

What's New in ChronoSync v12

ChronoSync v12 introduces many significant new features. This document provides a quick overview of what is neat, new and different.

New Scheduling Options

Simple Interval: Monthly (Day of week)

This is a variation of Monthly but, instead of a specific day of the month, you indicate a specific day of the week such as “2nd Tuesday”.

Add Scheduled Task

Scheduled Task: **Sync Projects with iDev Big Sur**

Description: **Scheduled: Sync Projects with iDev Big Sur** ☒ Active

Operation: **Synchronize**

☒ Simple Interval ☐ Advanced Interval ☐ Event Triggered

Run Task:

- ☐ Hourly
- ☐ Daily
- ☐ Weekly
- ☒ Monthly (day of week) on: **1st** **Monday** at: **8:00 AM**
- ☐ Monthly

☐ Expand for additional options...

Advanced Interval: Yearly

Allows you to specify specific months of the year to run your tasks so that you can schedule tasks like quarterly syncs.

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☐ Simple Interval ☒ Advanced Interval ☐ Event Triggered

Interval: **Yearly**

Months: **Jan** **Feb** **Mar** **Apr** **May** **Jun** **Jul** **Aug** **Sep** **Oct** **Nov** **Dec**

Days: **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12**

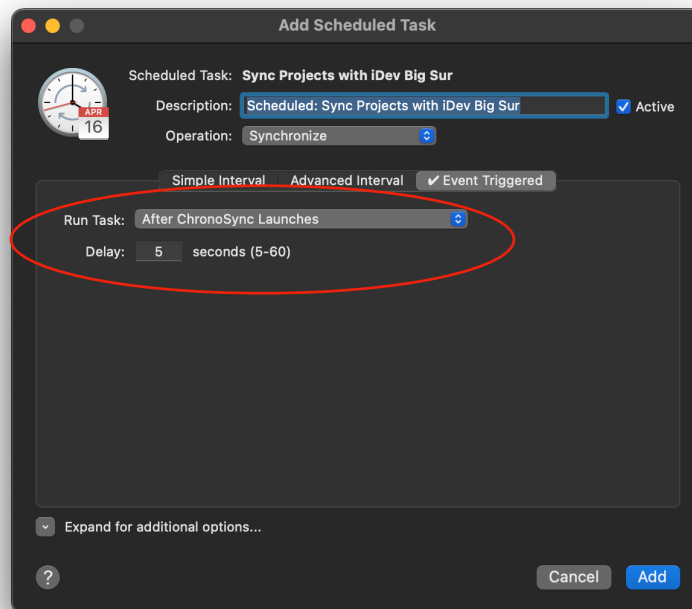
Hours: **12** **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11**

Minutes: **0** **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13** **14** **15** **16** **17** **18** **19**

☐ Expand for additional options...

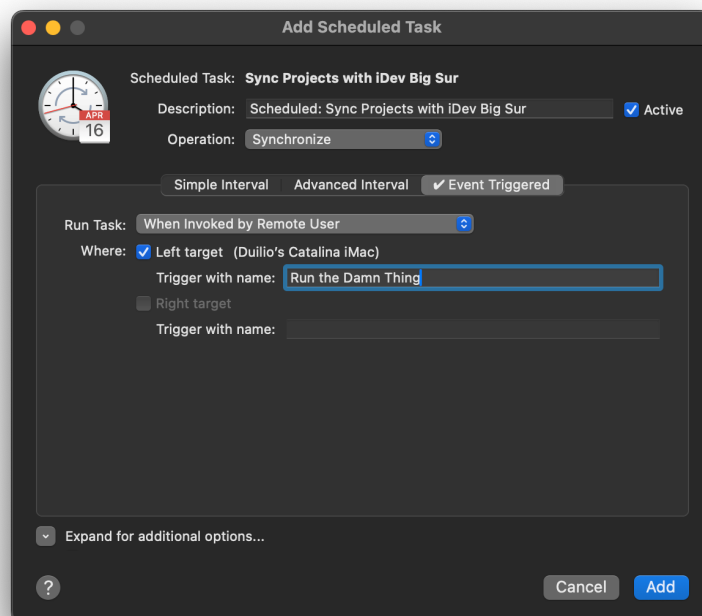
Event Triggered: After ChronoSync Launches

This event isn't new, but the time delay option is. It is most useful when ChronoSync is set to launch at login but you want to give the system time to stabilize (e.g. launch all open applications and mount all volumes) before running a scheduled task.

