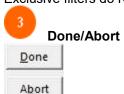


▼ Stop on match

(Version 1.39 and above). This option is for inclusive filters only. This is checked by default. Normally if there is a match on an inclusive filter, processing of other filters down on the list will stop. By un-checking this box, you can allow other filters to process.

So for instance if you have an inclusive filter that includes all stats, you can define an exclusive filter after it that screens out certain unwanted tests.

Exclusive filters do NOT cause processing of other filters to stop if they have a match.



When you are finished defining you filter click Done or click Abort to discard your changes.

Filter examples

Here is a simple filter to filter out blood cultures:



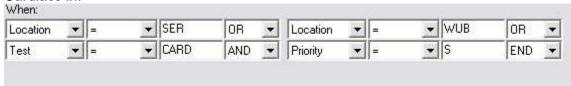
(Filter type is 'exclusive')

This one filters in only stats from ER:



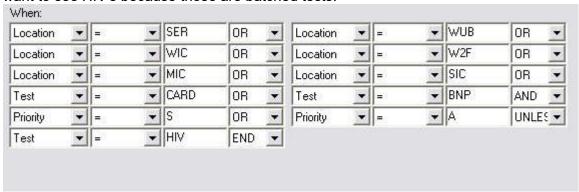
(Filter type is 'inclusive')

Here is a more complex version of the above. It also allows tests from location 'WUB' and any Cardiacs in:



(Filter type 'inclusive')

Say you want to monitor stats or asaps from 5 locations, any cardiacs or bnp's, but you don't want to see HIV's because those are batched tests:

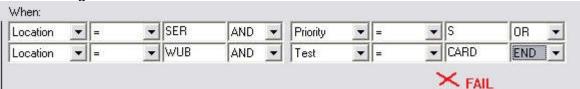


(Filter type 'inclusive')

One thing to remember is that the filtering processes operators in a certain order. Or's are processes first, then

And's and finally Unless.

The following filter seems like it should work:



We were trying to see stat ER's and also Cardiacs from WUB. But since the Or gets processed first, it ends up

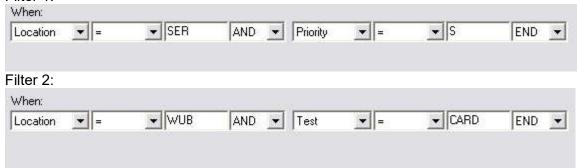
being:

Location=SER and Location = WUB and Test = Card

So you end up with a blank list.

We can get what we want here by using 2 inclusive filters instead:

Filter 1:



Filtering on time:

It is important to remember that filters have nothing to do with turn around times, those are set up under the alerts tab.

But there are many ways to use time within filters to have things pop up or be hidden at the appropriate time.

Say you have a chemistry OL Monitor. Specimens are received in the lab but still take about 8 minutes to centrifuge.

So chemistry doesn't care to see tests that are still spinning. You can set up a time filter to filter out anything

less than 8 minutes old. To do time filters do not use 'collect time' or 'receive time' fields. Use 'Process time':



(Filter type 'exclusive')

Using 'contains':

Contains is a handy operator that can save you some headache sometimes.

Say you have 5 ER locations you want to monitor and 3 ICU's. If there is any consistency to how you have these locations named you can use that. So if the locations are:

MER MIC ER2 SIC

ER3 ICU

ER4

SER

You can use the contains operator to simplify your filter:



(Filter type 'inclusive')

Another possible use: Filtering out junk.

For whatever reason at one point our lab wasn't using a worksheet to pull the overdue log. Just left the worksheet field blank and pulled the whole lab. So we ended up with scores of sendout tests on the list.

Luckily almost all our sendout tests include the name of the lab: 'ARUP'. I.E. tests look like: HepCAb ARUP, WNile Ab ARUP, etc.

We could create filters for all 8000 or so possible ARUP tests, or use 1 simple contains filter:



(Filter type 'exclusive')

Using 'NOTCONTAINS':

Although it's possible to get your filter to do what you need it to just using 'CONTAINS', the resulting logic could turn out to be confusing. NOTCONTAINS was added in version 1.90 to keep from having to use some funky inverted logic.



This inclusive type filter shows we are only interested in seeing stats and asaps but we don't care about any outpatient (OP) locations.

Don't forget 'Stop on match':

Stop on match only appears on 'inclusive' type filters. Inclusive filters are a broad sword, they mark anything that

matches criteria to be shown and everything that doesn't is marked to filter out. So you have to be careful

in your definition to make sure everthing you want to see is either in the filter or in subsequent inclusive filters.

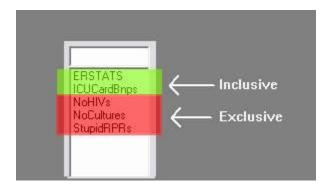
Exclusive filters leave alone anything that doesn't match their criteria. So you can play a little more fast and loose with exclusives. (That is why all filters created with the right-click 'quick filter' method are exclusive.)

It can get a little cumbersome to keep tweaking your inclusive filters for various scenarios. That is why there is a

'stop on match' option on inclusives. By un-checking this, you allow exclusive filters a chance to examine

tests already processed by inclusive filters. So you can have a simple, broad inclusive filter at the top of your filter list,

with several exclusive filters below to tweak what shows up.



Also see this <u>blog post</u> that covers using worksheets along with filters, and what to do when you wan to modify a long, complex filter.

