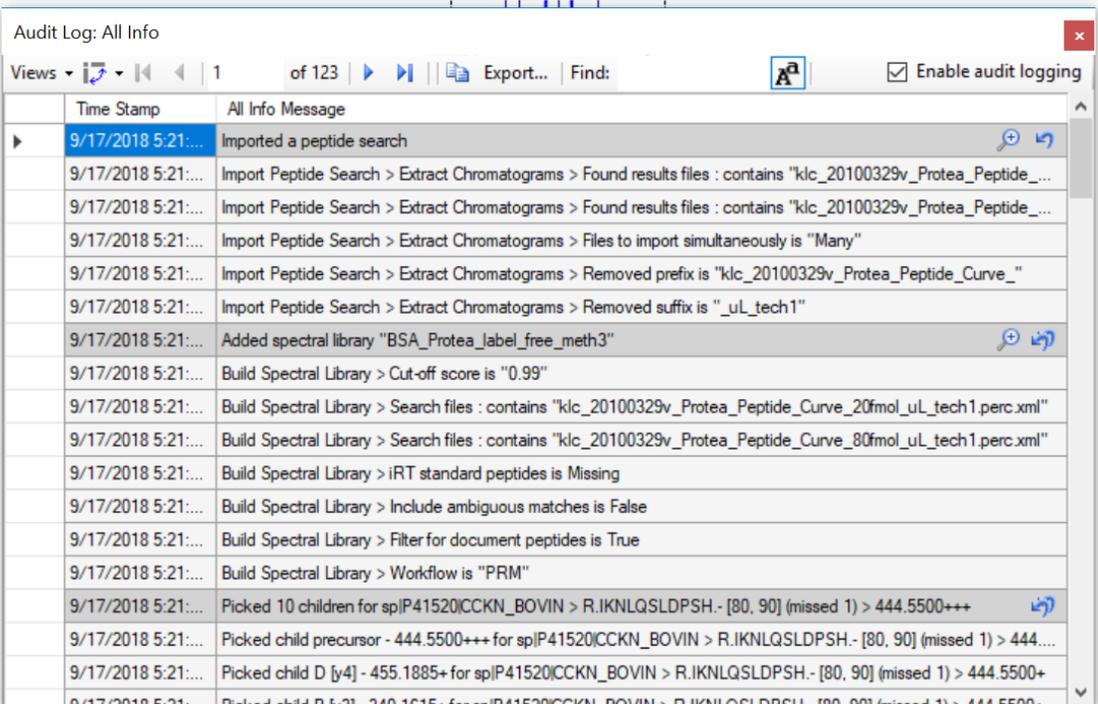


Audit Logging



Overview

With the most recent release of Skyline daily Audit logging was added. If enabled, the audit log will keep track of all changes that are made to the current document. The audit log is stored as a separate file (.skyl), alongside with the skyline document.