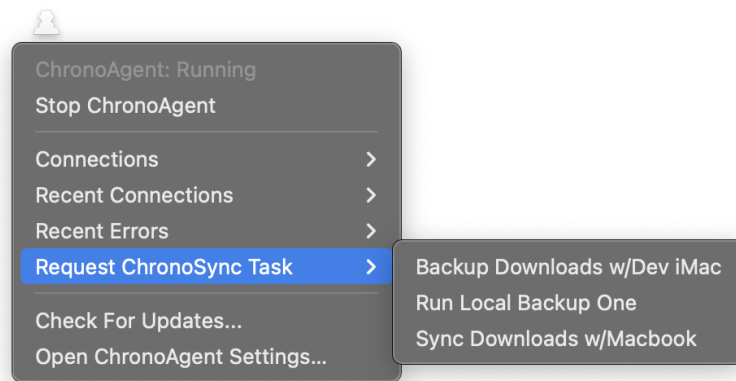


Event Triggered: When Invoked by Remote User

This is a big new feature whereby remote ChronoAgent users can trigger a sync task. It's only available if one or both targets are connecting to ChronoAgent v12 or later. Choose the target, and hence the remote agent, that you would like to be able to trigger this sync task from. The "Trigger with name" field is what the ChronoAgent user will see in their ChronoAgent Monitor system menu, under the "Request ChronoSync Task" sub-menu.



When the ChronoAgent user chooses the name from the “Request ChronoSync Task” sub-menu, a push notification is sent to the ChronoSync computer where this scheduled item was created. This will trigger the sync task to execute.

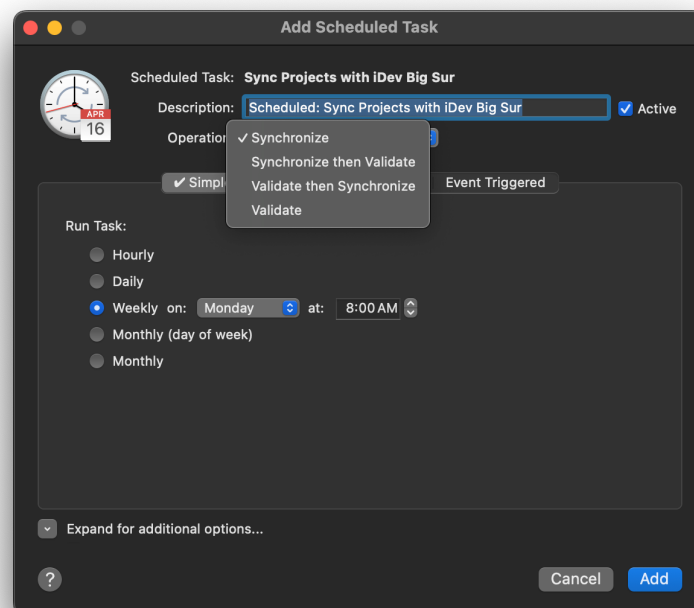


Note: This feature is built on top of Apple’s Push Notification Service (APNS) and utilizes our existing server infrastructure for sending push notifications to ChronoMonitor on iOS. The Mac running ChronoSync needs to be able to receive push notifications from the internet. Similarly, the Mac running ChronoAgent needs to be able to access our push notification server via the internet. Office firewalls and other network settings may prevent this feature from working properly.