I hope these examples help you with your filter-creating. If you have a comment to add, would like to share a clever

filter you came up with, or have further questions feel free to email me or post in the forum.

<u>Email</u>

Forum

Options window - TAT/Alerts tab

Turn around times and event sounds are defined here.

The structure of the Options window - TAT/Alerts tab

TAT Listboxes

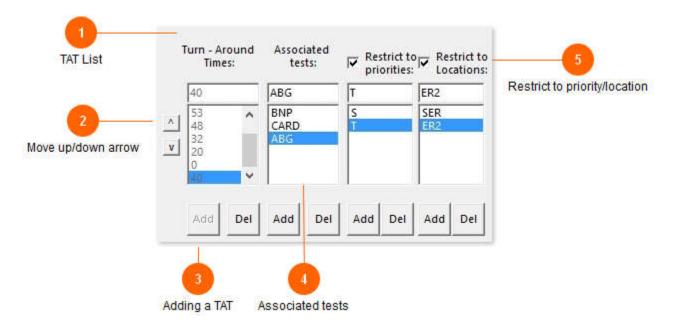
TAT sound/color

TAT Stat/Other

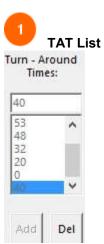
TAT interval

TAT Example

TAT Listboxes



The Turn-around-times define actions to take place when a test or group of tests exceed a time limit.



The key to organizing turn-around times is to group them by the time itself. This approach is also makes log processing faster.



Moves the selected TAT up or down on the list.

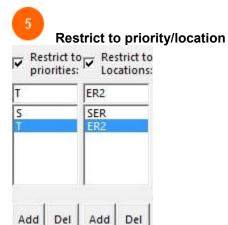


To add a turn-around-time simply type in a time and click add. This will enable the other controls.



You can define specific tests for the turn-around-time.

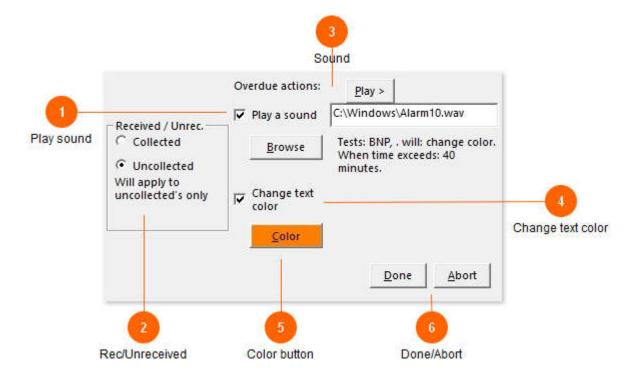
To have a general tat time that applies to all tests, enter an asterisk () in this box and click add. If you enter an asterisk in the tests list you do not need to type any other testnames in the list.



You can also further limit the TAT to certain priority/location codes.

In the example here only 'T' and 'S' priorities in locations 'SER' and 'ER2' will be checked. These options are optional, you don't have to specify priorities and locations for each TAT.

TAT sound/color



Options for color changes and sound cues for the selected TAT are defined here.



Play a sound

Check this box to have a sound play when a test is overdue.



Choose whether the TAT applies to collected or uncollected tests.





Click the browse button to specify a .wave (wave) file to play when the test(s) are overdue. Click play to hear the sound.

An explanation of what will happen with the process time exceeds appears .



Check this box to have the test text change to a different color when a test is overdue.

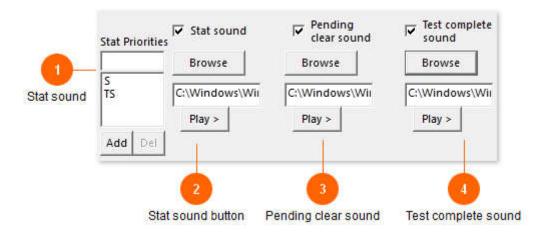


Click this button to choose the text color.



Click Done to save your changes, Abort to discard.

TAT Stat/Other



A stat sound, pending clear sound, and test complete sound can be defined here.

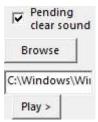


A stat sound can play when a new 'stat' test appears on the list. Here you can define a list of priorities considered stat.



Enable/disable stat sound. Browse for and test the stat sound.

Pending clear sound



some labs are actually able to occasionally clear the list of all pending tests, if this occurs a pending clear sound can play, signalling time for everyone to take a break.



If you really enjoy sounds you can have a sound play once for each test that goes off the list. If you choose a sound that is more than one second long this can become truly annoying. When multiple tests go off the list this sound plays more rapidly.

TAT interval

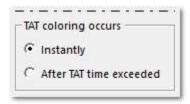


It is important to keep the playing of sounds at a bearable interval. Techs already accustomed to listening for alarms, timers, beeps, and phones will rapidly tune out any sound that occurs too much, thus negating the purpose of sound cues.