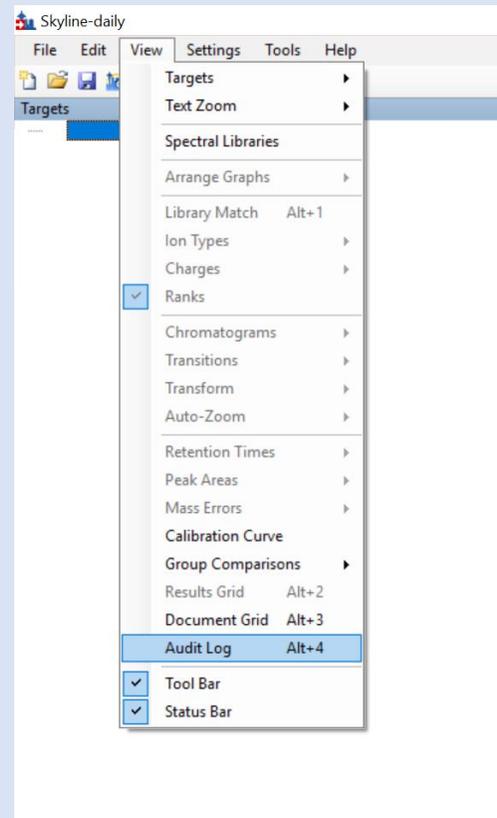


The screenshot shows the 'Audit Log: All Info' window in Skyline. The window title is 'Audit Log: All Info' and it has a close button in the top right corner. Below the title bar, there is a toolbar with 'Views' (set to 'All Info'), navigation icons, '1 of 123' entries, 'Export...' button, and a search field. A checkbox labeled 'Enable audit logging' is checked. The main area is a table with two columns: 'Time Stamp' and 'All Info Message'. The table contains 23 rows of log entries, each starting with a timestamp of '9/17/2018 5:21:...' followed by a description of an action. The first row is highlighted in blue. The actions include importing a peptide search, building a spectral library, and picking children for a precursor.

Time Stamp	All Info Message
9/17/2018 5:21:...	Imported a peptide search
9/17/2018 5:21:...	Import Peptide Search > Extract Chromatograms > Found results files : contains "klc_20100329v_Protea_Peptide_..."
9/17/2018 5:21:...	Import Peptide Search > Extract Chromatograms > Found results files : contains "klc_20100329v_Protea_Peptide_..."
9/17/2018 5:21:...	Import Peptide Search > Extract Chromatograms > Files to import simultaneously is "Many"
9/17/2018 5:21:...	Import Peptide Search > Extract Chromatograms > Removed prefix is "klc_20100329v_Protea_Peptide_Curve_"
9/17/2018 5:21:...	Import Peptide Search > Extract Chromatograms > Removed suffix is "_uL_tech1"
9/17/2018 5:21:...	Added spectral library "BSA_Protea_label_free_meth3"
9/17/2018 5:21:...	Build Spectral Library > Cut-off score is "0.99"
9/17/2018 5:21:...	Build Spectral Library > Search files : contains "klc_20100329v_Protea_Peptide_Curve_20fmol_uL_tech1.perc.xml"
9/17/2018 5:21:...	Build Spectral Library > Search files : contains "klc_20100329v_Protea_Peptide_Curve_80fmol_uL_tech1.perc.xml"
9/17/2018 5:21:...	Build Spectral Library > iRT standard peptides is Missing
9/17/2018 5:21:...	Build Spectral Library > Include ambiguous matches is False
9/17/2018 5:21:...	Build Spectral Library > Filter for document peptides is True
9/17/2018 5:21:...	Build Spectral Library > Workflow is "PRM"
9/17/2018 5:21:...	Picked 10 children for spIP41520(CCKN_BOVIN > R.IKNLQSLDPSH.- [80, 90] (missed 1) > 444.5500+++
9/17/2018 5:21:...	Picked child precursor - 444.5500+++ for spIP41520(CCKN_BOVIN > R.IKNLQSLDPSH.- [80, 90] (missed 1) > 444...
9/17/2018 5:21:...	Picked child D [y4] - 455.1885+ for spIP41520(CCKN_BOVIN > R.IKNLQSLDPSH.- [80, 90] (missed 1) > 444.5500+
9/17/2018 5:21:...	Picked child D [y4] - 455.1885+ for spIP41520(CCKN_BOVIN > R.IKNLQSLDPSH.- [80, 90] (missed 1) > 444.5500+

