

Celigo[®] Cytometer Administrator Guide



Celigo Software Version 5.2

8001620 Rev. H

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1. About this Guide

This section provides a brief description of this guide and how to use it.

1.1 Purpose

The purpose of this guide is to describe the Celigo cytometer administrative procedures. The procedures are those performed to ensure proper Celigo cytometer functionality, reasonable performance, and the ability to retrieve backup files. The procedures are those performed after Celigo cytometer installation and testing.

1.2 Conventions used in this Guide

This section describes the symbols and signal words used in this guide.

1.2.1 Hazard Symbols

This guide uses symbols and associated signal words to communicate safety hazards. The hazard symbols, listed in Table 1, allow for easy and rapid recognition of the hazard type.

The signal word definitions, listed in Table 2, comply with the ANSI Z535.4 standard for product safety signs and labels.

Table 1. Hazard Symbols

Symbol	Hazard
4	Voltage or electrical current
	Moving parts (pinch point hazard)
	General

Table 2. Hazard Severities

Signal Word	Severity		
DANGER Indicates an imminently hazardous situation that will result severe personal injury or death if it is not avoided.			
WARNING	Indicates a potentially hazardous situation that could result in severe personal injury or death if it is not avoided.		

Signal Word	Severity
CAUTION	Indicates a potentially hazardous situation that may result in minor or moderate personal injury. It may also alert against unsafe practices. These include practices that may result in system damage, data corruption, data loss, or settings loss.

1.2.2 Other Symbols

This guide uses the additional symbols and signal words shown in Table 3.

Table 3. Additional Symbols

Symbol	Meaning
<u>\</u>	A note. Indicates helpful information for the topic or step being described.

1.3 Safety Precautions

This section describes the precautions for safe operation of the Celigo cytometer.

1.3.1 Electrical Safety

The Celigo cytometer contains voltages and electric currents that are potentially hazardous. Under normal circumstances, the user and other persons in the vicinity of the Celigo cytometer are protected from accidental contact with these electrical hazards by physical barriers (exterior panels and access doors) and by electrical grounding of the instrument.

To reduce the risk of electric shock:

- Ensure that all three-pronged power cords from the Celigo cytometer (total of 3 for instrument, workstation and monitor) are plugged into properly grounded 100 – 240 VAC receptacles only.
- Do not perform repairs on or within the Celigo cytometer. Only qualified service personnel should perform repairs.

If you are uncertain about any of the safety issues highlighted in this manual or have additional safety concerns, do not hesitate to contact Nexcelom Customer Service directly, with your questions or concerns, before attempting to service the Celigo cytometer.

	WARNING: Use this product in the manner described in this document, and while observing all specified safety precautions. When used other than as specified, the safety features may be impaired or defeated. Failure to adhere to the safety precautions and/or procedures outlined in this document may result in system failure, personal injury, or death, for which Nexcelom shall not be held liable under any circumstances.
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WARNING: Risk of electric shock! The Celigo cytometer contains voltages and electric currents that are potentially hazardous. To reduce the risk of electric shock, do not remove instrument covers without proper training. Qualified service personnel should perform all repairs.

1.3.2 Moving Part Hazards

The Celigo cytometer contains mechanical components that move within the instrument. Some of these components move in a linear fashion (for example, the x-axis and y-axis movements of the specimen stage), and some of these components have a rotational motion (for example, the galvanometer motors).

The Celigo cytometer's moving components can pose risks of pinching, crushing, cutting, twisting or entrapping body parts, particularly hands and fingers. To avoid injury by the instrument's moving components, you must observe the following precautions.

- While an application is executing, keep the access door closed.
- While an application is executing, the various mechanical components of the instrument can move at any time, without warning. Do not reach into the instrument while an application is executing, unless the application specifically requests that a new specimen plate be loaded onto the stage at a particular time.
- Do not reach into the instrument to remove or load a specimen plate while the stage is still moving. Wait until the stage has come to a complete stop, before reaching into the instrument.
- Keep clothing, jewelry, hair, and other loose materials clear of the instrument's mechanical components. Moving components can catch hold of such loose materials, thereby forcing a body part into a dangerous position.



CAUTION: The Celigo cytometer contains moving mechanical components that are capable of causing bodily harm. Do not reach into the instrument while parts are moving. Keep clothing, jewelry, hair, and other loose materials clear of mechanical components.

1.4 Disposal Compliance



Nexcelom Bioscience complies with European Union Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC. The Celigo cytometer, as supplied by Nexcelom, contains Electrical and Electronic Equipment (EEE) and is suitable for recycling, provided it is not contaminated with hazardous substances.

If disposal is needed, contact Nexcelom Customer Service for further information, assistance, and costing for disposal.

1.5 Technical Assistance

Contact Nexcelom Customer Service for further information:

Nexcelom Bioscience, LLC. Customer Service 360 Merrimack St. Building 9 Lawrence, MA 01843, USA

- From the United States: E-mail: <u>support@nexcelom.com</u> Phone: +1 978-327-5340
- From Europe: E-mail: <u>support@nexcelom.co.uk</u> Phone: +44 (0) 161 232 4593

If you have a technical question that you are unable to answer after consulting the documentation provided with the Celigo cytometer, please contact Nexcelom for assistance. So that we may assist you in the most expeditious manner possible, please generate and send an error report as follows:

Using the Software Help feature

 At the upper right corner of the Start tab, select Help > Generate Diagnostic File (Figure 1).

Figure 1. Generate Diagnostic File

			_	Ć	P	×
Calibr	ration	Adn	ninistra	tion	Help	
	Gene	rate [Diagno	stic Fi	le	
	Celigo	o Lea	rning C	enter	r	
	Abou	t				

- 2. Perform the prompt instructions.
- 3. Save the resulting error report to your desktop.
- 4. Attach the error report to an e-mail and send it to the applicable e-mail address according to the above list. If it is too large to attach to an e-mail then please upload to a 3rd party file transfer site (such as Dropbox, Google Drive, etc.) or simply contact Nexcelom Customer Service for temporary use of our support Dropbox account.

2. Startup and Shutdown

This section provides the procedures for starting up and shutting down the Celigo cytometer.

2.1 Startup

To start up the Celigo cytometer system

- Turn on the main power button on the front of the instrument.
 Note: The instrument's front display panel should light up.
- 2. Turn on the Celigo computer.
- 3. Log in to the computer.
- 4. Launch the Celigo application.

The Celigo program opens and the Home tab appears.

2.2 Shutdown

To shut down the Celigo cytometer system

1. In the Celigo application, click **Unload Plate** (Figure 2).

Figure 2. Unload Plate Button



2. An Unload Plate window appears (Figure 3).

Figure 3. Unload Plate Window



- 3. Remove the plate or flask from the instrument.
- 4. In the Unload Plate window, click OK or Cancel.
- 5. Exit the Celigo program by clicking the X icon in the upper right corner of the window.
- 6. Shut down the computer using the Windows Start/Shutdown menu.



NOTE: It is recommended that you only *periodically* shut down the computer. Keeping it on will allow for defragmentation, which helps Celigo cytometer performance.

7. Switch off the instrument power button.

3. Managing Users



NOTE: Managing users requires Local Administrator permissions.

You manage users in the User Management window, accessed from the Administration menu (Figure 4) on the Start tab. Managing users consists of adding, deleting, and changing user profiles.

Note: Administration tab is accessible from the HOME tab.

Figure 4. Administration Menu

Calibration Administration	Help
Preferences	
Manage Users	
Manage Plate Profiles	nols
	cience

After a Local Administrator creates a user, that user can then login to the Celigo software using those credentials. Feature access and data access may be limited depending on the role associated to the user and the permissions provided to the user to various folders. For the additional information on folders, see section 5.

3.1 Adding a User

Perform the following steps to add a user profile to the database.

To add a user



NOTE: Adding users requires Local Administrator permissions.

- 1. Log in to the Celigo application.
- In the Start tab, at the top of the Celigo user interface, select Administration > Manage Users (Figure 4 above).

The User Management window appears (Figure 5) with the Users tab displayed.

Clo

Figure 5. User Management Window Only Celigos configured with a network Only personnel logged in with database and personnel logged in with Local Local Administrator permissions can view Administrator permissions can view a User the Add User and Remove User buttons. Sessions tab. a User Management 8 Users Subser Groups Sessions Only personnel logged in Users with Local Administrator permissions can view a 4 🕵 Users B Local Admins B Scientists User Groups tab. Personnel logged in with Local Administrator permissions can view a list of all users. Scientists can view only their own user account.

- In the upper right corner of the User tab, click the + button. The Add New
 - User dialog box appears (Figure 6).



Add New Dec.				-	n ×
Personal Information First Name: Formatied Name:		Last Name:			
Login User Neme: Password Duration (Days):	0 🗢	Password Expiration Date:	12/31/0000		
Pasorword:		Password Confirmation:			
Permissions Permission Role:					
				Save	Canco

- 4. Fill in the following fields:
 - First Name
 - Last Name
 - Formatted Name (optional)
 - User Name Fill in your login ID
 - Password Duration (Days) (optional) 0 means forever
 - Password Expiration Date (optional)
 - Password (optional)
 - Password Confirmation (optional)

- Permissions: Select one of the following:
 - Scientist: Can view and edit only his or her data in their own user folder or folders the user was provided permissions to.
 - Local Administrator: Can view and edit all user folders and their scans, settings, and analyses. Also can perform administrative tasks, such as adding users and importing/exporting plate profiles.

An example of a completed Add New User dialog box is shown in Figure 7.

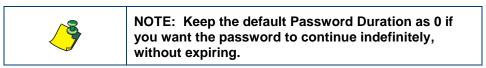


Figure 7. Add New User Example

Personal Information First Name: User Formatted Name: User 3 Login User Name: Awesome Sauce Password Duration (Days): 0 + Password Expiration Date: 12/31/9999 * Password: **** Permissions Permission Role: Scientist	8	Add New User					-	\times
User Name: Awesome Sauce Password Duration (Days): 0 Password Expiration Date: 12/31/9999 Password: Password Confirmation: Permissions		First Name:			Last Name:	3		
		User Name: Password Duration (Days):		0 🔹				•
			Scientist	~				

5. Click Save.

The system adds the user to the database with full permissions to their user folder. In the User Management window, an icon for the user (their user folder) appears in the Users tab, and a listing for the user appears in the Groups tab. The new user is listed as a Non Group Member because new users have not yet been assigned to a group. An icon for the user's folder will also appear in the Data Management screen. The results of adding a user are shown in Figure 8.

Figure 8. Added User

New User Listing in User Management Window's Users List

Users Students

 Users

 Users

 Users

 Local Admins
 Ex
 LAdmin
 MGH
 Tim

 Scientists
 Scientist
 asdagdsdf
 Validation
 Awesome Sauce

n Group M	lembers		
User Role	Login	First Name	Last Name
Scientist	Scientist	ABC	Scientist
LocalAdmin	Ex	Celigo	Experiment
LocalAdmin	LAdmin	Local	Administrator
LocalAdmin	MGH	MGH	wellman
Scientist	asdagdsdf	teastas	adgsdfs
LocalAdmin	Tim	Tim	Smith
Scientist	Validation	Tim	smith
Scientist	Awesome Sauce	User	3

New User Listing in User Management

Window's Non Group Members List

New User Listing in Data Management Screen

earc	h Data	_
Searc	h only Tags	
Folde	rs	
Includ	e Folder	Has Content
1	asdagdsdf	
V	2 Awesome Sauce	
	8 Fx	1
V		
v	& LAdmin	1

- 6. To confirm that the user has been added to the database:
 - Select Administration > Manage Users. The User Management window appears.
 - Confirm that the user's name is listed in the Users and User Groups tabs (Figure 8 above).
 - Navigate to the Home tab and click **Manage Data**. The Data window appears.

Confirm that the newly added user's name appears in the Non Group Members list in the right-hand pane, for potential adding to a group.

Figure 9 illustrates user permissions. In the Data window on the left, the loggedin user has Local Administrator permissions and therefore can view the icons (user folders) representing all users and can also view all folders. On the right, the logged-in user has Scientist permissions and therefore is limited to viewing only their own user folder and any shared folders the user has at least read access to.

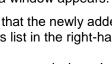


Figure 9. User Permissions Local Administrator



Scientist



The logged-in user in this Data window has Scientist permissions and therefore cannot view the user folders for the other two users and the shared folder that the user does not have read access to.

3.2 Removing a User

Perform the following steps to permanently remove a user profile from the database. To temporarily remove a user profile from the database for possible future reactivation, see Deactivating a User in section 3.3.

To remove a user



NOTE: Removing users requires Local Administrator permissions.

- 1. Log in to the Celigo application.
- In the Start tab, at the top of the Celigo user interface, select Administration > Manage Users (Figure 4 above).

The User Management window appears (Figure 5 in section 3.1) with the Users tab displayed.

- 3. In the Users list in the left pane, left-click the name of the user to be removed.
- 4. In the upper right corner of the Users tab, click the X button.

A confirmation message appears asking if you are sure you want to remove the user.

5. Click Yes.

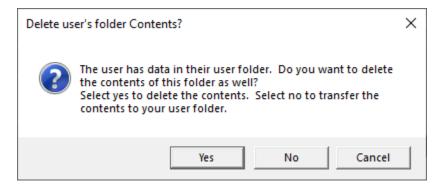
The user list updates as follows to reflect the change:

- If the user does not have any associated plates/scans, the user name is removed (Figure 10a).
- If the user has associated plans/scans, a prompt appears (Figure 10b).
 - Clicking Yes will delete all the contents along with the user.
 - Clicking No will transfer all the data belonging to the user into the currently logged in user account's folder.
 - Clicking Cancel will cancel the delete user operation.

Figure 10a. Removing a User From the Database

Before Confirm	After Confirm				
all User Management	all User Management				
& Users 😫 User Groups 🖳 Sessions	& Users 😫 User Groups 📮 Sessions				
Users	Users				
✓ 🤮 Users	🔺 🥵 Users				
 Local Admins Scientists Scientist asdagdsdf Validation Awesome Sauce 	 Local Admins Scientists Scientist asdagdsdf Validation 				

Figure 10b. Removing a User from the Database with Associated Data



3.3 Deactivating a User

Perform the following steps to deactivate a user profile. To permanently remove a user profile, see Removing a User in section 3.2.

To deactivate an existing user profile



NOTE: Deactivating users requires Local Administrator permissions.

- 1. Log in to the Celigo application.
- In the Start tab, at the top of the Celigo user interface, select Administration > Manage Users (Figure 4 above).

The User Management window appears (Figure 5 in section 3.1) with the Users tab displayed.

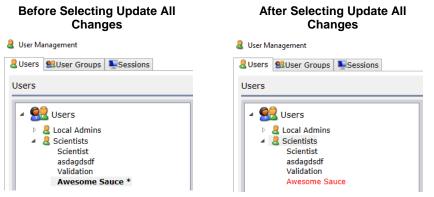
- 3. In the Users directory in the left pane, left-click the name of the user to be edited.
- 4. Click **De-Activate User** on the right-hand pane.

The users name in the user list changes to bold text with an asterisk (*). The asterisk indicates that the profile for the user has changed in the current session.

5. At the bottom of the Users tab, click **Update All Changes**.

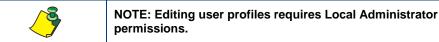
The system applies the change. The user's name in the user list changes to red (Figure 11) and the asterisk disappears. The red indicates a deactivated user.