The structure of the TAT interval

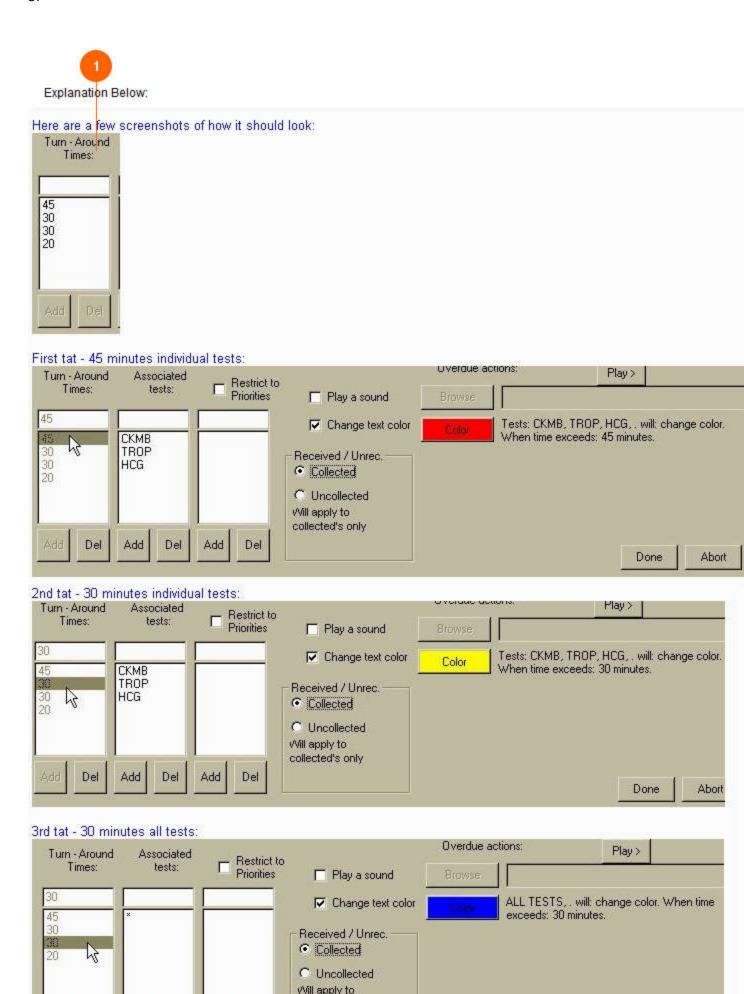
TAT Coloring occurs

TAT Coloring occurs



The coloring/sounding of TAT's can occur at the time the TAT is reached or after the time is exceeded.

TAT Example



A lot of people have asked why sometimes TAT's they design seem to have no effect. Here is an example that explains the process.



Explanation Below:

Turn - Around Times:

The staff wants specific order codes:

TROP, CKMB, HCG to turn YELLOW @ 30 Minutes; RED @ 45 Minutes AND, they want ALL OTHER order codes to:

turn YELLOW @ 20 Minutes; RED @ 30 Minutes

The thing is that you need to define the TAT's IN A CERTAIN ORDER*, for it to behave they way you want it to. What happens is that when a test matches a TAT, the program stops looking at the other TAT's down the line, so you should have your most restrictive TAT's defined first on down to the least restrictive. In your case you should define the 45-minute, trop-ckmb-hcg tat first, then the 30 minute, trop-ckmb-hcg second. Then define the 30 minute-all test tat, and finally the 20 minute-all test tat.

So in a nutshell: -The code stops evaluating a test on the first matching TAT definition.

- -Define the longest TAT'S, with specific tests first (you don't want a 60 minute old Cardiac turning blue because it was found to exceed the 30 minute TAT when what you really wanted was for it to turn yellow because it exceeds the 45 minute TAT)
- -Define shorter TAT's, with specific tests next.
- -You can define some TAT's that apply ALL Tests, this should come after the specific test TAT's so it won't override them.
- -Again if you have multiple, all test TAT's define the longest TAT's first and then the shorter ones.

*In the current version (1.65) TAT code has been rewritten that should allow you to put TAT's in whatever order. However the issue still seems to come up when using the asterisk * 'all test' matching on more than one TAT. I advise adding TAT's as you desire without regard to their order, and if they do not behave as you expect, refer to this example.

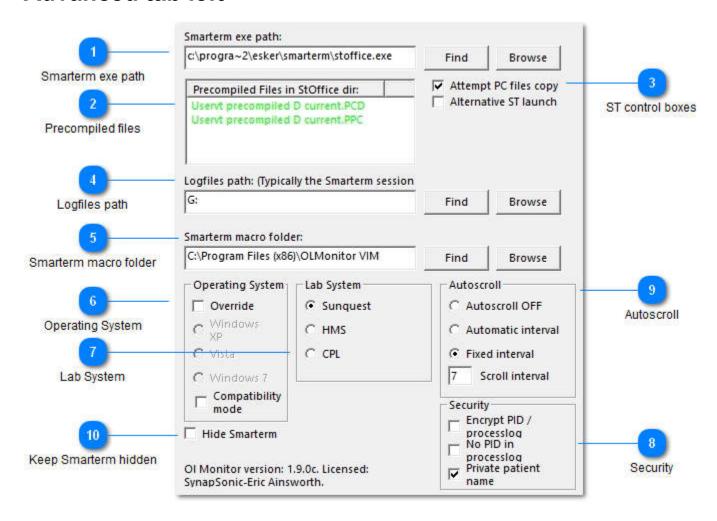
Options window - Advanced tab

If the program is having problems getting the log or starting/communicating with Smarterm, you may be able to solve the problem with the advanced tab. Various other options are here also.

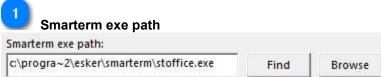
The structure of the Options window - Advanced tab

Advanced tab left Advanced tab right

Advanced tab left



If the program is having problems getting the log or starting/communicating with Smarterm, you may be able to solve the problem with the advanced tab.