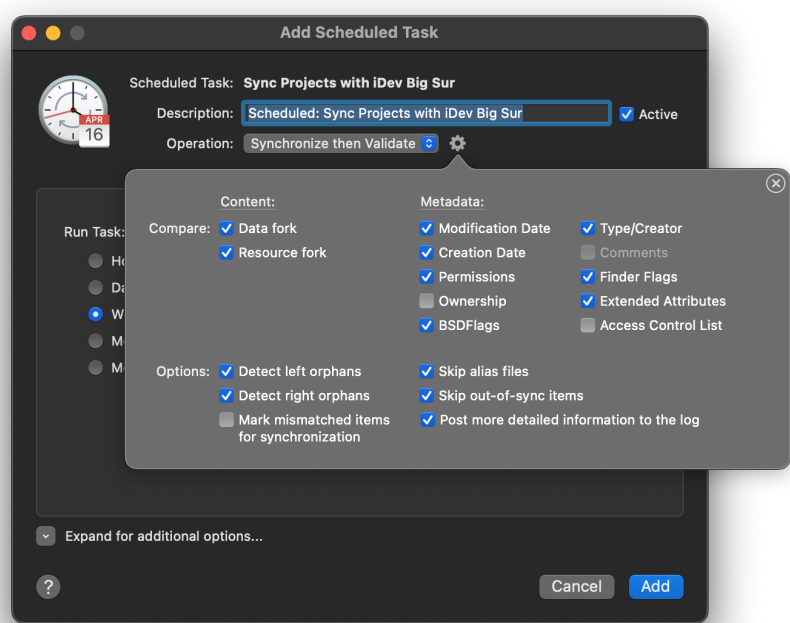
The ChronoSync Mac where this scheduled item is created will periodically connect to the remote ChronoAgent Mac to ‘Refresh’ this trigger. This is done by the ChronoSync Scheduler twice a day. Thus it is important for “Use background scheduler” to be enabled on the ChronoSync side. If ChronoAgent does not receive this refresh after a predefined interval has elapsed (currently 30 days), the trigger will be removed from the “Request ChronoSync Task” menu.

Scheduled Validations

All scheduled synchronization tasks can optionally perform a Validation operation in conjunction, or in place of a Synchronization. Scheduled container tasks do not provide this option. This is controlled from the “Operation” pop-up menu in the top portion of the Scheduled Task Editor.



When you choose to validate, a small “Gear” icon appears next to the pop-up menu. Clicking this icon displays a popover window with all the standard Validator settings. This allows you to configure exactly what type of validation will take place.

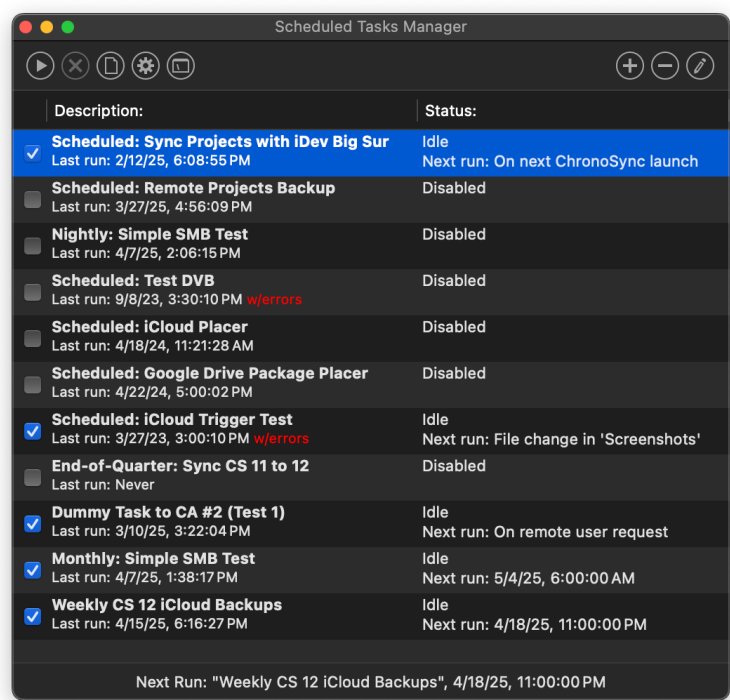


Note: If you choose “Validate then Synchronize” and turn on the “Mark mismatched items for synchronization” option, the Validator can essentially determine what files will synchronize. Choosing to compare data & resource forks will make ChronoSync use the contents of the files to indicate what gets synchronized. This comes at the expense of performance, since comparing file contents can be time consuming.

Scheduled Tasks Manager Enhancements

Improved Task Status

The information displayed in the Status column now includes the next run date/time or event that will trigger the scheduled task.