Figure 11. User Profile Deactivation Indicated



3.4 Editing an Existing User Profile

To edit an existing user profile



- 1. Log in to the Celigo application.
- 2. In the Start tab, at the top of the Celigo user interface, select **Administration** > **Manage Users** (Figure 4 above).

The User Management window appears (Figure 5 in section 3.1) with the Users tab displayed.

3. In the Users directory in the left pane, left-click the name of the user to be edited.

The user profile appears in the right-hand pane.

4. Edit the user profile as needed.

The user's name in the user list (appears as bold text and with an asterisk (*) after it. The asterisk indicates that the profile for the user has changed in the current session.

5. Commit the edited user profile to the database by clicking **Update All Changes**.

The system applies the changes. The change is no longer bold and the asterisk disappears (Figure 12).

Figure 12. User Profile Change Indicated

Before Selecting Update All Changes	After Selecting Update All Changes
all User Management	all User Management
2 Users Sessions	& Users Sessions
Users	Users
✓ 🕵 Users	✓ 👷 Users
🕨 是 Local Admins	Local Admins
 A & Scientists 	 Scientists
Scientist	Scientist
asdagdsdf	asdagdsdf
Validation	Validation
Awesome Sauce *	Awesome Sauce

4. Managing Groups



NOTE: Managing groups requires Local Administrator permissions.

You manage groups in the User Management window, accessed from the Administration menu (Figure 4 above) on the Start tab. Managing groups consists of adding, editing, and removing user groups, and adding and removing users to/from user groups.

After a Local Administrator creates a group, any user can then use folders to limit access to data files and folders by those groups. For the instructions to use folders, see section 5.

4.1 Adding a User Group

To add a user group



NOTE: Adding user groups requires Local Administrator permissions.

- 1. Log in to the Celigo application.
- 2. In the Start tab, at the top of the Celigo user interface, select **Administration > Manage Users** (Figure 4 above).

The User Management window appears (Figure 5 in section 3.1) with the Users tab displayed.

3. Click the User Groups tab (Figure 13).



NOTE: The User Groups tab is available only to users who have Local Administrator permissions.

Figure 13. User Groups Tab

a User Management							
&Users State Groups Sessions							
User Groups							+ X
	Group Members	First Name	Last Name	LocalAdmir LocalAdmir LocalAdmir	Login Scientist Ex I Admin MGH asdagdsdf	First Name ABC Celigo Local MGH teastas Tim	Last Name Scientist Experiment Administrator weilman adgsdfs Smith
				Scientist		Tim	smith 3
							Close

 In the upper right corner of the User Groups tab, click the + symbol. The New User Group dialog box appears (Figure 14).

Figure 14. New User Group Dialog Box

New User Group	<
ser Group Name: escription:	
Create	

- 5. In User Group Name, enter the desired user group name.
- 6. In Description, enter a description of the group if needed (Figure 15).

Figure 15. New User Group Entries

🗊 New User Group	×	
User Group Name:	User Group 1	
Description:	First group	
	Create Cancel	



NOTE: If a user group by the entered name already exists, the Create button becomes disabled and a message appears when you hover the mouse cursor over the Create button.

7. Click Create.

The new user group appears in the User Groups list in the left-hand pane (Figure 16).

Figure 16. User Group Added

<u>.</u>	User Manageme	r Groups Sessions
U	lser Groups	
	Name the Brilliant	Description People with brains that rock

4.2 Adding Users to a User Group

It is convenient to add individual users to a user group. This will allow users to set up folders for multiple users to access.

To add users to a user group



NOTE: Adding users to a user group requires Local Administrator permissions.

- 1. Log in to the Celigo application.
- 2. In the Start tab, at the top of the Celigo user interface, select **Administration > Manage Users** (Figure 4 above).
- 3. Click the User Groups tab.
- 4. In the User Groups list in the left-hand pane, click the User Group to which you want to add the user.
- 5. In the Non Group Members list in the right-hand pane, click the user that you want to add to the selected group.
 - To select multiple individual users, use Ctrl+click.
 - To select multiple users in a range, use Shift+click.
- 6. Click the < button.

The user name moves from the Non-Group Members list to the Group Members list in the middle pane.

In Figure 17, the users named Demo User and Local Administrator have been added to the group named User Group 2. Users named User 1, User 2, and User 3 have not yet been assigned to groups.

iroups									
me Description	Group Men	bers				Non Group N	Members		
Brilliant People with brains that rock	User Role	Login	First Name	Last Name		User Role	Login	First Name	Last Name
	Scientist	Awesome Sauce	e User	3		Scientist		ABC	Scientist
		asdagdsdf	teastas	adgsdfs		LocalAdmin	Ex	Celigo	Experiment
					_	LocalAdmin	LAdmin	Local	Administrator
						LocalAdmin		MGH	wellman
						LocalAdmin		Tim	Smith
						Scientist	Validation	Tim	smith

Figure 17. Users Added to a User Group

7. Repeat steps 5 and 6 as needed for each user that you want to add to the selected group.

4.3 Removing Users from a User Group

To remove users from a user group



NOTE: Removing user from a user group requires Local Administrator permissions.

- 1. Log in to the Celigo application.
- 2. In the Start tab, at the top of the Celigo user interface, select **Administration > Manage Users** (Figure 4 above).

The User Management window appears (Figure 5 in section 3.1) with the Users tab displayed.

- 3. Click the User Groups tab.
- 4. In the User Groups list in the left-hand pane, click the User Group from which you want to delete the user.

In the Group Members list in the middle pane, click the user that you want to delete from the selected group.

- To select multiple individual users, use Ctrl+click.
- To select multiple users in a range, use Shift+click.
- 5. Click the > button.

The user name moves from the Group Members list to the Non-Group Members list in the right-hand pane.

4.4 Removing a User Group

Perform the following steps to remove a user group from the database.

To remove a user group



NOTE: Removing a user group requires Local Administrator permissions.

- 1. Log in to the Celigo application.
- 2. In the Start tab, at the top of the Celigo user interface, select **Administration > Manage Users** (Figure 4 in section 3).

The User Management window appears (Figure 5 in section 3.1) with the Users tab displayed.

- 3. Click the User Groups tab.
- 4. In the User Groups list in the left-hand pane, click the name of the user group that you want to remove.
- 5. In the upper right corner of the User Management window, click the X button.

A confirmation message appears asking if you are sure you want to remove the user group.

6. Click Yes.

The User Groups list in the left-hand pane updates to reflect the deleted user group.

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5. Managing User Sessions

You manage user sessions in the User Management window, accessed from the Administration menu (Figure 4 above) on the Start tab. Managing user sessions consists of viewing user sessions and their locked data, and terminating user sessions.



NOTE: Managing user sessions requires a network database setup and Local Administrator permissions.

Figure 18. User Sessions Window

sions				6
lser	Machine		Plate ID	
Admin	NEXCELOM-201	00:19:10		

5.1 Viewing User Sessions

.

To view a user session



NOTE: Viewing user sessions requires a network database setup and Local Administrator permissions.

- 1. Log in to the Celigo application.
- In the Start tab, at the top of the Celigo user interface, select Administration > Manage Users (Figure 4 above).

The User Management window appears (Figure 5 in section 3.1) with the Users tab displayed.

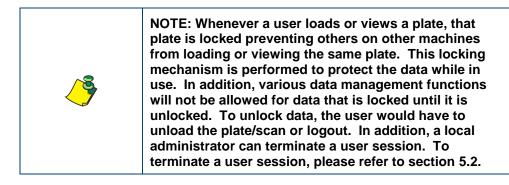
3. Click the User Sessions tab (Figure 18).



• Each entry in the user sessions table represent a current connection to the network database.

Each session specifies the:

- logged in user
- machine name the session originated from session duration
- plate details for any plate currently in use by the session



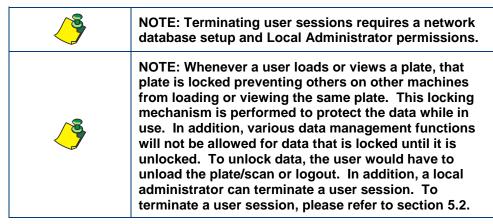
4. To refresh the user sessions at any time, click the refresh button found at the top right corner of the window.

Figure 19. User Session Refresh Button



5.2 Terminating a User Session

To terminate a user session



- 1. Log in to the Celigo application.
- In the Start tab, at the top of the Celigo user interface, select Administration > Manage Users (Figure 4 above).
- 3. Click the User Sessions tab.

4. In the window, select the user session to be terminated and then click the Terminate button to terminate the selected user session.

Figure 20. Terminate User Session Button



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6. Managing Folders

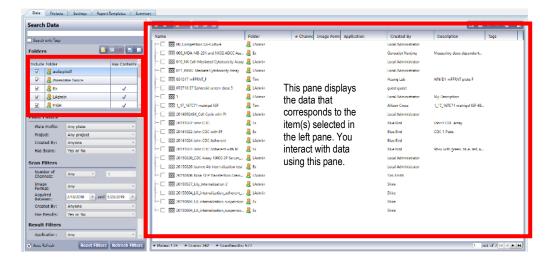
Any user can create folders to both organize files and to limit access to the folders and their contents by existing users and user groups. You do this using the Folder view found in the Data Management screen from the Start tab's Manage Data button.

Folders are displayed in the Data and Settings tabs (Figure 21).

If the user has Local Administrator permissions, the user will have full permissions to view all folders. All other users will be able to view a folder only if the user has been given permission to view it. A user has access to a data file or folder by being associated with it either directly or indirectly by means of a user group. A user's access rights to a shared folder depends on the association a user has with the folder.

The folder view in the left pane displays the existing folders that the logged-in user has permissions to access (by means of the Scientist or Local Administrator permission selected when the user profile was created). When a folder is checked in the left pane, the data or settings contained in the folder appears in the right-hand pane for interaction.

Figure 21. Data Window



6.1 Adding a Folder

Any user can create (add) a folder to set up permissions to the folder and its contents. The permissions affect whether personnel will be able to view or take other actions on the folder and its contents.

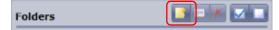
To add a folder

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 21 above).

3. Near the top of the Data Management screen, in the left-hand pane, click the **new folder** symbol found within the folder view (Figure 22).

Figure 22. New Folder Button



The New Folder window appears (Figure 23). By default, the Name field is blank and the Permissions field displays Full permissions for the currently logged in user.

Figure 23. New Folder for Setting Up Permissions

	New Folder			×
	ler Name: sociated Users / User Groups			
	Name	Permissions	Description	
	Local Administrator	Full v		
			Add	Remove
_			0	Cancel

- 4. In Folder Name, type a unique folder name (a folder name that is not already in use).
 - If the typed folder name is not unique, the folder name will display in red and the OK button will be greyed out.
- 5. In Permissions, change the permission for the folder as desired.
- 6. Click Add.
- 7. The Add User Group / User dialog box appears (Figure 24).

Figure 24. Add User Group / User Dialog Box

User Groups Tab	Users Tab
and User Group / User 🛛 🕹	and User Group / User
Add User Group / User Select a single available user group or user you would like to associate with the folder and then click the OK button. User Groups Users Group Name Description the Brilliant People with brains that rock	Add User Group / User Select a single available user group or user you would like to associate with the folder and then click the OK button. User Groups Users Login Formatted Name Scientist ABC Scientist Ex Celigo Experiment AGH MGH wellman asdagdsf teastas adgsfs Tim Tim Smith Validation Tim smith Awesome Sauce User 3
OK Cancel	OK Cance

- 8. Click a single user group or user that you want to associate with the folder.
- 9. In the Add User Group / User dialog box, click OK.

The name of the user group or user that you want to associate with the folder appears in the New Folder dialog box.

- 10. Repeat steps 8 and 9 as needed to associate more user groups and users with the folder.
- 11. In the New Folder dialog box, click OK.

The new folder name appears in the Data window's left pane. Figure 25 shows users and groups with the four different types of permissions.

Figure 25. Permission Types

Folder Name:	5-1-1-A				×
	ters / User Groups				
Name		Permissions	Description	_	
Lucal Adm	nimistratur	Full v Read Read / Write Read / Write / Delete Full			
			Add	Re	move
				OK	Cancel

- Read The folder and its contents can be viewed only.
- Read / Write The folder and its contents can be viewed, and can be modified by only adding to the contents.
- Read / Write / Delete The folder and its contents can be viewed, and can be modified by both adding and removing contents from the folder, but the folder itself cannot be deleted.
- Full In addition to the access given in Read / Write / Delete, folder associations and permissions can be modified, and the folder itself can be deleted.

If the user has Local Administrator permissions, the user has full permissions to all folders.

6.2 Changing Permissions to a Folder

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click **Manage Data**.

The Data Management screen appears (Figure 21 above).

3. Click the folder for which you want to change the permissions.

4. At the top of the Data Management screen, in the left-hand pane, click the **Modify Folder** button (Figure 26).



NOTE: You can click this button only if the selected folder is a shared folder and you have full permissions to the folder (by having been given Full permissions or by being an Administrator).

Figure 26. Modify Folder Button



The Modify Folder dialog box appears (Figure 27).

Figure 27. Modify Folder

New Folder Ider Name: Brilliance Associated Users / User Group	s		
Name	Permissions	Description	
Local Administrator	Full	¥	
			Add Remove
			OK Canc

- 5. In Permissions, change the selection as needed.
- 6. Click OK.

6.3 Deleting a Folder

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 21 above).

- 3. Click the folder that you want to delete.
- 4. At the top of the Folder view in the Data Management screen in the left-hand pane, click the Delete Folder button (Figure 28).

Figure 28. Delete Folder Button





NOTE: You can click this button only if the selected folder is a shared folder and you have full permissions to the folder (by having been given Full permissions or by being an Administrator).

A confirmation message appears about deleting the folder.

5. Click Yes.

One of the following occurs:

• If the folder contains no data or settings, the system deletes the folder.

If the folder contains data or settings, a confirmation message appears asking whether you would like to also delete the contents of the folder, transfer the contents of the folder to their own user directory, or cancel the delete operation (Figure 29).

Figure 29. Delete Folder Contents Confirmation Message

Delete Folder Contents?		×	
?	The folder you are about to delete has items inside of it. Do you want to delete the contents inside the folder as well? Selecting yes will delete the folder contents. Selecting no will transfer the folder contents to your user root directory.		
	Yes No Cancel		

- 6. Do one of the following:
 - If you want to delete the contents of the folder, click Yes.

The folder and its data are deleted.

• If you want to transfer the contents of the folder to your user directory, click **No**.

The folder is deleted and the contents are moved to your user directory.