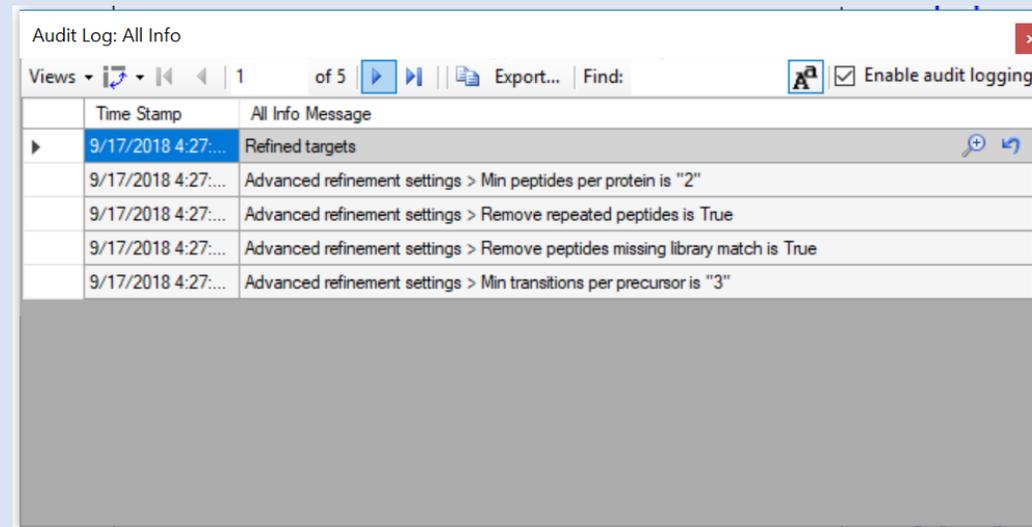
Opening the audit log

The audit log can be accessed from the View menu.



The Audit Log grid

The audit is displayed in a grid, similar to the document grid. In the top right corner audit logging can be enabled or disabled. For new documents, audit logging is enabled by default.



The screenshot shows a window titled "Audit Log: All Info" with a toolbar containing "Views", "Export...", and "Find:". A checkbox labeled "Enable audit logging" is checked. The main area is a table with two columns: "Time Stamp" and "All Info Message".

Time Stamp	All Info Message
9/17/2018 4:27:...	Refined targets
9/17/2018 4:27:...	Advanced refinement settings > Min peptides per protein is "2"
9/17/2018 4:27:...	Advanced refinement settings > Remove repeated peptides is True
9/17/2018 4:27:...	Advanced refinement settings > Remove peptides missing library match is True
9/17/2018 4:27:...	Advanced refinement settings > Min transitions per precursor is "3"

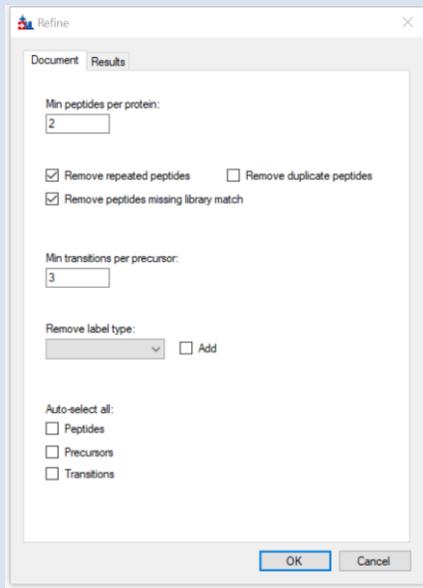
Reasons to enable Audit Logging

- **Reproducibility:** The audit log makes it easy to see what changes were made to a document and can be used to reproduce a document step-by-step.
- **Collaboration:** If multiple people are working on the same document it can be helpful to have a record of what each person has done to the document.
- **Troubleshooting:** If the user encounters an error in Skyline, the audit log can be helpful for the Skyline team to diagnose and fix the issue.