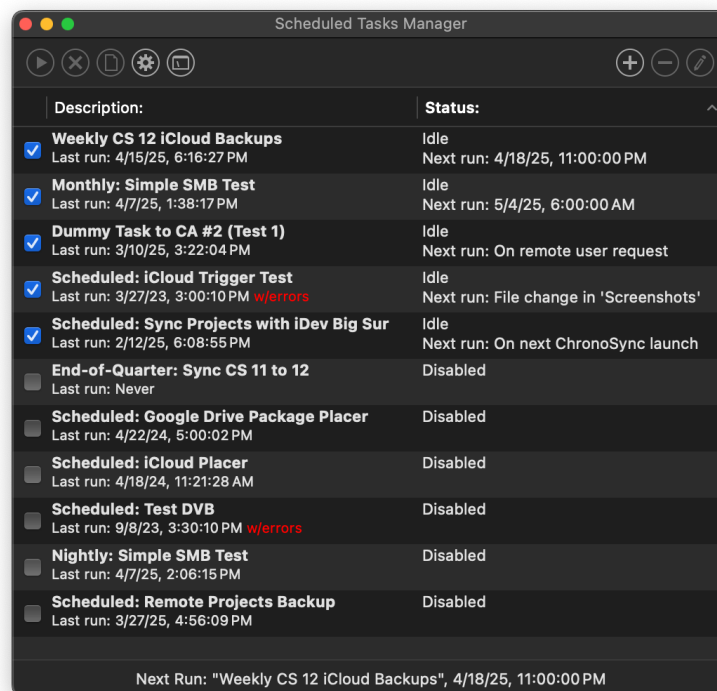


The information displayed is quite detailed. For instance, the “iCloud Trigger Test” in the above screenshot is a live-trigger scheduled item, and it shows that it is looking for changes beneath the “Screenshots” folder. Every event-triggered scheduled item has it’s own unique description. Time-based scheduled items will simply show the next run date & time.

Note: To accommodate this feature, the “w/errors” designation has been moved to the “Description” column, as pictured. The default width of the STM window has been increased, but it wont be any bigger if running on a system where ChronoSync was previously installed (i.e. it will match the width and position from when you last used ChronoSync). You may need to make your Scheduled Tasks Manager window larger to see the “w/errors” message.

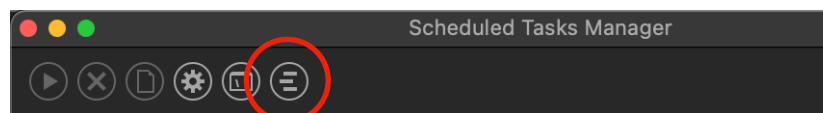
Column Sorting

You can sort the contents of the STM by clicking on a column heading. Clicking again on the same column heading will invert the sort order. Thus to arrange the entries by the order in which they will be next run, click the Status column heading. To display this in reverse order, click Status again. An up or down triangle is displayed in the column heading to show the current sort order.



Clicking the Description column will sort by name. Clicking in the checkbox column will sort by enabled/disabled status of scheduled items.

When you have sorted by column, an “Un-sort” button will appear in the STM toolbar:



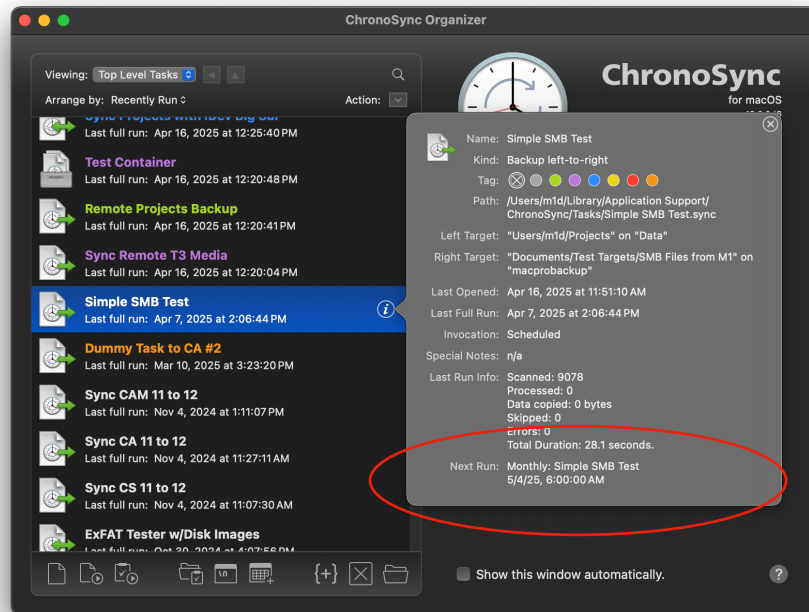
Clicking this will restore the previous sort order. This will be useful when you use column sorting to quickly display what scheduled tasks are next to run, but you don’t want them to normally appear that way in the STM. Since the STM has always been designed to allow you to arrange scheduled items as you see fit (via dragging them around), it would be frustrating to lose that carefully arranged order by clicking a column header.