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Figure 30. Data Management Screen

номе дата	Welcome, Local Administrator Log Out 🛆		Application Experiment Plate: Scan:	 as: Over Connected No Application Selected No Experiment Loaded No Plate Loaded No Scan Loaded No Results Loaded 		Calibration Adm	excelo
Data Projects Settings Report Templates Sum	1						
Search Data	3 3 · 6 × 8 8 8						
Search only Tags	Name 1 P- 3/18/2016 10:36:38 AM	Folder	# Channe 3	Image Form Application	Created By Moffitt Cancer Center	Description Ta Day 5	igs
Folders	- 888 009_MDA-MB-231 and NK92 ADCC Ass.	9 F.	-	compact	Genscript Nanjing	Measuring dose dependent	<u>^</u>
Folders	Good 010 NK Cell-Mediated Cytotoxicity Assa	-			Local Administrator	inclusing date dependentin	
Include Folder Has Contents		-			Local Administrator		
🗹 🤱 asdagdsdf	- 11/19/2015 1:25:14 PM	CADILINI	,	Compact	Local Administrator	0 hr time point	
✓ & Awesome Sauce	11/19/2015 2:25:00 PM		2	Compact	Local Administrator	1 hr time point	
🗹 🤱 Ex 🗸	11/19/2015 3:2445 PM		2	Compact	Local Administrator	2 hr time point	
🗹 💄 LAdmin 🗸	- 11/19/2015 4:23:36 PM		2	Compact	Local Administrator	3 hr time point	
🗹 🤱 ман 🗸 🗸	- 11/19/2015 5:25:03 PM		2	Compact	Local Administrator	4 hr time point	
Plate Filters	- 388 051017 mFFRNT_F	🤱 Tim			Huang Lab	WN/D1 mFFRNT plate F	
Plate Profile: Any plate ~	COS 072716 ST Spheroid screen dose 5	a LAdmin			guest guest		
Project: Any project	888 1	a LAdmin			Local Administrator	My Description	
Created By: Anyone	- 300 1_17_161C71 matrigel KF	🤶 Tim			Allison Cross	1_17_16TC71 matrigel KiF 48	
Has Scans: Yes or No *	- 888 201409245K, Cell Cycle with Pl	LAdmin			Local Administrator		
	- 388 20141022 John CDC	R Ex			Blue Bird	John's CDC assav	
Scan Filters	10/22/2014 3:04:44 PM		3	Compact	Blue Bird		
Number of Any 1 1	P- 0 34 10/22/2014 3:06:21 PM		3	Compact	Blue Bird		
Image Any v	10/22/2014 3:27:58 PM		3	Compact	Blue Bird	Lower exposure time on Red	
Format:	- 388 20141022 John CDC with BF	al ex			Blue Bird	CDC 1 Plate	
Between: 2/18/2010 * and 5/23/2019 *	- State 20141024 John CDC Adherent	a LAdmin			Blue Bird		
Created By: Anyone ·	20141024 John CDC Adherent with BF	a Ex			Blue Bird	96-w with green, blue, red, a	
Has Results: Yes or No ~	SSE 20150220_CDC Assay 10000 2P Serum	. al LAdmin			Local Administrator		
Result Filters	2/20/2015 10:59:41 AM	-	2	Raw	Local Administrator		
Application: Any 👻				n			
Auto Refresh Reset Filters Refresh Filters	# Plates: 135 # Scans: 342 # ScanResults	: 522				1 out o	17 H 4 P H

The Data Management is broken into five separate views: Data, Projects, Settings, Report Templates and Summary. The Data Tab displays all the data currently stored in the Celigo database. Data contains all Plates, Scans, and Scan Results. Data is displayed in a grid utilizing a tree like structure to display the relation between plates, scans, and scan results.

Figure 31.	Data	Management	Tabs
------------	------	------------	------

Data	Projects	Settings	Report Templates	Summary

7.1 Searching for Data

The default setting for the Data Tab is to display all the data the user has access to. If the user would like to limit what is displayed, the user can modify the filter settings found on the left side of the screen.

0		•		
Search Data			1	Search Section
Search only Tags				
Folders	<u> </u>	E 🗡 🔽 🗌	ן ו	
Include Folder		Has Contents		
🖌 息 asdago	dsdf			
🖌 Aweso	me Sauce		11	Folders Section
🖌 Ex		1		
🖌 & LAdmin	n	1		
🖌 🙎 мдн		1	/	
Plate Filters		1	14	
Plate Profile:	Any plate	¥		
Project:	Any project	~		Plate Filters Section
Created By:	Anyone	~		
Has Scans:	Yes or No	¥	ы.	
Scan Filters			1	
Number of	Anv · 1			
Channels:	Any ~ 1			
Image Format:	Any	~		
Acquired Between:	2/18/2010 • and 5	/23/2019 🔹		Scan Filters Section
Created By:	Anyone	~		
Has Results:	Yes or No	~		
Result Filters			IJ.	
Application:	Any	× .		
✓ Auto Refresh	Reset Filters	Refresh Filter		Result Filters Section

Figure 32. Data Searching Filters

Filters are broken up into 5 sections: Search, Folders, Plate, Scan, and Result.

Search

The Search section appears just above the Folders section. This section is primarily an open text field that allows the user to type in any text to match a plate barcode, descriptions for any data (plates, scans or scan results), or tags for any data (plates, scans, or scan results). If desired, a checkbox exists to limit the filter to only data related tags.

Folders

The Folders section appears underneath the Search section and displays all folders the logged in user has access to. This section allows the user to add, modify, or delete folders as well as selecting which folders to display data for. If a folder is checked, the data contained within the folder is displayed. If a folder is not checked, the data contained within the folder is not displayed. The Check All and Uncheck All buttons (Figure 33) exist to quickly perform batch checking/unchecking. If a user wishes to display a single folder, the user double clicks on any folder to check that folder and uncheck all others.

Figure 33. Check/Uncheck All Buttons



Controls for creating, modifying, and deleting folders (Figure 34) exist in the Folders section. This functionality works in the same manner as in prior versions

of Celigo. Additional details can be found in section 6 of the Celigo Administrator Guide.

Figure 34. Folder Control Buttons



Plate Filters

The Plate Filters section appears just below the Folders section. This section allows a user to filter plates by plate type (also referred to as the plate profile), project, plate creator, and whether or not the plate has any associated scans.

Scan Filters

The Scan Filters section appears just below the Plate Filters section. This section allows a user to filter scans by the number of channels used when the scan was acquired, image format of the images in the scan, time frame the scans were acquired, plate creator, and whether or not the scan has any associated scan results.

Result Filters

The Result Filters section appears just below the Scan Filters section. This section allows a user to filter scan results by the scan's application type, time frame the scan results were generated, and scan result creator.

Refreshing Controls

If a user modifies any setting while the Auto Refresh checkbox (Figure 35) is checked, a refresh operation will occur, and the software will display the updated data set matching the new filter criteria on the right-hand side of the screen.

Figure 35. Auto Refresh Checkbox

Auto Refresh

If the Auto Refresh checkbox (Figure 35) is not checked, no refresh operation will occur until the user clicks the Refresh button (Figure 36) located at the bottom right hand side of the screen.

Figure 36. Refresh Button

<u>R</u>efresh

To search for data (plates, scans, scan results)

- 1. Log into the Celigo application.
- 2. In the Start tab's task screen, click Manage Data. The Data Management screen appears.
- 3. Adjust any search and filter entries as applicable (see descriptions above).
- 4. Click Refresh. The Data display on the right side of the screen will display any found data results matching the search parameters/filters specified.



NOTE: If the Auto Refresh checkbox is checked, step 4 above is not necessary. A refresh operation will be invoked for every change setting as a setting is changed.

7.2 Clearing Search Selections

The Reset Filters button (Figure 37) provides the user the ability to revert all the filters back to default settings which will display all data on the right-hand side of the screen after a refresh is invoked.

Figure 37. Reset Filters Button

Reset Filters

To clear search settings for data (plates, scans, scan results)

• In Data Management screen in the Data Tab, click the Reset Filters button.

7.3 Updating Search Selections

The Plate, Scan, and Result Filters are set to have their selectable options and limits based on the entire database. Plate Types will therefore only display plate types that are existing in the database. Created By filter and all other filters function similarly. When the Celigo is connected to a network database (where it is possible for other users to be changing the data in the database you are connected to) the limits of your filters can change from when they have been loaded. The Refresh Filters button (Figure 38) allows a user to refresh the limits of all their filters to the current state of the database.

Figure 38. Refresh Filters Button

Refresh Filters



NOTE: The Refresh Filters button is only displayed when the Celigo is connected to a network database. This option is not present for Celigo connected to a local database.

To update the bounds of the search settings for data (plates, scans, scan results)

• In Data Management screen in the Data Tab, click the Refresh Filters button.

7.4 Viewing Data

Data is displayed in a grid on the right-hand side of the screen (Figure 39). The grid utilizes a tree like structure to display the relation between plates, scans, and scan results. This section of the screen allows the user to view data that matches the specified filters and enables the user to perform various functions on the data.

	1	_					
Name	Folder	4 Channe	Image Form Compact	Application	Created By Moffitt Cancer Center	Description Day 5	Tags
- -	0 m	5	compact		Genscript Nanjing	Measuring dose dependent	
	-				Local Administrator	measuring dose dependent	
OI0_NK Cell-Mediated Cytotoxicity Assay	-						
OI1_PEMC Mediate Cytotoxicity Assay	a LAdmin				Local Administrator		
- 11/19/2015 1:25:14 PM		2	Compact		Local Administrator	0 hr time point	
- 11/19/2015 2:25:00 PM		2	Compact		Local Administrator	1 hr time point	
- 11/19/2015 3:24:45 PM		2	Compact		Local Administrator	2 hr time point	
		2	Compact		Local Administrator	3 hr time point	
	0 -	2	Compact		Local Administrator	4 hr time point	
- 051017 mFFRNT_F	a Tim				Huang Lab	WN/D1 mFFRNT plate F	
O72716 ST Spheroid screen dose 5	a LAdmin				guest guest		
- 🗌 🗱 1	LAdmin				Local Administrator	My Description	
- 🗌 🔠 1_17_16TC71 matrigel IGF	🧶 Tim				Allison Cross	1_17_16TC71 matrigel IGF 48.	-
- 🗌 🗱 201409245K_Cell Cycle with Pl	al LAdmin				Local Administrator		
- 888 20141022 John CDC	al Ex				Blue Bird	John's CDC assay	
- 🗌 🎆 10/22/2014 3:04:44 PM		3	Compact		Blue Bird		
- 🗌 🎆 10/22/2014 3:06:21 PM		3	Compact		Blue Bird		
IO/22/2014 3:27:58 PM		3	Compact		Blue Bird	Lower exposure time on Red.	
- 🗌 🐯 20141022 John CDC with BF	a Ex				Blue Bird	CDC 1 Plate	
- 🗌 🕅 20141024 John CDC Adherent	a LAdmin				Blue Bird		
- 🗌 🗱 20141024 John CDC Adherent with BF	al Ex				Blue Bird	96-w with green, blue, red, a	
- 🗌 🔯 20150220_CDC Assay 10000 2P Serum	. 🧶 LAdmin				Local Administrator		
- 🗌 🎆 2/20/2015 10:59:41 AM		2	Raw		Local Administrator		
			-				

Figure 39. Data Display Grid

The data displayed in the grid is organized by plate. Each plate can be expanded to display any scans that were acquired for the plate. Each scan can also be expanded to display any scan results that were generated for the scan. The grid is organized into columns that display various properties of the plates, scans, and scan results. These columns include: Name, Folder, Number of Channels, Image Format, Application, Created By, Description, and Tags. Information within columns will be displayed as applicable. All columns are sortable except for the Tags column.

The button strip (Figure 40) at the bottom of the data display section displays the plate count, scan count, and scan result count of the found matching data set. Each data set is broken up into pages and only one page can be viewed at a time. On the right-hand side of the strip, controls exist to allow the user to navigate to different pages of the data set. A user can type in a page number to navigate to, click on a button with an arrow and a line to navigate to the first or last pages, or click on a button with just an arrow to navigate to the previous or next page. If an operation is not allowed, the buttons will become disabled.

Figure 40. Data Display Button Strip

Plates: 135 # Scans: 342 # ScanResults: 522

1 out of 7 🖂 🔺 🕨

You can expand and collapse the line items (data view) showing the plate listings containing the scan images and scan data (scan results).

To expand the data view

• With the Data tab selected in the Data Management screen, click the Expand All arrow at the top right of the screen (Figure 41).

Figure 41. Expand All Arrow



To collapse the data view

• With the Data tab selected in the Data Management screen, click the Collapse All arrow at the top right of the screen (Figure 42).

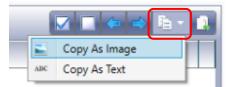
Figure 42. Collapse All Arrow



7.5 Exporting Data Report

The Data Tab allows a user to copy the current data result set as an image, text, or as an exported CSV file.

Figure 43. Copy Dropdown Menu



The Copy As Image button allows the user to copy the displayed data (as seen on the screen) as an image to the clipboard.

The Copy As Text button allows the user to copy all data (in all pages) as text to the clipboard.

Figure 44. Export Button



The Export button (Figure 44) allows the user to save a text file of all data (from all pages) to disk.

7.6 Selecting Data

Each data item (plate, scan, scan result) can be checked or unchecked. Checking a data item marks the data item to be included for a data operation if one is chosen by the user.

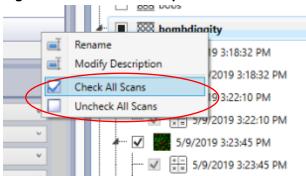
Figure 45. Data Operations Buttons



Data operations (Figure 45) can be found at the top left of the data display section. These operations include: Export, Export and Delete, Move, Delete, Add Tag, Remove Tag, and Clear All Tags. One additional operation that exists in this area of the user interface that does not involve checked data items is the Import operation.

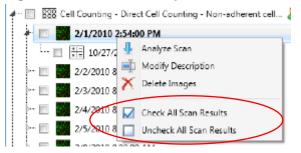
Context menu options (Figure 46) exist for all Plates for checking and unchecking all the plate's scans. The Check All Scans button allows the user to quickly check all scans for the specified plate. The Uncheck All Scans button allows the user to quickly uncheck all scans for the specified plate.

Figure 46. Context Menu Options for Plates



Context menu options (Figure 47) exist for all Scans for checking and unchecking all of the scan's scan results. The Check All Scan Results button allows the user to quickly check all scan results for the specified scan. The Uncheck All Scan Results button allows the user to quickly uncheck all scan results for the specified scan.

Figure 47. Context Menu Options for Scans



To check all data in the data view

• With the Data tab selected in the Data Management screen, click the Check All button at the top right of the screen (Figure 48).

Figure 48. Check All Button



To uncheck all data in the data view

• With the Data tab selected in the Data Management screen, click the Uncheck All Button at the top right of the screen (Figure 49).

Figure 49. Uncheck All Button



To check all scans of a plate in the data view

- 1. With the Data tab selected in the Data Management screen, right click the plate you want to check all scans for (Figure 46).
- 2. Select the Check All Scans menu item in the context menu.

To uncheck all scans of a plate in the data view

- 1. With the Data tab selected in the Data Management screen, right click the plate you want to uncheck all scans for. (Figure 46).
- 2. Select the Uncheck All Scans menu item in the context menu.

To check all scan results of a scan in the data view

- 1. With the Data tab selected in the Data Management screen, right click the scan you want to check all scan results for (Figure 47).
- 2. Select the Check All Scan Results menu item in the context menu.

To uncheck all scan results of a scan in the data view

- 1. With the Data tab selected in the Data Management screen, right click the scan you want to uncheck all scan results for (Figure 47).
- 2. Select the Uncheck All Scan Results menu item in the context menu.

7.7 Importing Data

Figure 50. Import Data Button



The Import button (Figure 50) allows the user to import data into the Celigo database. Celigo data in file format is referred to as archives and archives can be imported back into a Celigo database using this operation.

When you import plates, you are returning plates, scans, and the associated scan results from their archive location (the location of the local hard drive) into the database in *.rcf format for use.

To import plates

- 1. Locate the files that you want to import.
- 2. In the Data tab, click the Import button.

The Import Plates dialog box appears (Figure 51).