This should list the full path to the stoffice.exe program file.

Normally you shouldn't have to mess with this setting. OL Monitor automatically locates the stoffice.exe file.

You can click Find to have OL Monitor do a search for Smarterm, Browse to try and locate it with file explorer.

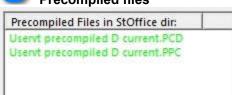
If the exe is not found, have you installed Smarterm? Is Smarterm installed as a citrix app/virtual server?

^{*}Sunguest/CPL versions of OI Monitor only.

HMS does not have this.



Precompiled files



The precompiled files contain the macro code necessary for interacting with Smarterm. Smarterm loads this code if it is present when it runs.

This box shows the PC files if found in green when they are present and the right version.

Red indicates a problem:

- -If Smarterm is started and the files are not present,
- -classic precompiled files are present instead, or
- -the files are hidden.

If the PC files are not present in the StOffice dir OlMonitor will not refresh.

If you install as a limited rights user, these may not install. More info.

The "Fix", "Start", and "Stop" buttons previously found here were redundant and removed in version 1.88q.

*Sunquest/CPL versions of OI Monitor only.

HMS does not have this.



ST control boxes

Attempt PC files copy
Alternative ST launch

Attempt PC files copy: Every time OL Monitor starts, it checks to ensure the Precompiled files are present and the right version in the StOffice folder. If they are not, OlMonitor will attempt to copy them into the folder. This can be a problem because Windows 7 does not like it when a program decides to poke around another program's folder and then have the audacity to put files in there. So it may block both the attempt to check the files and the attempt to copy the files. So this option is present to prevent OL Monitor from trying.

Alternative ST launch: OL Monitor accomplishes the lauch of Smarterm via OLE automation. However this



Logfiles path

Logfiles path: (Typically the Smarterm session G:

This is where the Smarterm script/macro places the captured logfiles containing current test info. In most cases this will be the Smarterm Sessions directory.

OL Monitor makes an attempt to get Smarterm to use the "Public\Documents\OlMonitor" folder captured logs. However depending on what version and how you have Smarterm installed it may not allow that change.

So the folder location may vary depending on what version of Smarterm is installed and what options were used. OlMonitor automatically searches multiple locations to find the logfiles but occasionally fails to locate the right folder.

^{*}Sunquest/CPL versions of OI Monitor only.

HMS does not have this.



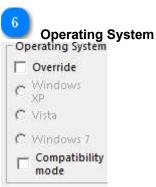
Believe it or not OLMonitor does not use the Smarterm macro folder.

OlMonitor places it's macro code directly in the Smarterm application folder (Smarterm stoffice.exe folder).

The only reason this is here is to avoid a Smarterm error that can occur: "Cannot find specified file" or "UserVT.stm not found". When Smarterm loads it searches for the default macro file, if there is no file Smarterm has an error box that has to be clicked every time.

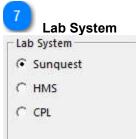
OlMonitor checks before launch and will try to place a 'dummy' macro file in this folder if there is no macro file there already.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.



This is more for your information. Ol Monitor detects the operating system it is on and changes it's behaviour accordingly.

OI Monitor v1.77 and above is designed to work with Windows 7 NOT using compatibility mode. However if compatibility mode has been engaged, it is impossible for OL Monitor to correctly determine the actual operating system, and may start trying to do things, use folders, that are disallowed in Windows 7. So if for some reason you decide to engage compatibility mode on Windows 7, you may also want to let OI Monitor know about it to avoid potential problems.

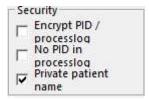


Select your LIS system. Sunquest is the default on a new install.

HMS users: After you select HMS for the first time click 'OK' and then go back into options. You will notice that many options that are not relevant to HMS are no longer visible.

*Although Smarterm is mentioned a lot in the documentation, Smarterm is NOT required for HMS. HMS folder options are explained here.





<u>Encrypt PID/processlog:</u> OL Monitor will encrypt both the captured test logs as well as the debug/error OIProcesslog file used for troubleshooting.

No PID in processlog: During troubleshooting, we may need to look at the OIProcesslog file which can contain PID. Enabling this option will prevent any PID from being put into OIProcesslog. Whenever you save this option the current OIProcessLog will be deleted since it might contain previous PID.

<u>Private patient name:</u> This will remove the patient last name and replace with just the first letter of the last name. I.E. "SMITH, JAMES" would display instead as: "S, JAMES"



The default is automatic interval, but this can sometimes be problematic. You can select a fixed interval or just turn autoscroll off.