Note: While you can un-sort the column order, ChronoSync will eventually decide that the newly arranged order should be the permanent order. This will happen after a scheduled item runs or you edit existing items, which includes adding and deleting them. The “un-sort” button will disappear when that happens. Thus you should be aware that the ability to un-sort is short lived.

ChronoSync Organizer Enhancements

Task Information Popover Window: Next Run

The Task Information popover window will display “Next Run” information for a selected task, if that task has been scheduled.



This takes into account the possibility that the task has been scheduled multiple times. In this case, only the next chronological run will be displayed.

Arrange Tasks by “Next Scheduled Run”

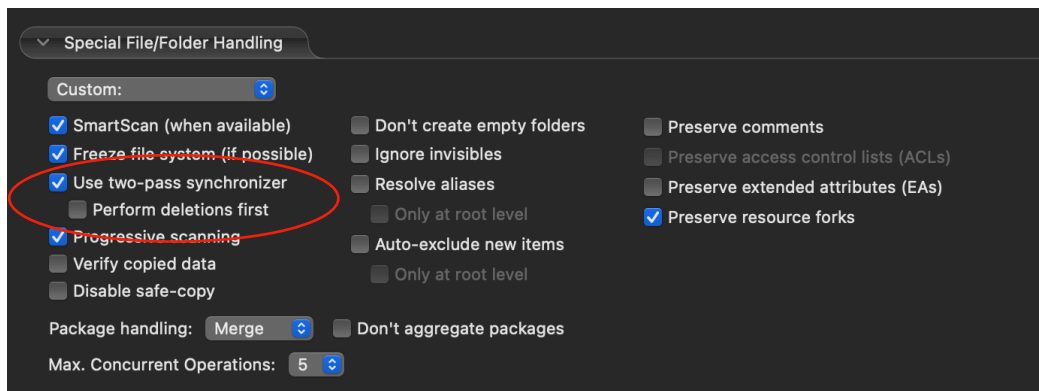
The Organizer’s list of tasks can now be arranged by “Next Scheduled Run,” which will show scheduled items first and in chronological order based on their next scheduled time to execute. Event-based scheduled tasks will appear after the time-based ones.



Synchronizer Enhancements

Two Pass Synchronizer

The two-pass synchronizer, previously only employed for Trial Synchronizations, can now optionally be enabled in the “Special File/Folder Handling” pane on the “Options” panel.



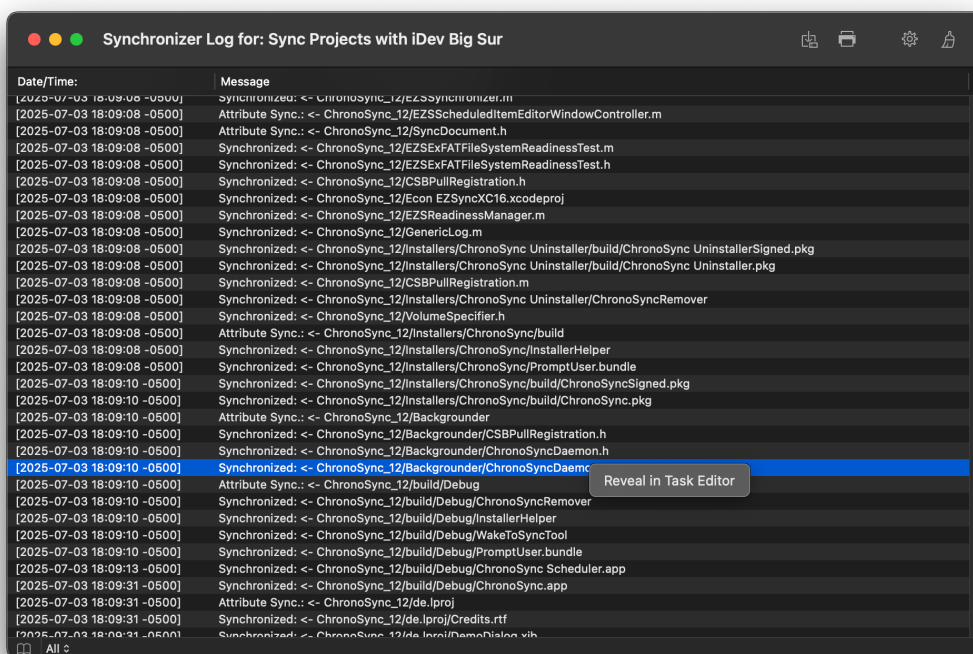
Enabling the two-pass synchronizer will (theoretically) provide a more accurate progress bar since it will scan the entire sync tree first before starting to copy files. Progress will still be indeterminate while scanning, so it's only after the second pass is entered that a meaningful progress is displayed.

