

RELEASE NOTES

CellarioOS[™] V1.13



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Revision A
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Software Requirements / Dependencies



IMPORTANT

For CellarioOS V1.13 to operate properly, your organization must have the following software installed and updated to the versions shown below. These requirements apply to all work cells and all instances of CellarioScheduler.

Contact HighRes Biosolutions support (highresbio.com/support) for help with upgrades or questions.

Table 1. CellarioOS Dependencies

Required Software	Minimum Required Version
CellarioScheduler	4.0.159
	 NOTE - Some run order syncing functionality requires CellarioScheduler V4.1.0.63 and Cellario Services (now named Cellario API) V4.1.0.17. - Protocol syncing functionality and dose response with intermediates require CellarioScheduler V4.2.
Cellario API	4.0.450
CellarioOS Hook	1.2.0.10
Manual Task Driver	4.2.0.25



New Features



NOTE

Depending on your feature set and configuration, the look of the CellarioOS user interface can vary from the screens and features discussed in this publication. CellarioOS is the central offering of the Cellario® product line, which includes several software products that your organization can purchase and implement to expand its capabilities.

For more information on these product offerings, contact your HighRes Biosolutions regional sales representative.

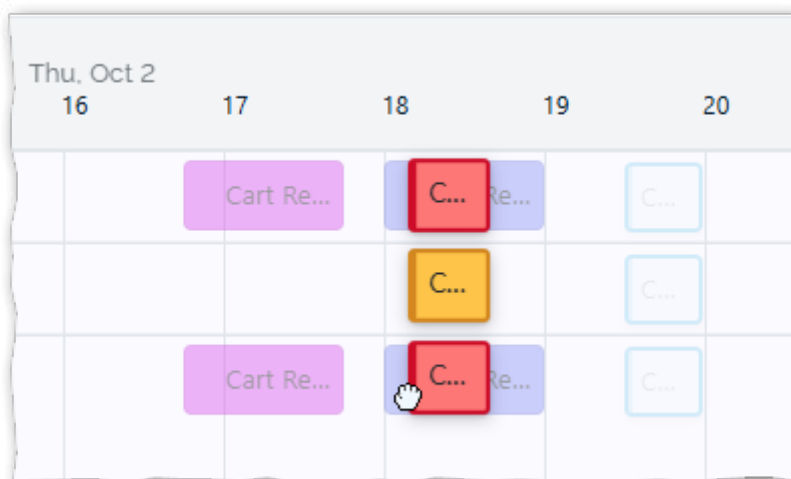
See the online *User Manual*, available from the Help menu (?) on the top-right area of CellarioOS, for more details about the new and improved features.

Parallel Requesting

Parallel requesting is an extension of the new cart-based requesting feature set, which was introduced in CellarioOS V1.12. Parallel requests are those that run concurrently and may require the same resources. CellarioOS now provides the ability to schedule multiple orders that use the same resources and that run within overlapping time windows.

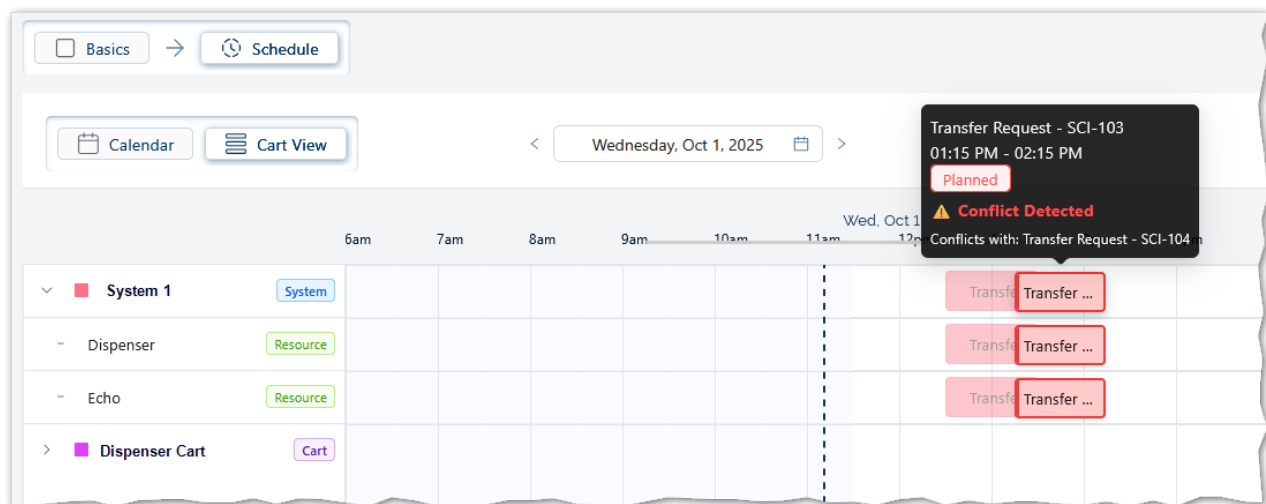
When multiple order requests require the same resources for a portion of the work orders' total run time, you can use the parallel requesting features to avoid conflicts and maximize resource utilization. Resources that are critical to an order's throughput and flow are presented as participants when you schedule so you can select the optimal time for the order. (See ["The SchedulingConstraint Property"](#))