Example: Advanced Refinement

For example, refining targets with the following settings will result in the audit log entry shown on the right. Note that Skyline will try to only show the options that the user changed (For instance, there is no message indicating that “Remove duplicate peptides” is unchecked)



Document Results

Min peptides per protein:
2

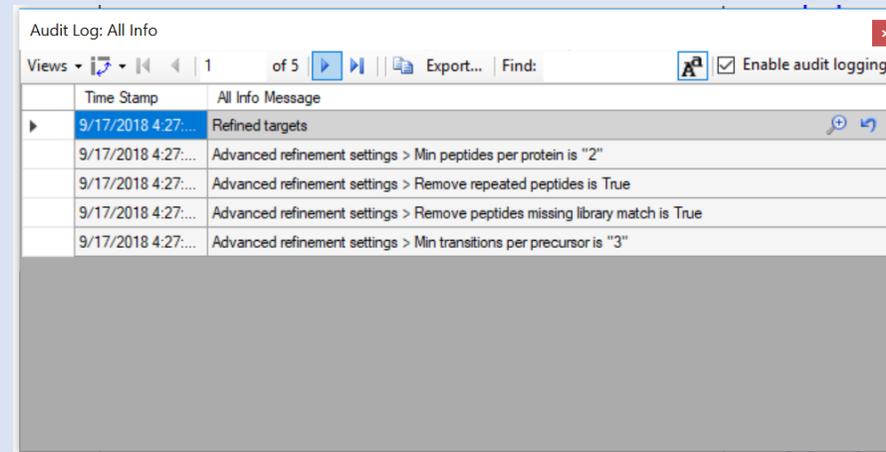
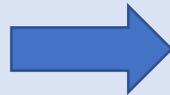
Remove repeated peptides Remove duplicate peptides
 Remove peptides missing library match

Min transitions per precursor:
3

Remove label type:
[Dropdown] Add

Auto-select all:
 Peptides
 Precursors
 Transitions

OK Cancel



Audit Log: All Info

Views [Icons] 1 of 5 [Icons] Export... Find: [Input] [Icon] Enable audit logging

Time Stamp	All Info Message
9/17/2018 4:27:...	Refined targets
9/17/2018 4:27:...	Advanced refinement settings > Min peptides per protein is "2"
9/17/2018 4:27:...	Advanced refinement settings > Remove repeated peptides is True
9/17/2018 4:27:...	Advanced refinement settings > Remove peptides missing library match is True
9/17/2018 4:27:...	Advanced refinement settings > Min transitions per precursor is "3"

Columns in the audit log grid

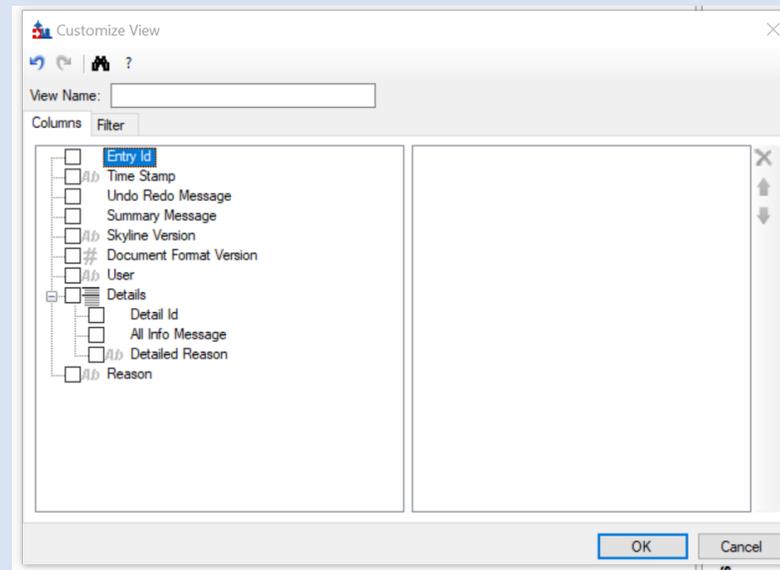
An audit log entry contains the following information, which can be displayed by using the “Views” menu (just like in the document grid):

- **Time Stamp:** Time at which the change was made
- **Undo Redo Message:** The shortest and least specific message describing an entire entry. This message will also be displayed in Skyline’s toolbar when clicking on the arrows next to the Undo-Redo arrows
- **Summary Message:** Similar (and often times the same) as the Undo Redo Message, but for certain messages more specific
- **All Info Message(s):** A list of messages that describe the change in detail
- **User:** The name of the computer and user who made the change