In addition to better progress calculation, the “Perform deletions first” option is available when using the two-pass synchronizer. This can be useful for freeing up space on your destination target before new files are actually copied.

Log Window Enhancements

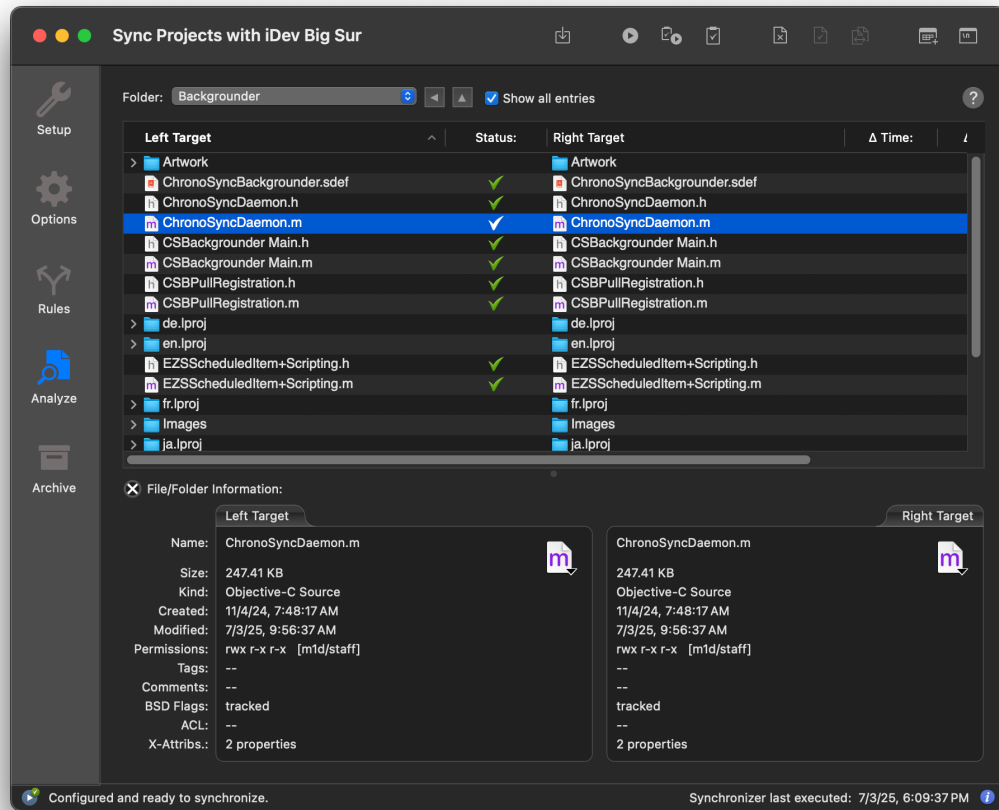
Fast File-pair Location

Any file path displayed in a Synchronizer Log Window will provide the option to “Reveal in Task Editor” when you right-click the entry.