Figure 51. Import Plates Dialog Box

	rv-netdb-01 CeligoTest						Include Subdirectori
der Containing Plates:	C:\Users\gdoyle\Do	cuments\Celigo\Archives					Browse
eck any Plates/Scans yo	u wish to import	(only archives with match	ing [plate ID].rcf files are s	hown):			
Original Name / Scans		New Name	Exists In Database	Description	Progress	Result	
- 🗹 👯 3214234	3.	214234					
🗹 🔀 asdasdasdsada	a	sdasdasdsada					
- 🗹 🚟 bombdiggity	ь	ombdiggity					
- 🗹 🚟 daggstrhrtjyjut	d	aggstrhrtjyjut					
- 🗹 👯 FGEWG	R	GEWG			-		
iuytrs	iu	iytrs					
- 🗹 👯 jigyuftdrses	jig	gyuftdrses					
- 🗹 🚟 Intgsgaa	lb	tgsgaa					
- 🔳 😳 test1	te	st1	1				
- 🗹 😳 test3	te	est3					
wretertert 🕄	w	retertert					
SSS xcvcxb	**	cwcxb					
- 🗹 🚟 xkrtukl	xi	krtuld					
e Remaining: Operatio							

3. To display the path that contains the folder with the plate folders to import:

• To the right of the Root Folder Containing Plates field, click the Browse... button and then, in the resulting Select Folder dialog box (Figure 52), navigate to the needed folder and click **Select Folder**.

NOTE: The default directory for archives will be the following: C:\Users\<username>\Documents\Celigo\Archives

• Users must browse to and select the parent folder that contains the entire archive folder. Users should not browse to and select the archive folder itself, or else no archives will appear in the list to import.

Figure 52. Select Folder Dialogue Box

rganize ▼ New folder This PC 3 D Objects Desktop Downloads Music Downloads	→ ^ ↑	This PC > Documents > Celigo > Archives			~ Ū	Search Archives	
This PC Name Date modified Type Size 3D Objects 3214234 5/20/2019 11:18 AM File folder Desktop asdasdasdsada 5/20/2019 11:18 AM File folder Documents asdasdasdsadaa 5/20/2019 11:12 AM File folder Downloads bobs 5/20/2019 11:12 AM File folder Music bobs_2019_05_20_11_8_57 5/20/2019 11:18 AM File folder	ganize 🔻 🛛 New f	older					
Desktop asdasdasdasda 5/20/2019 11:18 AM File folder Dockments asdasdasdasdaa_2019_05_20_11_18_56 5/20/2019 11:21 AM File folder Downloads bobs 5/20/2019 11:18 AM File folder Music bombdiggity 5/20/2019 11:18 AM File folder	This PC		Date modified	Туре	Size		
Documents sdasdasdsada_2019_05_20_11_18_56 5/20/2019 11:21 AM File folder Downloads bobs 5/20/2019 11:18 AM File folder Music bombdiggity 5/20/2019 11:18 AM File folder	 3D Objects	3214234	5/20/2019 11:18 AM	File folder			
Documents asdasdasdsada_2019_05_20_11_18_56 5/20/2019 11:21 AM File folder Downloads bobs 5/20/2019 11:18 AM File folder Music bombdiggity 5/20/2019 11:18 AM File folder	Desktop	🔒 asdasdasdsada	5/20/2019 11:18 AM	File folder			
Downloads 5/20/2019 11:18 AM File folder Music bobs_2019_05_20_11_18_57 5/20/2019 11:18 AM File folder bombdiggity 5/20/2019 11:18 AM File folder		asdasdasdsada_2019_05_20_11_18_56	5/20/2019 11:21 AM	File folder			
Music bombdiggity 5/20/2019 11:18 AM File folder		bobs	5/20/2019 11:18 AM	File folder			
bombdiggity 5/20/2019 11:18 AM File tolder	•	bobs_2019_05_20_11_18_57	5/20/2019 11:18 AM	File folder			
Pictures M David	Music	bombdiggity	5/20/2019 11:18 AM	File folder			
DAdtt 5/20/2019 11:19 AIVI File tolder	Pictures	Y DAdff	5/20/2019 11:19 AM	File folder			

If the selected plate folder contains exported archive folders (which individually contain their own .rcf file inside), the list of plate IDs appears in the Import Plates window. (The .rcf file must have the same name as the archive folder. The archive folder name is the plate name). If the, Include Subfolders checkbox is checked, when the path is updated by the Browse... button, the system will check every subfolder of the path for archives.

On the left side of the Import Plates dialog box, checkmark all plates that you want to import (Figure 53). You can also optionally choose individual scans of a plate to import.

This dialog will also specify whether a plate or its scan already exists in the database and provides you with the descriptions of the plates and scans to better inform the user what would be imported.

Figure 53. Plates Check Marked for Import

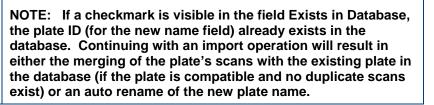
atabase Server: (local) atabase: Celigo52						 Include Subdirector
Ider Containing Plates: C:\Users\gdoyle	e\Documents\Celigo\Archives	\$				Browse
neck any Plates/Scans you wish to imp	ort (only archives with m	atching [plate ID].rcf files are :	shown):			🖂 💷 🗢
Original Name / Scans	New Name	Exists In Database	Description	Progress	Result	
🗹 Scan: 5/9/2019 4:14:05 PM		1				
🗌 🚟 asciasdasdsada	asdasdasdsada	4				
🕶 🗹 🚟 bombdiggity	bombdiggity	1				
🗹 Scan: 5/9/2019 3:18:32 PM		1	Created in Project Mode with the proj			
- Scan: 5/9/2019 3:22:10 PM		1	Created in Project Mode with the proj			
🗹 Scan: 5/9/2019 3:23:45 PM		~				
🗹 Scan: 5/9/2019 3:25:49 PM		1	Created in Project Mode with the proj			
🗹 Scan: 5/9/2019 3:45:30 PM		~	Created in Project Mode with the proj			
🗹 Scan: 5/10/2019 8:44:35 AM		~	Created in Project Mode with the proj			
🗹 Scan: 5/10/2019 8:45:41 AM		1	Created in Project Mode with the proj			
🗹 Scan: 5/13/2019 10:11:35 AM		~	Created in Project Mode with the proj			
🗹 Scan: 5/13/2019 10:13:00 AM		~	Created in Project Mode with the proj	_		
🗹 Scan: 5/13/2019 10:43:44 AM		~	Created in Project Mode with the proj			

4. If renaming of the plate that is being imported is desired:

- Select the plate row of the plate to be renamed.
- Right click in the New Name column for the plate row selected.
- A context menu will appear with a Rename menu item (Figure 54).
- Click the rename menu item and the field will become editable.
- Type in a new name for the plate and press enter.

Figure 54. Renaming Plate During Import

lmport Plates	
	srv-netdb-01 CeligoTest
Folder Containing Plates:	C:\Users\gdoyle\Documents\Celigo\Archives
Check any Plates/Scans y	ou wish to import (only archives with matching
Original Name / Scans	New Name
	3214234
🕬 🗹 🕅 asdasdasdsad	a asdasdasda
► 🗹 🐯 bombdiggity	
🕬 🗹 🐯 daggstrhrtjyju	t Rename
	EGEWG



5. Click Import.

The system begins importing the .rcf format files to the database and a progress screen appears. After each plate and scan completes, the progress for the item will state 100% and an import message for the item will appear for each plate and scan stating what the software did as part of the import operation.

Clicking Abort will cancel the import operation.

• If importing a plate that doesn't already exist in the database, the software will import the plate with the specified plate name (Figure 55).

Figure 55. Importing New Plate

a Import Plates						- 🗆	\times
Database Server: srv-netdb-01 Database: CeligoTest						Include Subdire	ctories
Folder Containing Plates: C:\Users\gdoyle\	Documents\Celigo\Archives					Growe	B
Check any Plates/Scans you wish to impo	ort (only archives with matching [p	olate ID].rcf files are s	hown):				6
Original Name / Scans	New Name	Exists In Database	Description	Progress	Result		
<u>) ₩ 888</u> 3214234	3214234			_	Imported as 3214234		^
- 🗹 💹 asdasdasdsada	asdasdasdsada			_	Imported as asdasdasdsada		
├─ 🗹 💹 bombdiggity	bombdiggity			_	Imported as bombdiggity		
🖛 🗹 🔝 daggstrhrtjyjut	daggstrhrtjyjut			-	Imported as daggstrhrtjyjut		
Scan: 5/13/2019 2:57:22 PM				-	Imported into daggstrhrtjyjut		
I I I I I I I I I I I I I I I I I I I	FGEWG			-	Imported as FGEWG		
- 🗹 Scan: 5/15/2019 9:49:44 AM				-	Imported into FGEWG		
👉 🗹 🗱 iuytrs	iuytrs			-	Imported as iuytrs		
L - 🗹 Scan: 5/14/2019 3:48:35 PM				-	Imported into iuytrs		
≁ ✓ III jigyuftdrses	jigyuftdrses						
Scan: 5/13/2019 10:53:20 AM							
🖛 🗹 🚟 Ihtgsgaa	Ihtgsgaa						
- 🗹 Scan: 5/14/2019 2:30:47 PM							
c							3
Time Remaining: 00:01:52							
Total Progress:					40% Impo	rt Abort	000000

• If importing a plate that already exists, the software will check to see if scans and scan results already exist within a plate and will automatically pre-select to import compatible scan and scan results. The software will then merge the new scans within the existing plate (Figure 56).

Figure 56. Import Plate Merging

Import Plates						- 0	
	local) Seligo52					Include Subdire	
Folder Containing Plates:	C:\Users\gdoyle\D	ocuments\Celigo\Archives				Trow	
Check any Plates/Scans ye	ou wish to import	t (only archives with matching [plate ID].rcf files are :	shown):			4 0 0
Original Name / Scans		New Name	Exists In Database	Description	Progress	Result	
- Scan: 5/9/2019	4:14:05 PM		~		_	Imported into 3214234_Restored_1	
- 📰 🐯 asdasdasdsada		asdasdasdsada	~				
🖌 🗹 🐹 bombdiggity	t	combdiggity	~			Imported as bombdiggity_Restored_1	
- 🗹 Scan: 5/9/2019	3:18:32 PM		~	Created in Project Mode with the proj	_	Imported into bombdiggity_Restored_1	
🗹 Scan: 5/9/2019	3:22:10 PM		~	Created in Project Mode with the proj	_	Imported into bombdiggity_Restored_1	
🗹 Scan: 5/9/2019	3:23:45 PM		~		_	Imported into bombdiggity_Restored_1	
- 🗹 Scan: 5/9/201	9 3:25:49 PM		~	Created in Project Mode with the p			
- 🗹 Scan: 5/9/2019	3:45:30 PM		~	Created in Project Mode with the proj			
- Scan: 5/10/201	9 8:44:35 AM		~	Created in Project Mode with the proj			
🗹 Scan: 5/10/201	9 8:45:41 AM		~	Created in Project Mode with the proj			
- 🗹 Scan: 5/13/201	9 10:11:35 AM		~	Created in Project Mode with the proj			
🗹 Scan: 5/13/201	9 10:13:00 AM		~	Created in Project Mode with the proj	_		
Scan: 5/13/201	9 10:43:44 AM		~	Created in Project Mode with the proj			_
ime Remaining: 00:00:1	1					32% Import Abort	

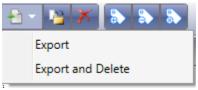
 If importing a plate with scan and scan results that already exists, the software will auto rename the imported plate. The software will automatically append to the name of the plate being imported to ensure it has a unique name (Figure 57).

Figure 57. Import Plate Auto Rename

abase Server: (local) abase: Celigo52					 Include Subdirector
der Containing Plates: CAUsers	gdoyle\Documents\Celigo\Archives				Grouven-
ck any Plates/Scans you wish t	to import (only archives with ma	atching [plate ID].rcf files are	shown):		🖂 🗔 👁
riginal Name / Scans	New Name	Exists In Database	Description	Progress	Result
	PM	4		_	Imported into 3214234_Restored_1
- 🔛 asdasdasdsada	asdasdasdsada	1			
✓ SSS bombdiggity	bombdiggity	1			Imported as bombdiggity_Restored_1
- 🗹 Scan: 5/9/2019 3:18:32	PM	1	Created in Project Mode with the proj	_	Imported into bombdiggity_Restored_1
🗹 Scan: 5/9/2019 3:22:10 F	PM	1	Created in Project Mode with the proj	_	Imported into bombdiggity_Restored_1
🗹 Scan: 5/9/2019 3:23:45 P	м	1		_	Imported into bombdiggity_Restored_1
- 🗹 Scan: 5/9/2019 3:25:49	PM	1	Created in Project Mode with the p		
🗹 Scan: 5/9/2019 3:45:30 F	м	1	Created in Project Mode with the proj		
- Scan: 5/10/2019 8:44:35	AM	1	Created in Project Mode with the proj		
🗹 Scan: 5/10/2019 8:45:41	AM	1	Created in Project Mode with the proj	_	
🗹 Scan: 5/13/2019 10:11:3		4	Created in Project Mode with the proj	_	
🗹 Scan: 5/13/2019 10:13:0		4	Created in Project Mode with the proj		
Scan: 5/13/2019 10:43:4	4 AM	~	Created in Project Mode with the proj		

7.8 Exporting Data

Figure 58. Export Button Options



The Export button (Figure 58) allows the user to export checked data from the Celigo database into a file format referred to as an archive. The Export and Delete button performs the same task as the export operation, but will also delete the checked data that was exported after a successful export operation.

When you export plates, scans, or scan results, you are moving them from the SQL database to your local data drive in .rcf format, followed by moving this archive copy to a different data drive for possible future use.

You select plates and scans for exporting with the associated scan results; you cannot select only scan results for exporting. You can only export scan results as a set; you do not export individual scan results.

To export plates, scans, or scan results

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click **Manage Data**.

The Data Management screen appears (Figure 30 above).

3. In the data view of the Data Tab, check the plates, scans, or scan results that you want to export.

To do this, left-click the checkbox to the left of the plate or select the **Check All** button (Figure 48), as applicable. To uncheck all, select the **Uncheck All** button (Figure 49).



NOTE: If you checkmark a plate, then a checkmark is automatically applied to ALL of its scans and all scan results, since they cannot exist in the database without an associated plate. Likewise, if you checkmark a scan, then a checkmark is automatically applied to its associated scan results.

4. Click Export.

A Browse for Folder dialog box appears (Figure 52). In the dialog box, navigate to the desired destination for the file.

<u>\</u>	NOTE: For best performance, archiving to an eSATA, USB 3.0 external hard drive, or networked file location over a 1 Gigabit Ethernet connection or better is recommended over exporting to the local C drive.
<u>`</u>	NOTE: Another option exists for exporting and deleting data at the same time. This is meant to streamline the operation if a user intends to delete the data after exporting. Data will only be deleted if it was successfully exported.

5. Click Select Folder.

The system begins exporting the plate in .rcf format and a progress bar appears.



NOTE: At this time, clicking Cancel only cancels the action on the next plate (assuming multiple plates were selected for export) to be exported and not on the plate currently being exported.

7.9 Moving Data

Figure 59. Move Button



The Move button (Figure 59) allows the user to move checked data from one Celigo folder to another.

To move data

1. In the Start tab, in the task screen, click Manage Data.

The Data Management screen appears (Figure 30 above) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the data display of the Data Tab, check all plates, scans, and scan results that you want to move to a new folder.

To do this, left-click the checkbox to the left of the plate or select the **Check All** button (Figure 48), as applicable. To uncheck all, select the **Uncheck All** button Figure 49).