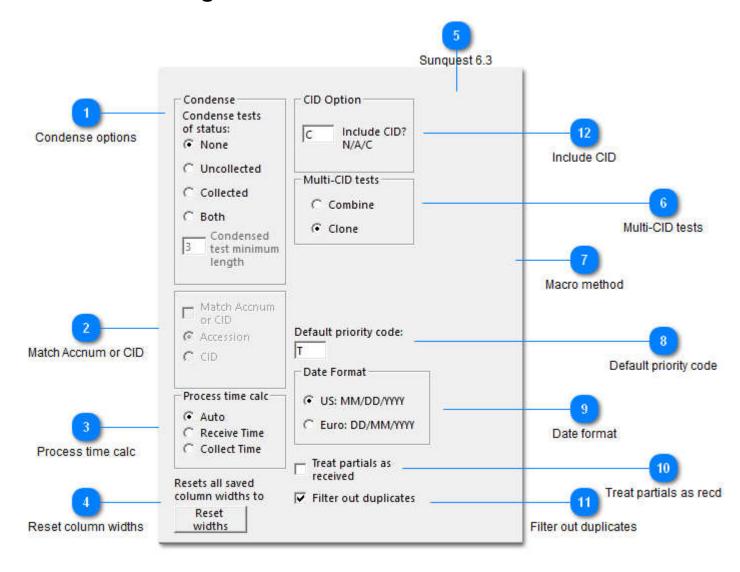


Techs may find it distracting to have the Smarterm window flashing in the toolbar. Check this option to hide the Smarterm session completely.

If you are troubleshooting you may want to Un-check this option so you can switch to the Smarterm window and check the macro.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.

Advanced tab right



Various options.





Tests can be 'Condensed'. This means that all tests on the same accession number will be condensed to one row on the display. This is very useful if your site does not use panels to combine groups of tests, or if you just want to conserve space. In order to control the width of the 'Test' column, the program will remove characters from the end of the testname until the list will fit within the column or the limit of 2 characters per test is reached. To view the full list of tests for an individual, hover the mouse over the test listing and the expanded list of tests will popup.

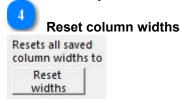
You can limit the condense action to just Collected, Uncollected, or have it act on both.

Match Accnum or CID Match Accnum or CID Accession C CID

When the condense option is checked, it will condense all a patient's tests to one line. You may want to limit this behavior by insisting it also match accession number or CID (container ID).



The 'Process time' is a column containing the calculated time in minutes. It is the time the test was either received or collected up to the current time. In Auto mode if a specimen has a receive status of collected it uses the receive time to calculate. If it has not been collected it uses the collect time. You can set Ol Monitor to always use one or the other if you like.



Occasionally someone might have squeezed one of the column sizes down to 0, making the column invisible. This can fix that problem.

Also by default the column sizes are automatically calculated depending on the length of the text in them. If you ever resize a column Ol Monitor remembers and fixes the column size. If you want the columns to go back to automatically sizing this will clear that setting.



Sunquest 6.3

Newer versions of OL Monitor (1.89q+) do not use this option and it has been removed.

Versions 1.32-1.88s only: Sunquest 6.3 introduced a CID option to the outstanding log menu. Check this box if you have Sunguest 6.3 or above and the macro is hanging on that option.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.



Ver 1.56 and above. Option to handle multiple CID's differently when encountered under same test line. 1: Combine: Add 2nd cid to cid field separated by comma (2 cids max at this time, currently version 1.75), 2: Clone: Add 2nd,3rd,4th cid by adding new 'clone' lines to list-works better for those using the condense options.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.



Macro method

Versions 1.89p and higher: This option became irrelevant with version 1.88s and was removed.

Ver 1.35-1.88s. New macro navigation method 'WayString' added to handle problems with OL menu navigation after upgrades. This method should be selected in advanced options for anyone having difficulty with the Smarterm script.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.



Default priority code

Default priority code:

T

If a priority code is not encountered on the log (blank priority code), a default code of 'T' is normally assigned to it by Ol Monitor. However you can change this to something else if the 'T' priority conflicts or is confusing.

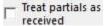


US is selected by default.

*Sunquest versions of OI Monitor only. CPL/HMS does not have this.



Treat partials as recd



For some test batteries receiving in part of the test does not change the collection status to collected. However the partial flag will change. This options allows those tests to show up as collected tests.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.



Filter out duplicates

▼ Filter out duplicates

Version 1.86 and higher. Ol Monitor has always eliminated duplicates, but the addition of combined OL&PL, OL&HRP, etc, has created the possibility of duplicates appearing on the list. Engaging this option adds an additional check for duplicates at the end of logscans.



The CID option allows for None/All/ or CID only. You can choose which option is selected by the macro.

^{*}Sunquest/CPL versions of OI Monitor only. HMS does not have this.

Options window - PL tab

The PL module can pull data from the Pending log and display it alone or combined with overdue log (OL) data, and also HRP.

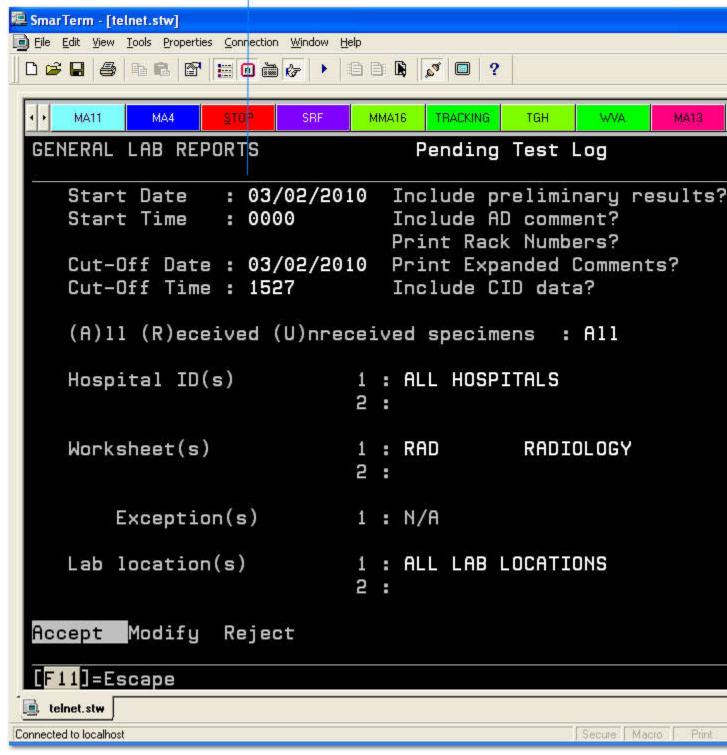
*Sunquest/CPL versions of OI Monitor only. HMS does not have this.