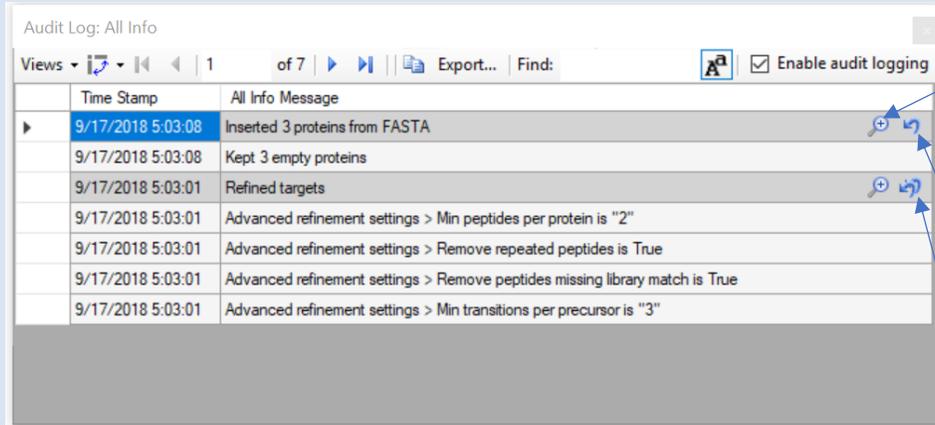
Columns in the audit log grid continued...

- **Reason:** The reason for the change, which can be set by editing the cell in the grid
- **Detailed Reason:** A reason that can be set for each of the detailed “All Info messages”

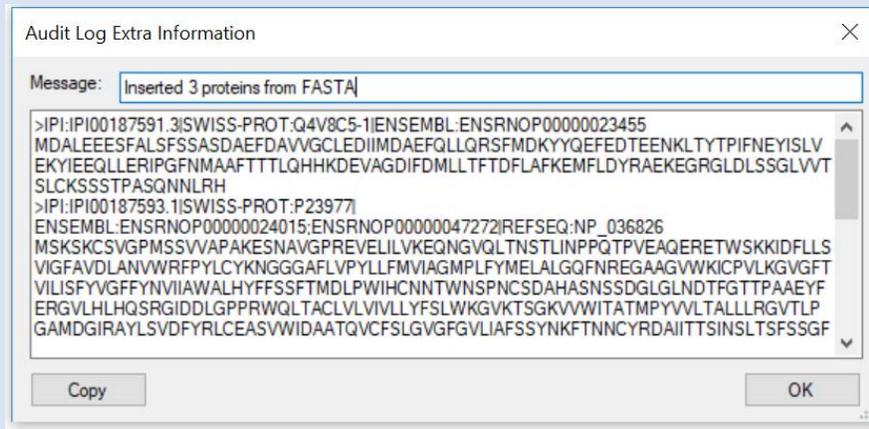


All Audit Log columns shown in the Customize View window

Buttons in the Audit Log grid



Time Stamp	All Info Message	
9/17/2018 5:03:08	Inserted 3 proteins from FASTA	 
9/17/2018 5:03:08	Kept 3 empty proteins	
9/17/2018 5:03:01	Refined targets	 
9/17/2018 5:03:01	Advanced refinement settings > Min peptides per protein is "2"	
9/17/2018 5:03:01	Advanced refinement settings > Remove repeated peptides is True	
9/17/2018 5:03:01	Advanced refinement settings > Remove peptides missing library match is True	
9/17/2018 5:03:01	Advanced refinement settings > Min transitions per precursor is "3"	



- Show extra information about this change. This is only available for some changes. In the first case it will show the FASTA that was pasted (As shown in the second picture)
- Undo this change. This is only available for the most recent entry and works the same way as the Undo button in the Skyline toolbar.
- Undo this change and all changes made after it. In the example in the first picture this would undo both changes.