NOTE: If you checkmark a plate, then a checkmark is automatically applied to ALL of its scans and all scan results, since they cannot exist in the database without an associated plate. Likewise, if you checkmark a scan, then a checkmark is automatically applied to its associated scan results.

- 3. Click the move button and the Folder Selection dialog will appear (Figure 60).
- 4. Select the folder to move all the checked data to and click **OK**.

Figure 60. Move Data – Folder Selection Dialog

Select Folder	To Move Plates To	×
Select Folder:	🔒 LAdmin	~
	ОК	Cancel

- 5. After the OK button is pressed, the software will attempt to perform the move operation for all data that is checked. If one of the following conditions for the data is found, no operation will be performed:
 - The data already resides in the selected folder.
 - The data is currently locked (the data is in use by another user). A lock icon will appear next to the data and no operation is performed.
 - The user does not have permission to move the data.

7.10 Deleting Data

Figure 61. Delete Button



The Delete button (Figure 61) allows the user to delete checked data from the Celigo database.

To delete plates, scans, or scan results

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 30 above).

- 3. Search as needed to find the items you want to delete (section Figure 32).
- 4. In the right-hand pane check the data items that you want to delete.

To do this, left-click the checkbox to the left of the plate or select the **Check All** button (Figure 48), as applicable. To uncheck all, select the **Uncheck All** button (Figure 49).



NOTE: If you checkmark a plate, then a checkmark is automatically applied to ALL of its scans and all scan results, since they cannot exist in the database without an associated plate. Likewise, if you checkmark a scan, then a checkmark is automatically applied to its associated scan results.

5. At the top of the data display in the Data Tab, click **Delete** (Figure 61).

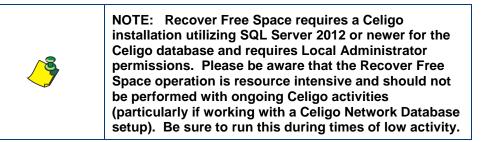
The system deletes all check marked items from the database (the entire plate and its associated scans and scan results).

- 6. Do one of the following:
 - If you want to wait for the system to begin freeing up space from the deleted files at its next scheduled checkpoint, no additional action is required.
 - If you want to immediately request that the system begin freeing up space from the deleted files, click the **Recover Free Space** button at the bottom right of the Data Management window (Figure 62).

Note: The Recover Free Space button is only active for the Sysadmin user.

Figure 62. Recover Free Space Button

Recover Free Space



7.11 Tagging Data

Figure 63. Add Tag Button



The Add Tag button (Figure 63) allows the user to add a tag to checked data. When first clicking on the Add Tag button, a dialog will appear asking the user to type in a new tag. As the user types a tag, a list will appear of tags matching the text typed if any exist. Once the tag has been entered, the user clicks OK to complete the operation and then a tag will appear next to the checked items.

Figure 64. Add Tag Selection Dialogs

S Tag Selection	×
Enter a tag to add:	
Project A	v
	OK Cancel

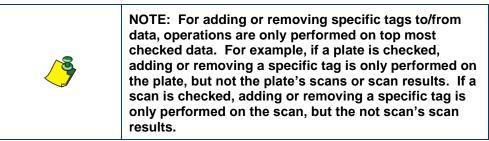
To tag data

1. In the Start tab, in the task screen, click Manage Data.

The Data Management screen appears (Figure 30 above) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the data display of the Data Tab, check all plates, scans, and scan results that you want to associate a tag with.

To do this, left-click the checkbox to the left of the plate or select the **Check All** button (Figure 48), as applicable. To uncheck all, select the **Uncheck All** button (Figure 49).



- 3. Click the **Add Tag** button (Figure 63) and the Tag Selection dialog (Figure 64) will appear.
- 4. In the Tag Selection dialog, enter a new or existing tag to associate with all the checked data to and click **OK**.

As text is typed, all matching tags will be displayed in a dropdown.

5. After the OK button is pressed, the tag is associated with all top most checked items.

7.12 Removing a Tag from Data

Figure 65. Delete Tag Button



The Delete Tag button (Figure 65) allows the user to delete a tag from checked data. When first clicking on the Delete Tag button, a dialog will appear (Figure 66) asking the user to type in a tag to remove. As the user types a tag, a list will appear of tags matching the text typed if any exist. If a tag is typed that is associated with the checked data, that tag will be removed when the user clicks OK. If a tag is typed that is not associated with the checked data, the data's tags will remain unchanged.

Figure 66. Delete Tag Selection Dialogs

S Tag Selection	×	
Enter a tag to delete:		
	1	
project a	ĥ	
day 1		

Figure 67. Clear All Tags Button



The Clear All Tags button (Figure 67) allows the user to delete all tags from checked data.

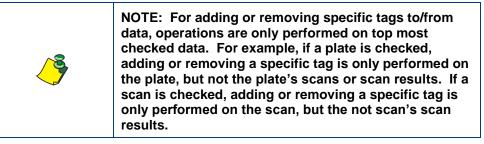
To remove a specific tag from data

1. In the Start tab, in the task screen, click **Manage Data**.

The Data Management screen appears (Figure 30 above) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the data view of the Data Tab, check all plates, scans, and scan results that you want to dissociate a tag from.

To do this, left-click the checkbox to the left of the plate or select the **Check All** button (Figure 48), as applicable. To uncheck all, select the **Uncheck All** button (Figure 49).



- 3. Click the Remove Tag button and the Tag Selection dialog will appear.
- 4. In the Tag Selection dialog, enter an existing tag to dissociate from the checked data to and click **OK**.

As text is typed, all matching tags will be displayed in dropdown.

5. After the OK button is pressed, the tag, if it is found associated with the top most checked items, is removed from the data item.

To remove all tags from data

1. In the Start tab, in the task screen, click Manage Data.

The Data Management screen appears (Figure 30 above) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the data view of the Data Tab, check all plates, scans, and scan results that you want to clear all tags from.

To do this, left-click the checkbox to the left of the plate or select the **Check All** button (Figure 48), as applicable. To uncheck all, select the **Uncheck All** button (Figure 49).



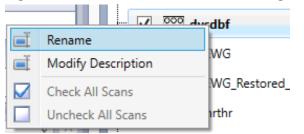
NOTE: If you checkmark a plate, then a checkmark is automatically applied to ALL of its scans and all scan results, since they cannot exist in the database without an associated plate. Likewise, if you checkmark a scan, then a checkmark is automatically applied to its associated scan results.

- 3. Click the Delete All Tags button.
- 4. After the button is pressed, all tags are removed from all plates, scans, and scan results currently checked.

7.13 Renaming a Plate

The user can right click on any plate in the displayed area and additional operations for the plate will appear via a context menu.

Figure 68. Plate Context Menu for Renaming a Plate



The Rename button allows the user to rename a plate by displaying the plate name in an editable textbox. If the name is already taken or if the name is invalid, the editing box for the name will appear red.

Figure 69. Editing Plate Name



To change a Plate Name (Plate ID)

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 30 above).

- 3. In the Data Management screen, click the Plate name that you want to change.
- 4. Right Click on the Plate.

A context menu (Figure 68) will appear with an option to rename the plate. After selecting this, the Plate name appears in a recessed field for editing.

5. Type the new name.

6. Press the enter key or click anywhere off of the new name to commit it.

7.14 Modifying Data Descriptions

The user can right click on any plate, scan, or scan result in the displayed area and an option to modify the data item's description will appear via a context menu. Clicking the Modify Description button allows the user to modify the data item's description by displaying the existing description in an editable textbox.

Figure 70. Data Description

Modify Description	
Check All Scans	
Uncheck All Scans	

To change a Plate Description

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 30 above).

- 3. In the Data Management screen, click the Plate name that you want to change.
- 4. Right click on the Plate.

A context menu (Figure 68) will appear with an option to modify the plate's description. After selecting this, the Plate description appears in a recessed field for editing.

- 5. Type the new description.
- 6. Press the enter key or click anywhere off of the new description to commit it.

To change a Scan Description

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 30 above).

- 3. In the Data Management screen, expand the Plate containing the scan you want to update.
- 4. Right Click on the Scan.

A context menu will appear with an option to modify the scan's description. After selecting this, the Scan description appears in a recessed field for editing.

- 5. Type the new description.
- 6. Press the enter key or click anywhere off of the new description to commit it.

To change a Scan Result Description

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 30 above).

- 3. In the Data Management screen, expand the Plate and Scan containing the scan result you want to update.
- 4. Right click on the Scan Result.

A context menu will appear with an option to modify the scan result's description. After selecting this, the Scan Result description appears in a recessed field for editing.

- 5. Type the new description.
- 6. Press the enter key or click anywhere off of the new description to commit it.

7.15 Loading a Scan

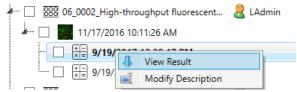
The user can right click on any scan in the displayed area and an option will appear via a context menu to load the scan (Figure 71). The Analyze Scan button allows the user to load the selected scan directly into the Analyze tab.

Figure 71. Context Menu for Scans



The user can right click on any scan result in the displayed area and an option will appear via a context menu (Figure 72) to load the scan with the specified scan result. View Result button allows the user to load the scan with the specified scan result directly into the Results tab.

Figure 72. Context Menu for Scan Results



To Load a Scan

1. Log in to the Celigo application.

2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 30 above).

- 3. In the Data Management screen, expand the Plate you want to load a scan from.
- 4. Right Click on the scan you want to load.

A context menu (Figure 71) will appear with an option to load the scan.

5. Select the Analyze Scan menu item from the context menu and the scan will load directly into the Analyze tab.

To Load a Scan with a specific Scan Result

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click **Manage Data**.

The Data Management screen appears (Figure 30 above).

- 3. In the Data Management screen, expand the Plate and Scan you want to load a scan from.
- 4. Right Click on the scan result you want have loaded with the Scan.

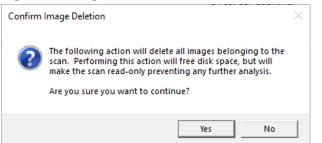
A context menu (Figure 72) will appear with an option to load the scan with the specified scan result.

5. Select the View Result menu item from the context menu and the scan will load with the specified scan result directly into the Results tab.

7.16 Deleting Scan Images

The Delete Images button allows the user to delete all images associated with the scan while keeping the scan data in the Celigo database. If the user selects this operation, the user will first be prompted to confirm the operation. Once the user confirms the operation, the scan's images will be deleted.

Figure 73. Image Deletion Confirmation



Once the images are deleted for a scan, the scan will have the text Deleted displayed in its Image Format column and will no longer be capable of being reanalyzed (read-only). If the scan is loaded, the user will only have access to the Results Tab displaying the well thumbnails and measurements. Since no images are available for the scan, well viewing is disabled for the scan.

To Delete Scan Images

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 30 above).

- 3. In the Data Management screen, expand the Plate you want to delete scan images from.
- 4. Right Click on the scan you want to delete images from.

A context menu will appear with an option to delete scan images.

- 5. Select the Delete Images menu item from the context menu to have its images deleted.
- 6. Click Yes for the confirmation pop-up (Figure 73) and the scan's images will be deleted.

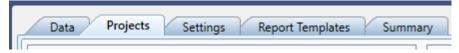
8. Managing Projects

Figure 74. Data Management Screen

Data Projects Settings Report Templates Summa	iry						
Search Data	1 2 - 12 × 3 3 3						⇐ ➡ 🖹 - 🚺
Search only Tags	Name	Folder #	≠ Channe Image Form	Application	Created By	Description	Tags
	🗌 🗱 00_Competition Co-Culture	al LAdmin			Local Administrator		
Folders	🗌 🐯 009_MDA-MB-231 and NK92 ADCC Ass	al Ex			Genscript Nanjing	Measuring dose dependent	
Include Folder Has Contents		a LAdmin			Local Administrator		
🗹 🚨 asdagdsdf	🗌 🗱 011_PBMC Mediate Cytotoxicity Assay	al LAdmin			Local Administrator		
🗹 Awesome Sauce	🗌 🗱 051017 mFFRNT_F	and the second s			Huang Lab	WN/D1 mFFRNT plate F	
🗹 🤮 EX 🗸	🗌 🗱 072716 ST Spheroid screen dose 5	a LAdmin			guest guest		
🗹 🔒 LAdmin 🗸	- 🗆 🚟 1	a LAdmin			Local Administrator	My Description	
🗹 🤱 мдн 🗸 🗸	🗌 🗱 1_17_16TC71 matrigel IGF	and Tim			Allison Cross	1_17_16TC71 matrigel IGF 48	
Plate Filters	🗌 🗱 20140924SK_Cell Cycle with Pl	a LAdmin			Local Administrator		
Plate Profile: Any plate *	🗌 🗱 20141022 John CDC	ali Ex			Blue Bird	John's CDC assay	
Project: Any project v	🗌 🗱 20141022 John CDC with BF	ar Ex			Blue Bird	CDC 1 Plate	
Created By: Anyone	🗌 🗱 20141024 John CDC Adherent	a LAdmin			Blue Bird		
Has Scans: Yes or No Y	🗁 🗌 🗱 20141024 John CDC Adherent with BF	ala Ex			Blue Bird	96-w with green, blue, red, a	
	🗌 🚟 20150220_CDC Assay 10000 2P Serum	al LAdmin			Local Administrator		
Scan Filters	🗌 🚟 20150226 Joanne Ab internalization test	and the second s			Local Administrator		
Number of Channels: Any 1	🗌 🗱 20150406_Nina_GFP Transfection Grein	al LAdmin			Tim Smith		
Image Any v	🗌 🚟 20150527_Lily_Internalization 2	a LAdmin			Shire		
Acquired 2/10/2010 - and 5/22/2010 -		a LAdmin			Shire		
Between:	🗌 🗱 20150604_Lili_internalization_suspension	al LAdmin			Shire		
Created By: Anyone v Has Results: Yes or No v	▶ □ 888 20150604_Lili_internalization_suspensio	and the second s			Shire		
Result Filters							
Application: Any 🗸 🧹							
Auto Refresh Reset Filters Refresh Filters	# Plates: 146 # Scans: 364 # ScanResults:	544				1 0	out of 8 阔 🔺 🕨
Back						Recover Free Space	Refresh

The Data Management is broken into five separate views: Data, Projects, Settings, Report Templates and Summary. The Projects Tab displays all the project files, currently stored in the Celigo database, which the logged in user has access to. Projects refer to a collection of settings that bundle the plate profile, experiment, and export settings together. Projects are displayed to the user in a grid on the right-hand side of the screen.

Figure 75. Projects Tab in Data Management



8.1 Searching for Projects

The default setting for this Projects Tab (Figure 75) is to display all the projects the user has access to. If the user would like to limit what is displayed, the user can modify the filter settings found on the left side of the screen (Figure 76).

Search Project	s		Search Section	
Search only Tags			-	
Include Folder	a rWoman	Has Contents	- Folders Section	
Project Filters Plate Profile: Application: Created By: Created Between: Last Modified Between:	Any plate Any Anyone 5/9/2019 • and 5/1 5/13/2019 • and 5/1		Project Filters Section	n
✓ Auto Refresh		Reset Filters		

Figure 76. Search Filters for Projects

Filters are broken up into 3 sections: Search, Folders, and Project Filters.

Search

The Search section appears just above the Folders section. This section is primarily an open text field that allows the user to type in any text to match a name, description, or tag for any project. If desired, a checkbox exists to limit the search to only the project's related tags.