The structure of the Options window - PL tab

Pending log menu Sunquest PL Tab

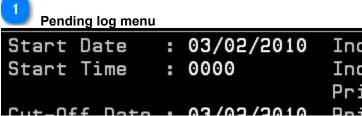
Pending log menu Sunquest





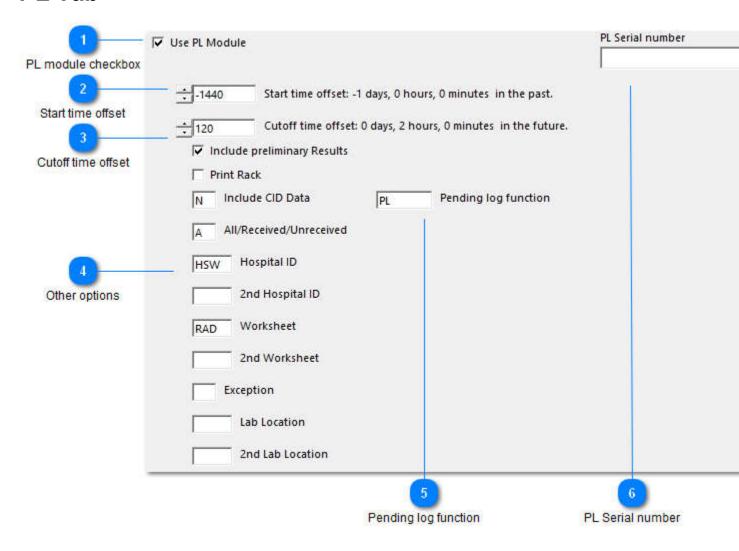
This is what the PL (pending log) menu looks like in Sunquest roll-n-scroll.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.



This is a screenshot of a typical PL-pending log menu.
The pending log menu contains a number of options.
All these options are configurable on the PL tab of the options window.

PL Tab



Activate and control the Pending log here.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.



PL module checkbox

✓ Use PL Module

Turn PL module on or off. The PL Module can be used along with both the OL and HRP logs. Because there are quite a few prompts in the Pending log menu, it takes more time to call up the Pending log than you may be accustomed to with the Overdue log. You can set a lower refresh time under Misc settings to compensate.

2 Start time offset

-1440 Start time offset: -1 days, 0 hours, 0 minutes in the past.	
The Pending log allows you to set a starting time cutoff. With this control specify how far into the past,	or
future, that you want to search for tests.	
*If the text changes to a red color, you have selected an invalid time range.	
3 Out off them off and	
Cutoff time offset	
Cutoff time offset: 0 days, 2 hours, 0 minutes in the future.	
Set an end time for the search. *If the text changes to a red color, you have calcuted an invalid time range.	
*If the text changes to a red color, you have selected an invalid time range.	
Other options	
✓ Include preliminary Results	
Print Rack	
N Include CID Data	
The supplies and the supplies are supplies and the supplies are supplies and the supplies and the supplies are supplies and the supplies and the supplies are supplies are supplies and the supplies are supplies and the supplies are supplies are supplies are supplies and the supplies are supplies are supplies are supplies are supp	
A All/Received/Unreceived	
HSW Hospital ID	
2nd Hospital ID	
RAD Worksheet	
2nd Worksheet	
Exception	
Lab Location	
2nd Lab Location	
These options, for the most part self explanatory, correspond to the options in the PL menu.	
5	
Pending log function	
PL Pending log function	
The function you would call in Sunquest roll-and-scroll to get to the Pending Log menu.	
If you do not have the "PL" tag setup to take you directly to the Pendling Log menu then you should use)
the report menu function ("LO") here instead.	
If you are not sure just leave this setting blank.	
PL Serial number	
DI Corial number	

If you have a serial number for the PL module you can enter it here.

It will not ask you for it again unless you lose your settings.

The number of days remaining in your PL module trial period also shows here.

Trial mode, 45 days remaining.

Options window - HRP tab

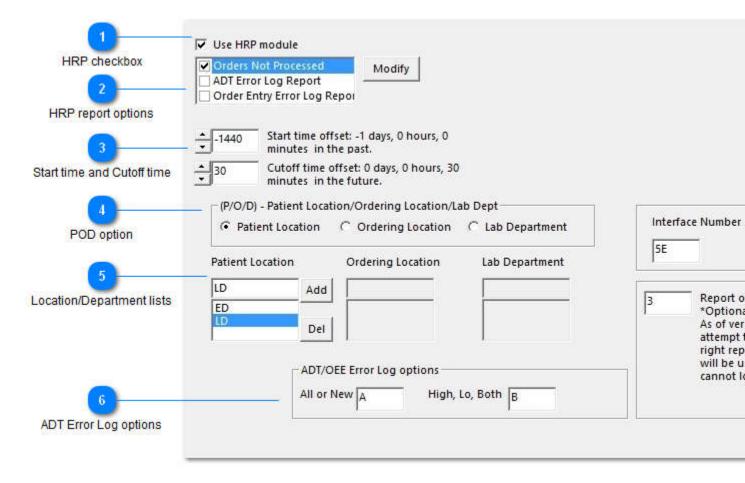
The HRP module allows you to monitor HRP data in OL Monitor.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.