When scheduling, you can click and drag the time slot across the calendar view to view the timing options. As you move the order request through the calendar, the software interactively alerts you to the open times, the time spans when concurrent work is detected, and times when there are conflicts.



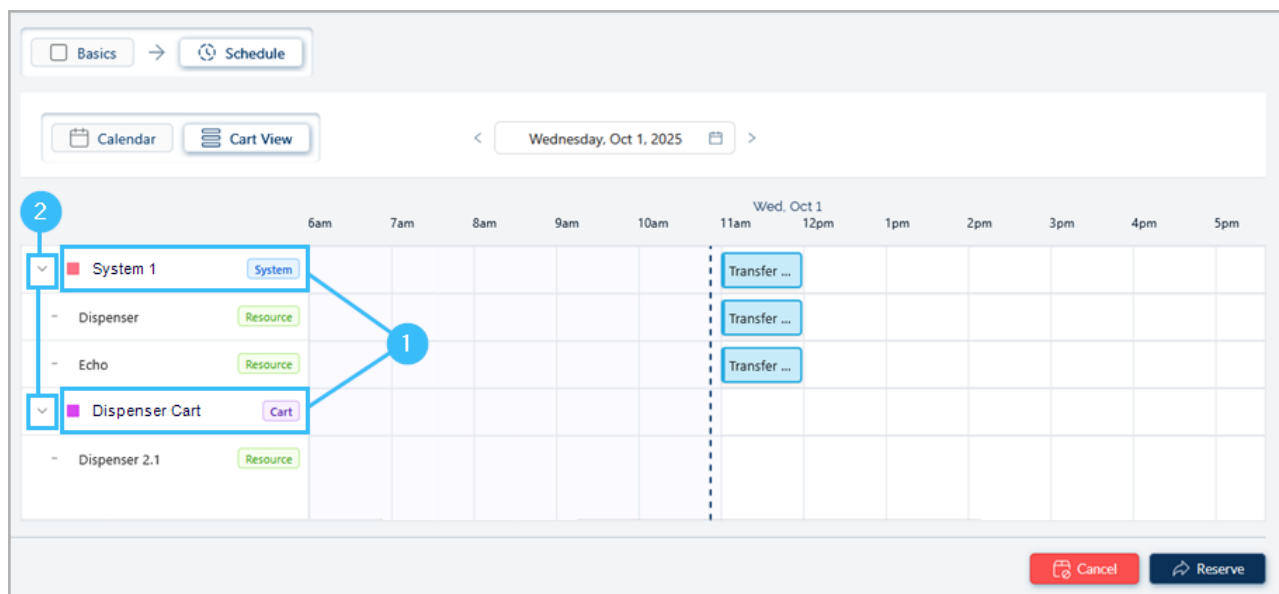
This example shows two conflicts and one concurrent work detected for the time slots being dragged.





Hovering the mouse pointer over a time slot provides details about the conflict.

When the critical resources are part of a system, such as a work cell or a cart, they are shown under the parent system on the scheduling calendar.



The critical resources are shown under the systems [1], and you can expand or minimize the view by clicking the arrow [2] on the left of the system name.

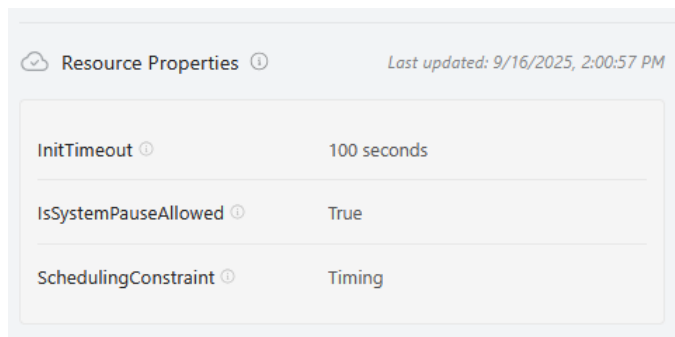
The SchedulingConstraint Property

When resources are created in CellarioScheduler, they can be assigned properties that specify the handling of the resource in work orders and in CellarioOS as needed.