Folders

The Folders section appears underneath the Search section and displays all folders the user has access to.

Project Filters

The Project Filters section appears just below the Folders section. This section allows a user to filter projects by setting plate profile, application, project creator, date the project was created, and date the project was last modified.

Refreshing Controls

If a user modifies any setting while the Auto Refresh checkbox (Figure 77) is checked, a refresh operation will occur, and the software will display the updated project set matching the new filter criteria on the right-hand side of the screen.

Figure 77. Auto Refresh Checkbox

Auto Refresh

If the Auto Refresh checkbox is not checked, no refresh operation will occur until the user clicks the Refresh button (Figure 78) located at the bottom right hand side of the screen.

Figure 78. Refresh Button



Perform the following steps to search for projects.

- 1. Log into the Celigo application.
- 2. In the Start tab's task screen, click Manage Data. The Data Management screen appears.
- 3. Select the Projects Tab.
- 4. Make adjustments to any search and filter entries as applicable (see descriptions above).
- 5. Click Refresh. The Data display on the right side of the screen will display any found project results matching the search parameters/filters specified.



NOTE: If the Auto Refresh checkbox is checked, step 5 above is not necessary. A refresh operation will be invoked for every change setting as a setting is changed.

8.2 Clearing Search Selections

The Reset Filters button (Figure 79) provides the user the ability to revert all the filters back to default settings which will display all projects on the right-hand side of the screen after a refresh is invoked.

Figure 79. Reset Filters Button

Reset Filters

To clear search settings for projects

 In Data Management screen in the Projects Tab, click the Reset Filters button (Figure 79).

8.3 Updating Search Selections

The Project Filters are set to have their selectable options and limits based on the entire database. Application will therefore only display applications that are associated with the projects in the database. Created By filter and all other filters function similarly. When the Celigo is connected to a network database (where it is possible for other users to be changing the data in the database you are connected to) the limits of your filters can change from when they have been loaded. The Refresh Filters button (Figure 80) allows a user to refresh the limits of all their filters to the current state of the database.

Figure 80. Refresh Filters Button

Refresh Filters



NOTE: The Refresh Filters button is only displayed when the Celigo is connected to a network database. This option is not present for Celigos connected to local databases.

To update the bounds of the search settings for projects

• In Data Management screen in the Projects Tab, click the Refresh Filters button.

8.4 Viewing Projects

Projects are displayed to the user in a grid (Figure 81) on the right-hand side of the screen. This section of the screen allows the user to view projects matching the filters specified and enables the user to perform various functions on that data.

Figure 81. Data Display Grid for Projects

a a -	1	> > > > >							
Check	Icor	Name	Folder	Application	Created By	Created Date	Last Modified	Description	Tags
		DCC Secretion	\rm 🗶 LAdmin	Direct Cell Cour	Local Administ	5/22/2019	5/22/2019		
				Target 1 + 2 +			5/22/2019		
	1	DCC	🚨 LAdmin	Direct Cell Cour	Local Administ	5/22/2019	5/22/2019		
# Projects	: 3		_	_	_				

The projects displayed in the grid are organized into columns that display various properties of the projects. These columns include: Check, Icon, Name, Folder, Application, Created By, Created Data, Last Modified, Description, and Tags. All columns other than Tags are sortable. The button strip (Figure 82) at the bottom of the projects display section displays the project count of the found matching settings set.

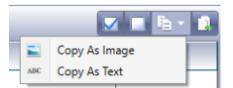
Figure 82. Button Strip for Projects

Projects: 3

8.5 Exporting Projects Report

The Projects Tab allows a user to copy the current data result set as an image, text, or as an exported CSV file.

Figure 83. Copy Button Dropdown Menu



The Copy As Image button allows the user to copy the displayed projects (as seen on the screen) as an image to the clipboard.

The Copy As Text button allows the user to copy all projects as text to the clipboard.

Figure 84. Export Button

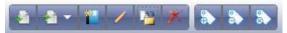


The Export button (Figure 84) allows the user to save a text file of all projects to disk.

8.6 Selecting Projects

Each project item can be checked or unchecked. Checking a project item marks it to be included for a project operation if one is chosen by the user.

Figure 85. Project Operation Buttons



Project operations (Figure 85) can be found at the top left of the projects display section. These operations include: Import, Export, Export and Delete, Create New, Edit, Move, Delete, Add Tag, Remove Tag, and Clear All Tags.

To check all projects in the projects view

• With the Project tab selected in the Data Management screen, click the Check All button at the top right of the screen (Figure 86).

Figure 86. Check All Button



To uncheck all projects in the projects view

• With the Projects tab selected in the Data Management screen, click the Uncheck All Button at the top right of the screen (Figure 87).

Figure 87. Uncheck All Button



8.7 Importing Projects

Figure 88. Import Button



The Import button (Figure 88) allows the user to import projects into the Celigo database. When you import projects, you are importing to the database in XML format.

To import projects

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 101).

- 3. Click the Projects Tab.
- 4. Click Import.

A Select Projects to Import dialog box appears. The dialog box for importing projects is shown in (Figure 89).

NOTE: The default directory for settings will be the following: C:\Users\<username>\Documents\Celigo\Projects

Figure 89. Importing Projects Dialog Box

→ × ↑ 📙	> This PC ⇒ Doc	uments > Celigo > Pr	ojects		✓ Õ Searce	ch Projects)
ganize 🔻 🛛 Ne	w folder						
This PC	↑ □ Name	^	Date modified	Туре	Size		
3D Objects	DC	C Secretion.cpj	5/28/2019 10:15 AM	CPJ File	1,332 KB		
Desktop	DC	С.срј	5/28/2019 10:15 AM	CPJ File	32 KB		
Documents	test	t459231.cpj	5/28/2019 10:15 AM	CPJ File	42 KB		
🕹 Downloads							
👌 Music							
Pictures	~						
	File name:				~ Celi	go Project (*.cpj)	

5. In the Look in field, navigate to the folder that contains the projects to import.

The system displays the projects folders that contain a corresponding XML file. The file extensions for the XML files are as follows:

- Projects: .cpj (Celigo Project).
- 6. Do one of the following to select the project(s) that you want to import:
 - To select a single file: In the File name field, type a name for the project that you want to import.
 - To select multiple files, Ctrl+click.

7. Click Open.

The system begins the import operation and a progress screen appears. The system imports the .cpj files (XML format) to the database. Clicking Cancel will cancel the import operation.

8.8 Exporting Projects

Figure 90. Export Button

	-	1	× 🎭 🛪 🔈 🗞
Export		Icou	Name
Export and De	lete	Icor	Robsvourundo

The Export button (Figure 90) allows the user to export checked projects from the Celigo database into a file format. The Export and Delete button performs the same task as the export operation, but also will delete the checked projects that were exported after the export operation is successful.

To export projects

- 1. Log into the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 101).

- 3. Select the Projects Tab.
- 4. In the right pane, check the projects you want to export.
- 5. Click Export.

Figure 92 shows the dialog box that appears for exporting the Project line item.

- 6. Navigate to designated or default folder (Figure 91), if applicable.
- 7. Enter File name.
- 8. Click Save.

Figure 91. Exporting Project

Search Projects		a -	1	× 🍇 🛪 🔈 🔊	
	Export		Ico	Name	Folder
Search only Tags	Export and De	lete		DCC Secretion	LAdmi
Folders	📑 🗉 🗡 🔽 🗖	v		test459231	🚨 LAdmi
		 Image: A start of the start of		DCC	\rm 🔏 LAdmi

Figure 92. Exporting Projects Dialog

→ * ↑	This PC → Documents → Celigo → Pro	jects		✓ [™] Search Pro	ects	۶
janize 🔻 New fo	lder					
This PC	Name	Date modified	Туре	Size		
3D Objects	DCC Secretion.cpj	5/28/2019 10:15 AM	CPJ File	1,332 KB		
Desktop	DCC.cpj	5/28/2019 10:15 AM	CPJ File	32 KB		
Documents	test459231.cpj	5/28/2019 10:15 AM	CPJ File	42 KB		
Downloads	4					
File name: tes	t4592351.cpj					
Save as type: Cel	igo Project (*.cpj)					

NOTE: The default directory for settings will be the following: C:\Users\<username>\Documents\Celigo\Projects

• Projects: .cpj (Celigo Project).

8.9 Moving Projects

Figure 93. Move Button



The Move button (Figure 93) allows the user to move checked projects from one Celigo folder to another.

To move projects

1. In the Start tab, in the task screen, click **Manage Data**.

The Data Management screen appears (Figure 101) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the data view of the Projects Tab, check all projects that you want to move to a new folder.

To do this, left-click the checkbox to the left of the project or select the **Check All** button (Figure 113), as applicable. To uncheck all, select the **Uncheck All** button (Figure 114).

- 3. Click the Move button and the Folder Selection dialog will appear.
- 4. In the Folder Selection dialog (Figure 120), select the folder to move all the checked projects to and click **OK**.

Figure 94. Folder Selection Dialog

Select Folder To Move Project(s) To						
Select Folder:	LAdmin	y				
		OK Cancel	j			

5. After the OK button is pressed, the software will attempt to perform the move operation for all projects that are checked. If one of the following conditions for the settings is found, no operation will be performed:

- The project already resides in the selected folder.
- The user does not have permission to move the project.

8.10 Deleting Projects

Figure 95. Delete Button



The Delete button (Figure 121) allows the user to delete checked projects from the Celigo database.

To delete projects

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click **Manage Data**.

The Data Management screen appears (Figure 101 above).

- 3. Select the Projects Tab.
- 4. Search as needed to find the items you want to delete (section 9.1).
- 5. In the right-hand pane check the detail items that you want to delete.

To do this, left-click the checkbox to the left of the project or select the **Check All** button (Figure 113), as applicable. To uncheck all, select the **Uncheck All** button (Figure 114).

6. At the top of the projects view in the Projects Tab, click **Delete**.

The system deletes all check marked items from the database.

8.11 Tagging Projects

Figure 96. Add Tag Button



The Add Tag button (Figure 96) allows the user to add a tag to checked projects. When first clicking on the Add Tag button, a dialog will appear asking the user to type in a new tag. As the user types a tag, a list will appear of tags matching the text typed if any exist. Once the tag has been entered, the user clicks OK to complete the operation and then a tag will appear next to the checked items.

Figure 97. Add Tag Selection Dialogs

	OK Cancel
	v
Enter a tag to add:	
🖏 Tag Selection	×

Tag Selection	×
Enter a tag to add:	
Cell Assay 01	~
	OK Cancel
Tags	
cell a	

To tag projects

1. In the Start tab, in the task screen, click **Manage Data**.

The Data Management screen appears (Figure 101 above) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the projects view of the Projects Tab, check all projects that you want to associate a tag with.

To do this, left-click the checkbox to the left of the project or select the **Check All** button (Figure 113), as applicable. To uncheck all, select the **Uncheck All** button (Figure 114).

- 3. Click the **Add Tag** button (Figure 96) and the Tag Selection dialog (Figure 97) will appear.
- 4. In the Tag Selection dialog, enter a new or existing tag to associate with all the checked projects to and click **OK**.

As text is typed, all matching tags will be displayed in dropdown.

5. After the OK button is pressed, the tag is associated with all checked items.

8.12 Removing a Tag from Projects

Figure 98. Delete Tag Button



The Delete Tag button (Figure 98) allows the user to delete a tag from checked projects. When first clicking on the Delete Tag button, a dialog will appear (Figure 99) asking the user to type in a tag to remove. As the user types a tag, a list will appear of tags matching the text typed if any exist. If a tag is typed that is associated with the checked projects, that tag will be removed when the user clicks OK. If a tag is typed that is not associated with the checked projects, the data's tags will remain unchanged.

Figure 99. Delete Tag Selection Dialog

	ок	Cancel
cell		×
Enter a tag to delete:		
💫 Tag Selection		×
	ок	Cancel
Enter a tag to delete:		~
🔊 Tag Selection		\times

Figure 100. Delete All Tags Button



The Delete All Tags button (Figure 100) allows the user to delete all tags from checked projects.

To remove a specific tag from projects

1. In the Start tab, in the task screen, click **Manage Data**.

The Data Management screen appears (Figure 101) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the project view of the Projects Tab, check all projects that you want to dissociate a tag from.

To do this, left-click the checkbox to the left of the project or select the **Check All** button (Figure 113), as applicable. To uncheck all, select the **Uncheck All** button (Figure 114).

- 3. Click the **Delete Tag** button (Figure 99) and the Tag Selection dialog will appear.
- 4. In the Tag Selection dialog, enter an existing tag to dissociate from the checked projects to and click **OK**.

As text is typed, all matching tags will be displayed in dropdown.

5. After the OK button is pressed, the tag, if it is found associated with the checked items, is removed from the item.

To remove all tags from projects

1. In the Start tab, in the task screen, click **Manage Data**.

The Data Management screen appears (Figure 101) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the projects view of the Projects Tab, check all projects that you want to clear all tags from.

To do this, left-click the checkbox to the left of the project or select the **Check All** button (Figure 113), as applicable. To uncheck all, select the **Uncheck All** button (Figure 114).

- 3. Click the **Delete All Tags** (Figure 100) button.
- 4. After the button is pressed, all tags are removed from all projects currently checked.

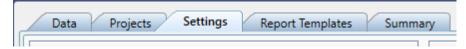
9. Managing Settings

Figure 101. Data Management Screen: Settings Tab

Search Setting	Is	_	2 2	- 1	s 🗡 🔈 🔊 🕯						🔽 💷 🖷 🔹 🛽
Search only Tags			Check	Туре	Name	Folder	Application	Created By	Created Date	Last Modified Description	Tags
) Search only lags				Α	Tim_AOPI_Counti	🚨 LAdmin	Target 1 + 2 + 3	Local Administrat	10/27/2016	10/27/2016	
Folders		= X 🗸 🗖		E	Tim_AOPI_Counti	a Scientist	Target 1 + 2 + 3	Local Administrat	10/27/2016	10/27/2016	
Include Folder		Has Contents		E	HT AOPI Cell Cou	🚨 LAdmin	Live + Dead	Local Administrat	11/04/2016	11/04/2016	
🗹 🤰 asdag		has contenta		A	madeline green	🚨 LAdmin	Colony 1	Local Administrat	11/14/2016	11/14/2016	
Aweso				A	Dark_Tim_T-cell	📕 Tim	Target 1	Tim Smith	12/08/2016	12/08/2016	
Ex 2		1		A	Light_Tim_T-cell	🚨 Tim	Target 1	Tim Smith	12/08/2016	12/08/2016	
🖌 🤱 LAdmi	n	1		Α	Tim GFP_APC	🗶 Tim	Target 1 + 2 + M	Tim Smith	12/09/2016	12/09/2016	
🗐 🙎 ман		J		A	D	📒 Tim	Direct Cell Counti	Tim Smith	12/12/2016	12/12/2016	
				Α	L	📒 Tim	Direct Cell Counti	Tim Smith	12/12/2016	12/12/2016	
etting Filters				E	test_exp	🚨 LAdmin	Target 1 + 2	Local Administrat	12/13/2016	12/13/2016	
Setting Type:	Any	~		Ε	SD024-01 3D co	🚨 Tim	Tumorsphere 1 +	Tim Smith	01/05/2017	01/05/2017	
Application:	Any	*		E	ABC-1	🚨 Tim	Target 1 + 2 + 3	Tim Smith	01/06/2017	01/06/2017	
Created By:	Anyone	· · · · ·		E	HTS Suspension	🚨 Tim	Target 1 + 2 + 3	Tim Smith	01/06/2017	01/06/2017	
Created Between:	10/27/2016 • and	5/22/2019		E	ABC-Cell Cycle	🚨 Tim	Target 1 + Mask	Tim Smith	01/06/2017	01/06/2017	
Last Modified	10/27/2016 • and	5/22/2019		E	ABC-Cell Cycle1	🚨 Tim	Target 1 + Mask	Tim Smith	01/06/2017	01/06/2017	
Between:				Ε	Cell Cycle using PI	📕 Tim	Target 1 + Mask	Tim Smith	01/06/2017	01/06/2017	
				E	ABC-3	🚨 Tim	Tumorsphere 1 +	Tim Smith	01/06/2017	01/06/2017	
			E	ABC-3b	🗶 Tim	Tumorsphere 1 +	Tim Smith	01/06/2017	01/06/2017		
				E	3D Spheroid	area and a scientist	Tumorsphere 1 +	Tim Smith	01/06/2017	01/06/2017	
			A	Tumorsphere 1	🚨 Tim	Tumorsphere Mig	Tim Smith	01/23/2017	01/23/2017		
			A	merge settings fo	🚨 МСН	Target 1 + 2 + 3	Local Administrat	01/24/2017	01/24/2017		
				A	Tumorsphere Tim	🚨 Tim	Tumorsphere Mig	Tim Smith	01/26/2017	01/26/2017	
				Α	Background Corr	🚨 Tim	Target 1 + 2 + 3	Tim Smith	02/06/2017	02/06/2017	
				A	bill measure far r	🚨 MGH	Colony 1	MGH wellman	02/08/2017	02/08/2017	

The Data Management is broken into five separate views: Data, Projects, Settings, Report Templates and Summary. The Settings Tab displays all the settings, currently stored in the Celigo database, which the logged in user has access to. Settings refer to Experiments, Analysis Settings, and Classification Settings. Settings are displayed to the user in a grid on the right-hand side of the screen.