The structure of the Options window - HRP tab

HRP Tab

HRP Tab



Setup options for HRP monitoring.

The HRP report, among other things, can be used to check on outstanding nurse-collected/micro specimens and restricted orders.

To get started using HRP module to pull the ADT Error log Report, see this blog post: http://ericainsworth.com/olmonitor/blog/?p=280
More info on HRP reports.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.



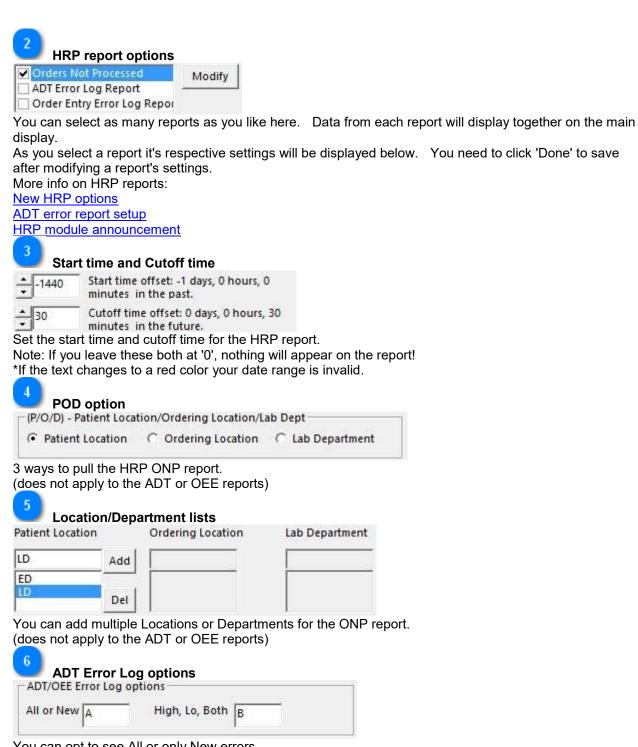
HRP checkbox

✓ Use HRP module

Quickly enable/disable HRP module.

HRP data can be monitored by itself or along with Overdue Log and Pending log data.

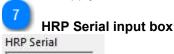
*Prior to version 1.88j, there were some confusing options here for using HRP in combination with OL/PL. New options explained here.



You can opt to see All or only New errors.

High, Lo, Both, is an option to pull only Hi or Lo priority errors or Both.

(Does not apply to the ONP report)



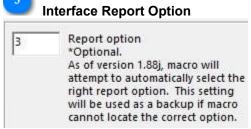
After purchasing an HRP module license, enter the serial number here.

After successfully entering your serial the box will no longer appear the next time you open options.



<u>Interface number</u>: select Sunquest interface number for HRP report. Interface number is usually a number followed by a letter: '5A', '2E', ...

<u>Hospital ID</u>: May not be necessary. Enter your hospital ID.



*With version 1.88j and above, this option is probably irrelevant. New macro code automatically selects the correct report option.

Versions 1.88j and below ONLY: Since the number for the report options vary from site to site/ user to user, you will need to find out what number to enter in 'Interface Report Option'.

The report options typically are:

- 1. ADT Transaction Log Report
- 2. ADT Error Log Report
- 3. Order Entry Transaction Log Report
- 4. Order Entry Error Log Report
- 5. Orders Not Processed

Version 1.86- only option 5 'Orders Not Processed' is supported.

Version 1.88- ADT Error Log Report option supported.



You need to click on Done after modifying your options for them to save. Abort will discard any changes.

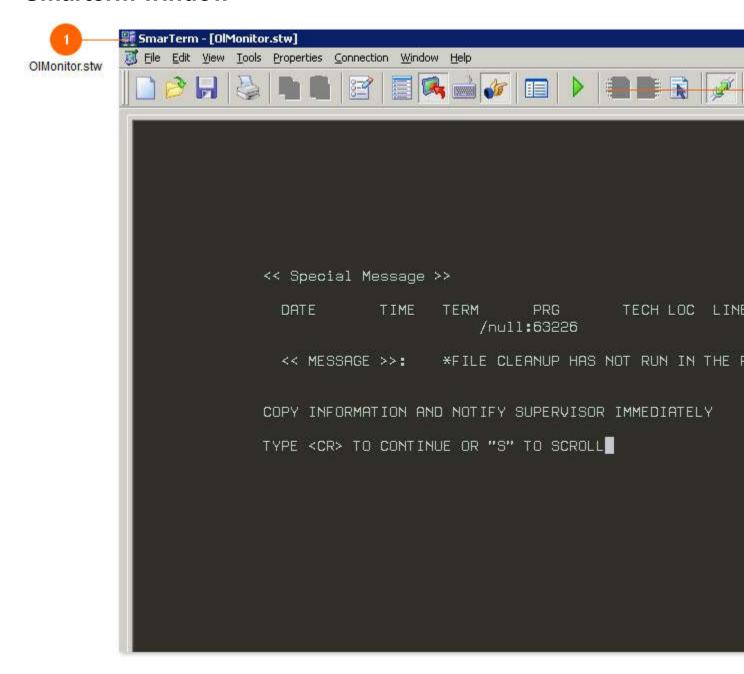
Smarterm window

Smarterm
*Sunquest/CPL versions of OI Monitor only.
HMS does not have this.