To view the resource properties in CellarioOS, go to the **System View** screen, click the **Resources** tab, and then click the resource name. If the resource has associated properties, they display at the bottom of the screen.



Figure 1. Resource Properties on the System View > Resources Screen



Resource Properties ⓘ		Last updated: 9/16/2025, 2:00:57 PM
InitTimeout ⓘ	100 seconds	
IsSystemPauseAllowed ⓘ	True	
SchedulingConstraint ⓘ	Timing	

In [Figure 1](#), the resource's **SchedulingConstraint** property (Timing) shows that the resource is critical in the timing of protocols. Orders placed concurrently could cause timing issues. The resource could also be a common bottleneck, which would be shown in Timeline view.



Improvements

This section contains information about improved features and functionality.

Display Name Added to Request Type Form

When creating or editing a scientific protocol request type, you can now enter an optional **Display Name** for each parameter.

Prior to CellarioOS V1.13, the entry in the **Name** column was used to label the parameter on the CellarioOS requesting screens. The **Name** is obtained from CellarioScheduler and is not editable in CellarioOS; in some cases, it may not be descriptive enough to identify the parameter. Now you can enter a **Display Name** to easily identify the parameter on the requesting screens. (See [Figure 2](#))

Figure 2. Example Scientific Protocol Requests — Parameters

Name	Display Name	Level	Type
Parameter111	FailedWells	ORDER	BOOLEAN
Parameter146	MaxPercentFa	ORDER	INTEGER

[1] New Display Name column, [2] CellarioScheduler parameter name

Basics → Schedule

> File Attachments

Protocol Parameters

FailedWells false

MaxPercentFail

Display Name entries on the Basics tab



NOTE

If a **Display Name** is not entered in the request type form, CellarioOS will use the **Name** when displaying the parameter.



Required Parameters in Time Reservation Requests

When creating a time reservation request type, you can now define whether each parameter is required.

The toggle to enable the Required designation is located on the right side of the parameter row. (See [Figure 3](#))

Figure 3. Example Time Reservation Request Type Form — Parameters

Name	Type	Choices	Default Value	Description	Required
Device AB.25	TEXT				☐
ABTechnicalDr	BOOLEAN	☐ false ☐ true	false		☒

The toggle (outlined in blue) is ON, meaning that the parameter is required for order requests that use this request type.

If the parameter is designated as required, a value must be provided for that parameter when creating an order request. If you try to proceed with the order request without entering a required parameter, a message will alert you that the parameter is required. (See [Figure 4](#))

Figure 4. Example Request Screen — Activity Parameters

Activity Parameters

* Clocking Value is required

This one is not required

TimeRes for X

Required parameters are indicated on the Basics tab with a red asterisk (*), and you are alerted if you try to save without a value for a required parameter.

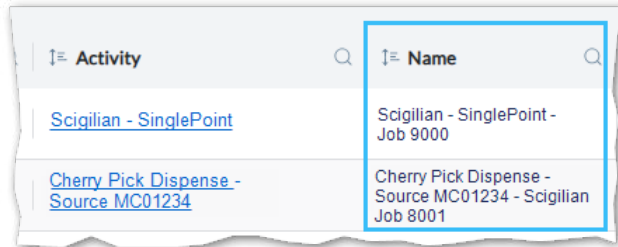
If the toggle is OFF on the request type form, it is not necessary to add a parameter value when creating order requests.



Name Column Added to Order Management List

A **Name** column has been added to the **Order Management** and **Home** screens. Useful for organizations that use extension services, the **Name** column displays the external job ID for the order request.

Figure 5. Example Order Management Screen — Name Column



Activity	Name
Scigilian - SinglePoint	Scigilian - SinglePoint - Job 9000
Cherry Pick Dispense - Source MC01234	Cherry Pick Dispense - Source MC01234 - Scigilian Job 8001

The Name column shows the external job ID, which consists of the external source, the activity, and the job ID.



NOTE

- The external job ID is also referenced in the associated CellarioScheduler work order.
- For organizations that do not use extension services, the **Name** column provides the name of the protocol being used in the request.

As with the other columns on the **Order Management** and **Home** screens, you can filter, sort, and search the contents of the column. You can also click [Configure Columns](#) (⚙️) to show/hide the column and rearrange the location of the column in the table.