Figure 102. Settings Tab in Data Management



9.1 Searching for Settings

The default setting for this Settings Tab (Figure 102) is to display all the settings the user has access to. If the user would like to limit what is displayed, the user can modify the filter settings found on the left side of the screen (Figure 103).

Search Setting	IS		L	
Search only Tags			ך	Search Section
Folders	1		ו	
Include Folder		Has Contents		
🗹 asdag	dsdf			
🗹 👶 Aweso	me Sauce			Folders Section
🖌 📒 Ex		1		
🗹 LAdmi	n	1		
🗹 🙎 МСН		J V	J	
Setting Filters			1	
Setting Type:	Any	~		
Application:	Any	v		
Created By:	Anyone	¥		Setting Filters Section
Created Between:	10/27/2016 • and	5/22/2019 🔹		
Last Modified Between:	10/27/2016 • and	5/22/2019 🔹		
			.	
✓ Auto Refresh	Reset Filters	Refresh Filters		

Figure 103. Search Filters for Settings

Filters are broken up into 3 sections: Search, Folders, and Setting Filters.

Search

The Search section appears just above the Folders section. This section is primarily an open text field that allows the user to type in any text to match a name, description, or tag for any setting (experiment, analysis settings, or classification settings). If desired, a checkbox exists to limit the search to only the setting's related tags.

Folders

The Folders section appears underneath the Search section and displays all folders the user has access to. This section works in the same manner as it does in the Settings Tab.

Setting Filters

The Setting Filters section appears just below the Folders section. This section allows a user to filter settings by setting type, application, setting creator, date the setting was created, and date the setting was last modified.

Refreshing Controls

If a user modifies any setting while the Auto Refresh checkbox (Figure 104) is checked, a refresh operation will occur and the software will display the updated settings set matching the new filter criteria on the right-hand side of the screen.

Figure 104. Auto Refresh Checkbox

✓ Auto Refresh

If the Auto Refresh checkbox is not checked, no refresh operation will occur until the user clicks the Refresh button (Figure 105) located at the bottom right hand side of the screen.

Figure 105. Refresh Button

Refresh

Perform the following steps to search for settings.

To search for settings (experiments, analysis settings, classification settings):

- 1. Log into the Celigo application.
- 2. In the Start tab's task screen, click Manage Data. The Data Management screen appears.
- 3. Select the Settings Tab.
- 4. Make adjustments to any search and filter entries as applicable (see descriptions above).
- 5. Click Refresh. The Data display on the right side of the screen will display any found setting results matching the search parameters/filters specified.



NOTE: If the Auto Refresh checkbox is checked, step 5 above is not necessary. A refresh operation will be invoked for every change setting as a setting is changed.

9.2 Clearing Search Selections

The Reset Filters button (Figure 106) provides the user the ability to revert all the filters back to default settings which will display all settings on the right-hand side of the screen after a refresh is invoked.

Figure 106. Reset Filters Button

Reset Filters

To clear search settings for settings (experiments, analysis settings, classification settings):

• In Data Management screen in the Settings Tab, click the Reset Filters button (Figure 106) Updating Search Selections.

The Setting Filters are set to have their selectable options and limits based on the entire database. Application will therefore only display applications that are associated with the settings in the database. Created By filter and all other filters function similarly. When the Celigo is connected to a network database (where it is possible for other users to be changing the data in the database you are connected to) the limits of your filters can change from when they have been loaded. The Refresh Filters button (Figure 107) allows a user to refresh the limits of all their filters to the current state of the database.

Figure 107. Refresh Filters Button

Refresh Filters



To update the bounds of the search settings for settings (experiments, analysis settings, classification settings):

• In Data Management screen in the Settings Tab, click the Refresh Filters button.

9.3 Viewing Settings

Settings are displayed to the user in a grid (Figure 108) on the right-hand side of the screen. This section of the screen allows the user to view settings matching the filters specified and enables the user to perform various functions on that data.

Figure 108. Data Display Grid for Settings

		Name	Folder	Application	Created By	Created Date		Description	Tags
		Tim_AOPI_Counti	-		Local Administrat		10/27/2016		
	Ε	Tim_AOPI_Counti	-	Target 1 + 2 + 3	Local Administrat	10/27/2016	10/27/2016		
	Е	HT AOPI Cell Cou	a LAdmin	Live + Dead	Local Administrat	11/04/2016	11/04/2016		
	Α	madeline green	2 LAdmin	Colony 1	Local Administrat	11/14/2016	11/14/2016		
	Α	Dark_Tim_T-cell	🙎 Tim	Target 1	Tim Smith	12/08/2016	12/08/2016		
	Α	Light_Tim_T-cell	🙎 Tim	Target 1	Tim Smith	12/08/2016	12/08/2016		
	А	Tim GFP_APC	🙎 Tim	Target 1 + 2 + M	Tim Smith	12/09/2016	12/09/2016		
	Α	D	🗶 Tim	Direct Cell Counti	Tim Smith	12/12/2016	12/12/2016		
	Α	L	🗶 Tim	Direct Cell Counti	Tim Smith	12/12/2016	12/12/2016		
	E	test_exp	8 LAdmin	Target 1 + 2	Local Administrat	12/13/2016	12/13/2016		
	Е	SD024-01 3D co	🗶 Tim	Tumorsphere 1 +	Tim Smith	01/05/2017	01/05/2017		
	Е	ABC-1	\rm Tim	Target 1 + 2 + 3	Tim Smith	01/06/2017	01/06/2017		
	E	HTS Suspension	🙎 Tim	Target 1 + 2 + 3	Tim Smith	01/06/2017	01/06/2017		
	E	ABC-Cell Cycle	🙎 Tim	Target 1 + Mask	Tim Smith	01/06/2017	01/06/2017		
	E	ABC-Cell Cycle1	🙎 Tim	Target 1 + Mask	Tim Smith	01/06/2017	01/06/2017		
	E	Cell Cycle using PI	🗶 Tim	Target 1 + Mask	Tim Smith	01/06/2017	01/06/2017		
	E	ABC-3	🗶 Tim	Tumorsphere 1 +	Tim Smith	01/06/2017	01/06/2017		
	E	ABC-3b	\rm Tim	Tumorsphere 1 +	Tim Smith	01/06/2017	01/06/2017		
	E	3D Spheroid	8 Scientist	Tumorsphere 1 +	Tim Smith	01/06/2017	01/06/2017		
		Tumorsphere 1	Tim	Tumorsphere Mig	Tim Smith	01/23/2017	01/23/2017		
	_	merge settings fo	8 MGH	Target 1 + 2 + 3	Local Administrat	01/24/2017	01/24/2017		
	_	Tumorsphere Tim	\rm Tim	Tumorsphere Mig	Tim Smith	01/26/2017	01/26/2017		
	A	Background Corr	🙎 Tim	Target 1 + 2 + 3	Tim Smith	02/06/2017	02/06/2017		
_	-	bill measure far r	-	-	MGH wellman		02/08/2017		

The settings displayed in the grid are organized into columns that display various properties of the settings. These columns include: Check, Type, Name, Folder, Application, Created By, Created Data, Last Modified, Description, and Tags. All columns other than Tags are sortable. The button strip (Figure 109) at the bottom of the settings display section displays the setting count of the found matching settings set.

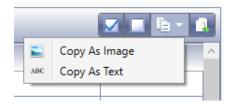
Figure 109. Button Strip for Settings

Settings: 52

9.4 Exporting Settings Report

The Settings Tab allows a user to copy the current data result set as an image, text, or as an exported CSV file (Figure 110).

Figure 110. Copy Button



The Copy As Image button allows the user to copy the displayed settings (as seen on the screen) as an image to the clipboard.

The Copy As Text button allows the user to copy all settings as text to the clipboard.

Figure 111. Export Button



The Export button (Figure 111) allows the user to save a text file of all settings to disk.

9.5 Selecting Settings

Each setting item (experiment, analysis setting, and classification setting) can be checked or unchecked. Checking a data item marks the data item to be included for a data operation if one is chosen by the user.

Figure 112. Setting Operation Buttons



Setting operations (Figure 112) can be found at the top left of the setting display section. These operations include: Export, Export and Delete, Move, Delete, Add Tag, Remove Tag, and Clear All Tags. One additional operation that exists in this area of the user interface that does not involve checked data items is the Import operation.

To check all settings in the settings view

• With the Setting tab selected in the Data Management screen, click the Check All button at the top right of the screen (Figure 113).

Figure 113. Check All Button



To uncheck all settings in the settings view

• With the Setting tab selected in the Data Management screen, click the Uncheck All Button at the top right of the screen (Figure 114).

Figure 114. Uncheck All Button



9.6 Importing Settings

Figure 115. Import Button



The Import button (Figure 115) allows the user to import settings into the Celigo database. When you import settings, you are importing to the database in XML format.

To import settings

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 101 above).

- 3. Click the Settings Tab.
- 4. Click Import.

A Select Settings to Import dialog box appears. The dialog box for importing settings is shown in (Figure 116).

NOTE: The default directory for settings will be the following: C:\Users\<username>\Documents\Celigo\Settings

Figure 116. Importing Settings Dialog Box

ganize ▼ New folder Image: State S	→ * ↑	> Th	nis PC ⇒	Documents > Celigo > Settings			✓ Ö Sea	rch Settings	٩
This PC Name Date modified Type Size 3D Objects 20150604_Lili_internalization_adherent 5/28/2019 10.40 AM CES File 38 KB Desktop 20150604_Lili_internalization_suspensi 5/28/2019 10.40 AM CES File 35 KB Documents 20150201_Laivie Experiment 1_Cell prol 5/28/2019 10.40 AM CES File 24 KB Downloads 20151207_Lavie Experiment 1_Cell prol 5/28/2019 10.40 AM CES File 26 KB Music 20151201_Lavie Experiment 1_Cell prol 5/28/2019 10.40 AM CES File 26 KB	janize 🔻 New	v fold	er						?
3D Objects 20150604_Lili_internalization_adherent 5/28/2019 10:40 AM CES File 38 KB Desktop 20150604_Lili_internalization_suspensi 5/28/2019 10:40 AM CES File 35 KB Documents 20150604_Lili_internalization_suspensi 5/28/2019 10:40 AM CES File 24 KB Documents 20151207_Lavie Experiment 1_Cell prol 5/28/2019 10:40 AM CES File 25 KB Downloads 20151207_Lavie Experiment 1_Cell prol 5/28/2019 10:40 AM CES File 26 KB Music 20151201_Lavie Experiment 1_Cell prol 5/28/2019 10:40 AM CES File 26 KB	This PC	^	🗆 N		Date modified	Туре	Size		
Desktop 20150004_Lili_internalization_suspensi 5/28/2019 10:40 AM CES File 35 KB Documents 20150004_Lili_internalization_suspensi 5/28/2019 10:40 AM CES File 24 KB Documents 20151207_Lavie Experiment 1_Cell proL 5/28/2019 10:40 AM CES File 25 KB Downloads 20151207_Lavie Experiment 1_Cell proL 5/28/2019 10:40 AM CES File 26 KB Music 20151201_Lavie Experiment 1_Cell viab 5/28/2019 10:40 AM CES File 35 KB	-			20150604_Lili_internalization_adherent	5/28/2019 10:40 AM	CES File	38 KB		
Documents 10150004_Lili_internalization_suspensi 5/28/2019 10:40 AM CES File 24 KB Downloads 0151207_Lavie Experiment 1_Cell prol 5/28/2019 10:40 AM CES File 25 KB Music 0151207_Lavie Experiment 1_Cell prol 5/28/2019 10:40 AM CES File 26 KB				20150604_Lili_internalization_suspensi	5/28/2019 10:40 AM	CES File	35 KB		
Downloads ^[2] 2015/207_Lavie Experiment 1_Cell prol 5/28/2019 10:40 AM CES File 25 KB 2015/207_Lavie Experiment 1_Cell prol 5/28/2019 10:40 AM CES File 26 KB Music 20151207_Lavie Experiment 1_Cell viab 5/28/2019 10:40 AM CES File 25 KB 26 KB 20151210_Lavie Experiment 1_Cell viab 5/28/2019 10:40 AM CES File 35 KB 35 KB 35 35 20151210_Lavie Experiment 1_Cell viab 5/28/2019 10:40 AM CES File 35 35 B 35 CES 35 35 AM CES		- 64		20150604_Lili_internalization_suspensi	5/28/2019 10:40 AM	CES File	24 KB		
Music	Documents			20151207_Lavie Experiment 1_Cell prol	5/28/2019 10:40 AM	CES File	25 KB		
	Downloads			20151207_Lavie Experiment 1_Cell prol	5/28/2019 10:40 AM	CES File	26 KB		
🔤 Pictures 🗸 📋 20160419_Microcarrier with Hoechst P 5/28/2019 10:40 AM CES File 45 KB	Music			20151210_Lavie Experiment 1_Cell viab	5/28/2019 10:40 AM	CES File	35 KB		
	Pictures	~		20160419_Microcarrier with Hoechst P	5/28/2019 10:40 AM	CES File	45 KB		

5. In the Look in field, navigate to the folder that contains the settings to import.

The system displays the settings folders that contain a corresponding XML file. The file extensions for the XML files are as follows:

- Analysis Settings: .cas (Celigo Analysis Setting).
- Classification Settings: .ccs (Celigo Classification Setting).
- Experiments: .ces (Celigo Experiment Setting).
- 6. Do one of the following to select the setting(s) that you want to import:
 - To select a single file: In the File name field, type a name for the experiment that you want to import.
 - To select multiple files, Ctrl+click.
- 7. Click Open.