The structure of the Smarterm window

Smarterm window

Smarterm window



Normally you should not have to interact with the Smarterm script.

When Smarterm is first called by OlMonitor the Smarterm window will show, after a few seconds it will be moved to the background. If you do not want to be seeing the Smarterm window you can choose to hide it under the advanced options tab.

The Smarterm script interacts with Sunquest to call up the outstanding log and save the data.

The script needs a Sunquest logon id, password, and logon string to connect to the Sunquest server.

You specify the logon password etc. in the Options window of OlMonitor.

If for whatever reason the script is unable to logon automatically, you may be able to login yourself at this screen and the script will continue from the Sunquest 'FUNCTION: ' prompt.

*Sunquest/CPL versions of OI Monitor only. HMS does not have this.



OlMonitor.stw is the Smarterm session configuration file for OlMonitor. It contains the Sunquest IP and information about the INI file if present. It is located in the OlMonitor application folder.



Macro button



If you need to stop the macro press the green macro button and click the Stop Macro button.

You cannot directly view or modify the Ol Monitor Smarterm macro except for the Session_Connect portion. To locate this section go into the macro section of Smarterm and select 'Predefined Session Macros'. Modifying the startup macro is not recommended.



The script displays any messages in the upper right corner.



Countdown



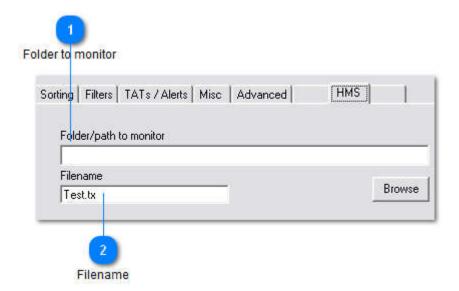
The countdown remaining till the next refresh cycle is displayed here.

Options window - HMS

Options tab for HMS LIS only.

The structure of the Options window - HMS HMS tab

HMS tab



HMS LIS only. Here is where you set the folder path to monitor and filename template.



Enter the path to monitor. This will be the mapped network drive where the pending log files are found.



Enter the filename template here. This must match the filename that is coming down from the server

The program is actually pretty flexible here. In the example 'Test.tx' will work for any file named 'Test'. It does not check the extension part of the name.

The extension part of the name is used later in the process. After the new logfile from the server is detected, OI Monitor will make a copy of that file and name the copies sequentially using the template. So in your network folder you will end up with 11 files named 'Test.tx1, Test.tx2, ...' and the server file. The file from the server, presumably named 'Test.txt', is never written to or read by OI Monitor. OI Monitor makes a copy as quickly as possible to avoid any file access collisions. OI Monitor then analyzes the copy.

For this reason you need to give the Ol Monitor pc read and write permissions to the mapped network folder.

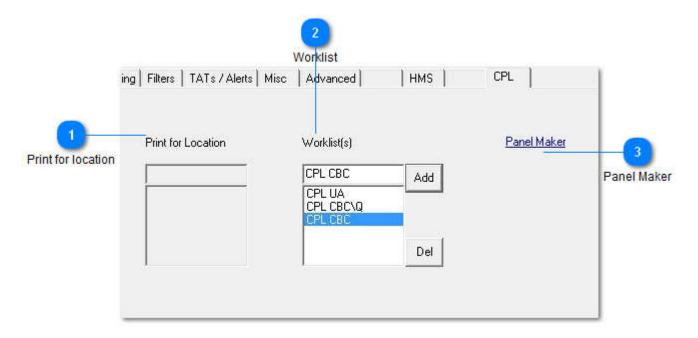
Options window - CPL

Options window for CPL (Sunquest commercial) labsystem only.

The structure of the Options window - CPL

CPL Tab

CPL Tab



CPL only. This is where you setup your worklists.



Print for location

Print for Location

As of this writing (version 1.86), only the default ALL locations is supported. Entering locations into this box will have no effect.



Worklist(s)

Enter the worklist(s) that you want to pull for the report.



Panel Maker

This will launch the <u>Panel Maker</u> app if it is installed. Otherwise it will launch the webpage to install Panel Maker.

Creating panels will allow you to compress all constituent tests to one panel code.

For instance, instead of Ol Monitor displaying:

GLU,BUN,CRE,NA,K+,CL,BICARB,CA,GFRB,GFRNB

It will show:

BMP

When you hover the mouse over 'BMP' the full test list will be shown.

Panel Maker intructions.

Troubleshooting

If you run into problems refer to the support page here: http://www.olmonitor.com/support.html



Installing

Complete install instructions, including videos, are on the download page: http://www.olmonitor.com/download.html <-- Go here if you are installing for the first time.

Security

Ol Monitor has a number of security features. Here is a document that covers all the security features in Ol Monitor: Logging and Security Features in Ol Monitor

Security related options in this help:

Password protect settings
FileProc logging disable
Encrypt PID
Prevent PID from writing to error log