The contents of the **Name** column is also included on the order details screen. On the **Parameters** tab in the lower pane of the order details, you can view the definition of the external source and ID. (See [Figure 6](#))



Figure 6. Example Order Details Screen

Name	Description	Value
WellFailureRate	Percentage of emulated failed wells	0
MaxPercentFailedWellsIntermediate	Maximum percent of failed wells for intermediate plate transfer to automatically pass QA.	0
MaxPercentFailedWells	Maximum percent of failed wells for plate transfer to automatically pass QA.	0
External Source	Extension Service	Scigilian
External ID	Job ID for extension service	90000

Implicit Transfer Calculations (for Liquid Transfer Requests)



NOTE

This feature is initially being limited to organizations where CellarioOS is integrated with Scigilian software (extension services).

Job requests for experiments requiring dilution(s) are supported through the CellarioOS API. The Implicit Transfer Calculations feature expands the Transfer API and extension services to include the solvent dispenses and compound transfers needed to get the desired concentrations.



Resolved Issues

These issues have been resolved since the previous software version.

- **Associated work cells display correctly for Time Reservation order requests** — Previously, when you created an order request, the work cells associated with the time reservation request type may not appear for selection. This issue has been corrected.
- **Linked order state correct in CellarioOS** — Previously, when viewing the [Linked Cellario Run Orders](#) tab on the CellarioOS order details screen, a CellarioScheduler run order linked to a CellarioOS order may have intermittently shown an incorrect state. This issue has been corrected.



Known Issues

This section provides information about minor known issues and what to do if you encounter them.

The CL numbers noted in the descriptions below are used by HighRes Biosolutions for tracking purposes. If you need help with any of these issues, please reference the CL-number when you contact HighRes.

Issue When Creating Order Requests

Issues with changing a default true/false parameter ^{CL-11822} — When creating an order request that requires a true/false activity parameter on the **Basics** tab, you may be unable to change the default setting (for example, if the default is false, you cannot change it to true). Alternatively, you may be able to change the default only once (if you change true to false, you cannot change it back to true).

If you see this issue, and the true/false parameter is "stuck" on the wrong value, you must recreate the order request.

Issues When Working with Request Types

- **For parameters of type "Duration," the choices and default value entries are not validated** ^{CL-9552} — When creating a request type with a parameter = **Duration**, the entries for **Choices** and **Default Value** are not validated for the correct format: hh:mm:ss (2 digits each for hour, minute, and second). If you enter an invalid entry, you can save the request type, and a message reports that the request type is successfully saved. However, an invalid entry will not be correctly interpreted as a duration by the software.

if you see this issue, update the **Choices** and/or **Default Value** to use the valid format of hh:mm:ss and then save the request type again.

- **Error loop can occur if deleting a port from a request type** ^{CL-7169} — When editing a request type, if you delete a port and then click **Save**, an error appears. If you then try to add a port, you can receive more errors that prevent you from adding the port or saving.



NOTE

If using an API, the error states **Unable to delete port records**.

If you see this issue, exit from the request type form and then return to the form to proceed.



Display Issues

- **Feedback tab is no longer in view** ^{CL-6322} — The CellarioOS **Feedback** tab goes away if you refresh the browser or access CellarioOS from a URL link.
To regain access to the **Feedback** tab, log out of CellarioOS and then log in again.
- **Unexpected behavior when sorting the Description column in the Protocols table** ^{CL-12321} — If there are protocols without description text in the Protocols table, sorting by the Description column puts those rows at the beginning and the end of the table instead of all together at the beginning or the end.

Issues Between CellarioOS and CellarioScheduler

- **CellarioOS does not recognize if a protocol is deleted in CellarioScheduler** ^{CL-11779} — If a protocol is deleted in CellarioScheduler, you can still create a scientific protocol in CellarioOS using the deleted protocol. When you try to save the scientific protocol, you cannot proceed, and an error states:
Protocol must have a protocol instance.

If you see this error, select a different protocol for the order request in CellarioOS.

- **A changed protocol name in CellarioScheduler does not update in CellarioOS** ^{CL-7212} — If you change a protocol name in CellarioScheduler, the name does not change in CellarioOS. The protocols are synchronized between CellarioOS and CellarioScheduler using protocol IDs rather than names.

To resolve this issue, save the protocol as a new version in CellarioScheduler.