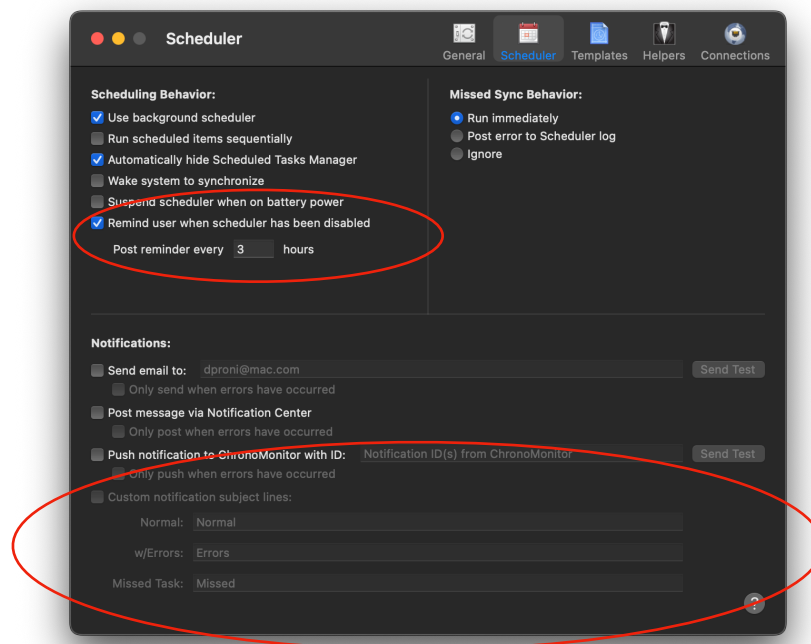
This will attempt to locate and select the path in the Analyze or Archive panel of the corresponding sync task editor (provided it is open).

If the exact file can't be located (e.g. it was deleted by the synchronizer), this function will do it's best to come as close as possible to located the file. The enclosing folder, or some ancestor, should be displayed, as long as it still exists. It's also worth noting that, in some cases, there may be a noticeable pause when trying to locate the file. This is because ChronoSync will be refreshing itself with the filesystem as it is working through your sync tree hierarchy.



New Scheduler Preferences

In “Settings”, under the “Scheduler” pane, there are a couple new options.



First, there is the new “Remind user when scheduler has been disabled” setting. The way this feature works is that a user notification will get posted by the ChronoSync Scheduler if the user suspends the scheduler, after it has been suspended for the specified number of hours. It is intended to serve as a reminder, in case the user suspends the scheduler for any reason. It should only appear when the user has explicitly suspended the scheduler or the scheduler has been suspended by virtue of booting on a different system i.e. you’ve booted from a bootable backup. It should NOT appear when the scheduler has been suspended because you are running on battery power.

When the notification is displayed to the user, they have the option of: ignoring it (in which case it should re-appear eventually), turning off the reminders, or re-enabling the scheduler.

Note that this uses system notifications, so make sure you’ve configured Notifications in System Settings so that ChronoSync Scheduler will display alert-style notifications. Otherwise, you’ll miss them.

Secondly, we’ve added custom subjects for all Scheduler induced notifications, as noted in the above screenshot. This is for emails and push notifications that the Scheduler may send. We’ve had this feature in Sync Task Documents for quite a while and it’s just now making it to Scheduler notifications.

Less Visual Enhancements

- Additional log messages for Scheduled validations and when employing the two-pass synchronizer.
- Explicit indication of “Waiting for Upload” or “Waiting for Eviction” when copying files to iCloud or a File Provider.
- Several additional Readiness Tests and/or enhancements to existing Readiness Tests to address many common error and warning scenarios that customers have encountered. A significant example is the prevention of running Bootable Backups on Apple Silicon, which can be ignored if you really want to try that. There are also performance suggestions, such as calling out ExFAT formatted destinations as not being a very good idea.
- More accurate display of filenames when errors are presented to users. Specifically, we try to display the final file name, not the temporary file name that is used when safe-copying files. Not every error has had this sanitation logic applied, since some of the more esoteric error messages may be more useful if they display the actual (temporary) file name.
- Significant optimizations and tweaks to the iCloud and File Provider specific connection managers. This will result in slightly better performance and much better detection of error scenarios, so that you can ensure iCloud and/or File Provider managed documents are correctly dealt with.
- Numerous, subtle terminology changes.
- Numerous bug fixes.