- **CellarioOS does not recognize if a template is removed from a protocol in CellarioScheduler** ^{CL-7132} — If a protocol has an associated template, and then the template is removed in CellarioScheduler, the protocol should become unavailable for requests in CellarioOS. However, the protocol remains requestable. If you create a CellarioOS request using the protocol, an error states:
the <protocol name> should have a template.

If you see this error, add a template to the CellarioScheduler protocol or use another protocol for the order in CellarioOS.



▪ **Syncing labware with CellarioScheduler can result in an issue for specific parameters** ^{CL-8369} —

The values for **Number of Wells** (density) and **Robot Speed** are selectable from a drop-down list in CellarioScheduler. If you enter a value for these parameters in CellarioOS that is unavailable on the drop-down list, and then sync the labware to CellarioScheduler, these parameters cannot sync.

For example, the **Robot Speed** drop-down list in CellarioScheduler may offer **10, 20, 50, and 100**.

If you enter **25** for the robot speed value in CellarioOS, and then sync the labware definition to CellarioScheduler, the software cannot sync the value with CellarioScheduler and the parameter will be blank.

The screenshot shows the 'Labware Definitions' window. On the left is a list of labware types, including '100mL Skinny Trough Human Only', '24w Cell Plate', '384 Labcyte Low Dead Vol Microplate', etc. The 'Labware created in OS' option is selected. On the right, configuration fields are shown: Name (Labware created in OS), Grip Height (22 mm), Sample Height (13 mm), Stack Height (16 mm), Thickness (15 mm), Max Volume (19), Fill Volume (18), Mass (10 g), No. of Wells (dropdown), Robot Speed (dropdown), Color (dropdown), Class (empty), and Description (Test for syncing labware to CellarioScheduler). The 'No. of Wells' and 'Robot Speed' dropdowns are highlighted with a blue box.

Labware Definitions in CellarioScheduler with drop-down lists for selecting number of wells and robot speed

If you encounter this issue, check the CellarioScheduler **Labware Definitions** window and enter a value in CellarioOS for **Density** and **Robot Speed** that can be handled by CellarioScheduler (a value that is available from the drop-down list).



NOTE

No. of Wells in CellarioScheduler is the same as **Density** in CellarioOS. Density = the total number of wells on the labware, as defined by column count x the row count.

▪ **Manual Tasks: Issues occur if closing CellarioScheduler when manual tasks are processing** ^{CL-8730} —

When working with manual tasks, it is possible for duplicate task entries to appear in CellarioOS if CellarioScheduler is closed and reopened while operations are in progress.

When the order completes, any duplicate tasks would normally be removed, but if the applications have been closed/restarted and tasks become "stuck" in the CellarioOS **Tasks** list, contact HighRes support for help clearing the duplicate tasks.

If possible, avoid closing the CellarioScheduler application when the system is processing manual tasks.



Issues with Workflows

- **Changing, then saving, a workflow request type may cause an error regarding connections in the Visualization tab** ^{CL-7407} — If you edit the name of a workflow request type, and then save, an error might occur that states: **The following source steps have duplicated connections / the following target steps have duplicated connections / The following source and target step combinations are duplicated...**

If you see this issue, click the **Visualization** tab, then return to the **Parameters** tab, and click **Save**.

- **Editing a workflow request type and publishing without saving may result in older information appearing in the request type** ^{CL-8059} — If you update a workflow request and save the changes multiple times, and then make more changes and publish without saving, some older information may appear in the published request. The expected result would be for the request to contain information from the last saved version, but the request type may use information from an earlier saved version instead of the last saved.

To avoid this issue, confirm the information in your workflow request type and save before publishing. If any information is incorrect, edit the workflow request type and save it, and then publish again.

- **Working with workflow request types requires scientific protocol rights** ^{CL-7331} — To view, edit, or delete workflow request types, you must have the rights to View Workflows, Edit Workflows, and Delete Workflows, but you also must have rights to View, Edit, and Delete Scientific Protocols (even though you cannot edit or delete scientific protocols while working with workflow request types).

If you encounter issues with rights, have an administrator grant you the rights that you need.

- **To view or edit workflow request types, you must have the right to view users** ^{CL-7333} — To view or edit workflow request types, you must have the View User right, which allows you to view the Created By and Updated By workflow fields.

If you encounter issues with rights, have an administrator grant you the rights that you need.

Issue with Duplicating Labware

Custom properties not included when duplicating labware from Card or List View ^{CL-12340} — If a labware entry has custom properties, duplicating that labware from the Card View or List View of the **Library** tab results in the duplicate having missing custom properties.

To retain the custom properties when duplicating, open the labware's details page, and then click **Duplicate**.





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