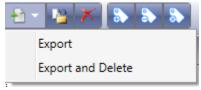
The system begins the import operation and a progress screen appears.

The system imports the .cas, .ccs, or .ces files (XML format) to the database.

Clicking Cancel will cancel the import operation.

9.7 Exporting Settings

Figure 117. Export Button



The Export button (Figure 117) allows the user to export checked settings from the Celigo database into a file format. The Export and Delete button performs the same task as the export operation, but also will delete the checked settings that were exported after the export operation is successful.

To export settings

- 1. Log into the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 101 above).

- 3. Select the Settings Tab.
- 4. Check the settings you want to export, in the right pane.
- 5. Click Export.
- 6. Navigate to designated or default folder (Figure 118), if applicable
- 7. Enter File name
- 8. Click Save

Figure 118. Exporting Dialog for Setting

→ ^ ↑	This PC > Documents > Celigo > Settings			✓ ひ Search Setting	S	P
rganize 👻 New f	older				-	?
This PC	^ Name ^	Date modified	Туре	Size		
] 3D Objects	3D Spheroid.ces	5/28/2019 10:40 AM	CES File	60 KB		
Desktop	009_MDA-MB-231 and NK92 ADCC Assa	5/28/2019 10:40 AM	CES File	31 KB		
Documents	010_NK Cell-Mediated Cytoxicity Assay.ces	5/28/2019 10:40 AM	CES File	32 KB		
	011_PBMC Mediated Cytotoxicity Assay.c	5/28/2019 10:40 AM	CES File	34 KB		
🕹 Downloads	✓ ☐ 20141022 John CDC.ces	5/28/2019 10:40 AM	CES File	49 KB		
File name: 🚺	m_AOPI_Counting.ces					_
Save as type: C	eligo Experiment Settings (*.ces)					

NOTE: The default directory for settings will be the following: C:\Users\<username>\Documents\Celigo\Settings

- Analysis Settings: .cas (Celigo Analysis Setting)
- Classification Settings: .ccs (Celigo Classification Setting)
- Experiments: .ces (Celigo Experiment Setting)

9.8 Moving Settings

Figure 119. Move Button



The Move button (Figure 119) allows the user to move checked settings from one Celigo folder to another.

To move settings:

1. In the Start tab, in the task screen, click Manage Data.

The Data Management screen appears (Figure 101 above) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the data view of the Setting Tab, check all settings that you want to move to a new folder.

To do this, left-click the checkbox to the left of the setting or select the **Check All** button (Figure 113), as applicable. To uncheck all, select the **Uncheck All** button (Figure 114).

- 3. Click the Move button and the Folder Selection dialog will appear.
- 4. In the Folder Selection dialog (Figure 120), select the folder to move all the checked settings to and click **OK**.

Figure 120. Folder Selection Dialog

Select Folder	To Move Settings To	×
Select Folder:	and the second s	v
		OK Cancel

- 5. After the OK button is pressed, the software will attempt to perform the move operation for all settings that are checked. If one of the following conditions for the settings is found, no operation will be performed:
 - The setting already resides in the selected folder.
 - The user does not have permission to move the setting.

9.9 Deleting Settings

Figure 121. Delete Button



The Delete button (Figure 121) allows the user to delete checked settings from the Celigo database.

To delete experiments, analysis settings, classification settings

1. Log in to the Celigo application.

2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 101 above).

- 3. Select the Settings Tab.
- 4. Search as needed to find the items you want to delete (section 9.1).
- 5. In the right-hand pane check the detail items that you want to delete.

To do this, left-click the checkbox to the left of the setting or select the **Check All** button (Figure 113), as applicable. To uncheck all, select the **Uncheck All** button (Figure 114).

6. At the top of the settings view in the Settings Tab, click **Delete**.

The system deletes all check marked items from the database.

9.10 Tagging Settings

Figure 122. Add Tag Button



The Add Tag button (Figure 122) allows the user to add a tag to checked settings. When first clicking on the Add Tag button, a dialog will appear asking the user to type in a new tag. As the user types a tag, a list will appear of tags matching the text typed if any exist. Once the tag has been entered, the user clicks OK to complete the operation and then a tag will appear next to the checked items.

Figure 123. Add Tag Selection Dialogs

🖏 Tag Selection	×
Enter a tag to add:	
	~
	OK Cancel
🖏 Tag Selection	×
Enter a tag to add:	
Project b	2
	OK Cancel
Tags	
proje cell g	

To tag settings

1. In the Start tab, in the task screen, click Manage Data.

The Data Management screen appears (Figure 101 above) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the settings view of the Settings Tab, check all settings that you want to associate a tag with.

To do this, left-click the checkbox to the left of the setting or select the **Check All** button (Figure 113), as applicable. To uncheck all, select the **Uncheck All** button (Figure 114).

- 3. Click the **Add Tag** button (Figure 122) and the Tag Selection dialog (Figure 123) will appear.
- 4. In the Tag Selection dialog, enter a new or existing tag to associate with all the checked settings to and click **OK**.

As text is typed, all matching tags will be displayed in dropdown.

5. After the OK button is pressed, the tag is associated with all checked items.

9.11 Removing a Tag from Settings

Figure 124. Delete Tag Button



The Delete Tag button (Figure 124) allows the user to delete a tag from checked settings. When first clicking on the Delete Tag button, a dialog will appear (Figure 125) asking the user to type in a tag to remove. As the user types a tag, a list will appear of tags matching the text typed if any exist. If a tag is typed that is associated with the checked settings, that tag will be removed when the user clicks OK. If a tag is typed that is not associated with the checked settings, the data's tags will remain unchanged.

Figure 125. Delete Tag Selection Dialog

💫 Tag Selection	×
Enter a tag to add:	
	v
	OK Cancel
🖏 Tag Selection	×
Enter a tag to add:	
Proje	9
project a	

Figure 126. Delete All Tags Button



The Delete All Tags button (Figure 126) allows the user to delete all tags from checked settings.

To remove a specific tag from settings

1. In the Start tab, in the task screen, click Manage Data.

The Data Management screen appears (Figure 101 above) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the data view of the Settings Tab, check all settings that you want to dissociate a tag from.

To do this, left-click the checkbox to the left of the setting or select the **Check All** button (Figure 113), as applicable. To uncheck all, select the **Uncheck All** button (Figure 114).

- 3. Click the **Delete Tag** button (Figure 124) and the Tag Selection dialog will appear.
- 4. In the Tag Selection dialog, enter an existing tag to dissociate from the checked settings to and click **OK**.

As text is typed, all matching tags will be displayed in dropdown.

5. After the OK button is pressed, the tag, if it is found associated with the checked items, is removed from the item.

To remove all tags from settings

1. In the Start tab, in the task screen, click **Manage Data**.

The Data Management screen appears (Figure 101 above) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the settings view of the Settings Tab, check all settings that you want to clear all tags from.

To do this, left-click the checkbox to the left of the setting or select the **Check All** button (Figure 113), as applicable. To uncheck all, select the **Uncheck All** button (Figure 114).

- 3. Click the Delete All Tags (Figure 126) button.
- 4. After the button is pressed, all tags are removed from all settings currently checked.

9.12 Updating Settings

The user can perform text modification operations on settings in the displayed area. These operations include renaming a setting and modifying a setting's description. Both modifications can occur by double clicking the cell in the display grid for the specific setting.

Figure 127. Editing Setting Name



To change a Setting Name

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 101 above).

- 3. In the Data Management screen in the Settings Tab, double-click the Setting name that you want to change.
- 4. Type the new name. Press the enter key or click anywhere off of the new name to commit it (Figure 127).

To change a Setting Description

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click **Manage Data**.

The Data Management screen appears (Figure 101 above).

- 3. In the Data Management screen in the Settings Tab, double-click the Setting description that you want to change.
- 4. Type the new description.
- 5. Press the enter key or click anywhere off of the new description to commit it.

10. Managing Report Templates

Figure 128. Data Management Report Template Screen

Nexcelom Bioscience Celigo 5 Channel			– 🗆 ×
номе дата	Welcome, Local Administrator Log Out 🖻	Celigo Status: @Hot Connected Application: No Application Selected Experiment: No Experiment Loaded Plate: No Plate Loaded Scan: No Scan Loaded Scan Result: No Results Loaded	
Data Projects Settings Report Templates Sumr	nary		
Search Report Templates	2 2 · 1 / X & & &		M = 4 M
Search only Tags	Check Name	Application Created By Created Date Last Modified	Description Type Tags
		ive + Dead + Local Administr 5/28/2019 5/28/2019	FCS
Report Template Filters		Whole Well 1 + Local Administr 5/28/2019 5/28/2019	FCS
Application: Any *			
Created By: Anyone *			
Created Between: 5/28/2019 • and 5/28/2019 •			
Last Modified 5/28/2019 • and 5/28/2019 •			
Detween.			
Auto Refresh Reset Filters Refresh Filters	# Report Templates: 2		
→ Back			Recover Free Space Refresh

The Data Management is broken into five separate views: Data, Projects, Settings, Report Templates and Summary. The Report Templates Tab displays all the report template files, currently stored in the Celigo database, which the logged in user has access to. Report templates are displayed to the user in a grid on the right-hand side of the screen.

Figure 129. Report Template Tab in Data Management									
Data Projects Settings Report Templates	Summary								

10.1 Searching for Report Templates

The default setting for this Report Templates Tab (Figure 129) is to display all the report templates the user has access to. If the user would like to limit what is displayed, the user can modify the filter settings found on the left side of the screen (Figure 130).

Search Repor	t Templates	17	Search Section
Search only Tags		Ľ.	
Report Templa	ate Filters		
Application:	Any ×		
Created By:	Anyone ~	I L	Report Template Filters Section
Created Between:	5/28/2019 • and 5/28/2019 •		
Last Modified Between:	5/28/2019 • and 5/28/2019 •		
between:			
		11.	
Auto Refresh	Reset Filters Refresh Filters		

Figure 130. Search Filters for Projects

Filters are broken up into 2 sections: Search and Report Template Filters.

Search

The Search section appears just above the Report Template section. This section is primarily an open text field that allows the user to type in any text to match a name, description, or tag for any report template. If desired, a checkbox exists to limit the search to only the report template's related tags.

Report Template Filters

The Report Template Filters section appears just below the Search section. This section allows a user to filter report templates by setting application, report template creator, date the report template was created, and date the report template was last modified.

Refreshing Controls

If a user modifies any setting while the Auto Refresh checkbox (Figure 131) is checked, a refresh operation will occur, and the software will display the updated report template set matching the new filter criteria on the right-hand side of the screen.

Figure 131. Auto Refresh Checkbox

Auto Refresh

If the Auto Refresh checkbox is not checked, no refresh operation will occur until the user clicks the Refresh button (Figure 132) located at the bottom right hand side of the screen.

Figure 132. Refresh Button



Perform the following steps to search for report templates.

- 1. Log into the Celigo application.
- 2. In the Start tab's task screen, click Manage Data. The Data Management screen appears.
- 3. Select the Report Templates Tab.
- 4. Make adjustments to any search and filter entries as applicable (see descriptions above).
- 5. Click Refresh. The Data display on the right side of the screen will display any found report template results matching the search parameters/filters specified.



NOTE: If the Auto Refresh checkbox is checked, step 5 above is not necessary. A refresh operation will be invoked for every change setting as a setting is changed.

10.2 Clearing Search Selections

The Reset Filters button (Figure 133) provides the user the ability to revert all the filters back to default settings which will display all projects on the right-hand side of the screen after a refresh is invoked.

Figure 133. Reset Filters Button

Reset Filters

To clear search settings for report template

• In Data Management screen in the Report Templates Tab, click the Reset Filters button (Figure 133).

10.3 Updating Search Selections

The Report Templates Filters are set to have their selectable options and limits based on the entire database. Application will therefore only display applications that are associated with the report templates in the database. Created By filter and all other filters function similarly. When the Celigo is connected to a network database (where it is possible for other users to be changing the data in the database you are connected to) the limits of your filters can change from when they have been loaded. The Refresh Filters button (Figure 134) allows a user to refresh the limits of all their filters to the current state of the database.

Figure 134. Refresh Filters Button

Refresh Filters



NOTE: The Refresh Filters button is only displayed when the Celigo is connected to a network database. This option is not present for Celigos connected to local databases.

To update the bounds of the search settings for report templates

 In Data Management screen in the Report Templates Tab, click the Refresh Filters button.

10.4 Viewing Report Templates

Report Templates are displayed to the user in a grid (Figure 135) on the righthand side of the screen. This section of the screen allows the user to view report templates matching the filters specified and enables the user to perform various functions on that data.

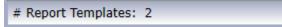
Figure 135. Data Display Grid for Report Templates

Check	Name	Application	Created By	Created Date	Last Modified	Description	Туре	Tags
	Cell Cycle Data	Live + Dead +		5/28/2019	5/28/2019		FCS	
	DCC	Whole Well 1 +	Local Administ	5/28/2019	5/28/2019		FCS	

The report templates displayed in the grid are organized into columns that display various properties of the report templates. These columns include: Check, Name, Application, Created By, Created Data, Last Modified, Description,

Type and Tags. All columns other than Tags are sortable. The button strip (Figure 136) at the bottom of the report templates display section displays the report template count of the found matching settings set.

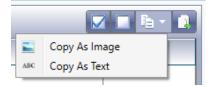
Figure 136. Button Strip for Report Templates



10.5 Exporting Report Templates Report

The Report Templates Tab allows a user to copy the current data result set as an image, text, or as an exported CSV file.

Figure 137. Copy Button Dropdown Menu



The Copy As Image button allows the user to copy the displayed report templates (as seen on the screen) as an image to the clipboard.

The Copy As Text button allows the user to copy all report templates as text to the clipboard.

Figure 138. Export Button



The Export button (Figure 138) allows the user to save a text file of all report templates to disk.

10.6 Selecting Report Templates

Each report template item can be checked or unchecked. Checking a report template item marks it to be included for a report template operation if one is chosen by the user.

Figure 139. Report Template Operation Buttons



Report template operations (Figure 139) can be found at the top left of the report template display section. These operations include: Import, Export, Export and Delete, Create New, Edit, Delete, Add Tag, Remove Tag, and Clear All Tags.

To check all projects in the report templates view

• With the Report Templates tab selected in the Data Management screen, click the Check All button at the top right of the screen (Figure 140).

Figure 140. Check All Button



To uncheck all report templates in the report templates view

• With the Report Templates tab selected in the Data Management screen, click the Uncheck All Button at the top right of the screen (Figure 141).

Figure 141. Uncheck All Button



10.7 Importing Report Templates

Figure 142. Import Button



The Import button (Figure 142) allows the user to import projects into the Celigo database. When you import report templates, you are importing to the database in XML format.

To import report templates

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 101 above).

- 3. Click the Report Templates Tab.
- 4. Click Import.

A Select Report Templates to Import dialog box appears. The dialog box for importing projects is shown in (Figure 143).

NOTE: The default directory for settings will be the following: C:\Users\<username>\Documents\Celigo\Report Templates

Figure 143. Importing Report Templates Dialog Box

\rightarrow \land \uparrow	> This PC	> Documents > Celigo > Repo	ort Templates		✓ Ö Seard	ch Report Templates	م
rganize 👻 Ne	ew folder						
This PC	^	Name	Date modified	Туре	Size		
🗊 3D Objects		Cell Cycle Data.crp	5/28/2019 2:38 PM	CRP File	36 KB		
Desktop		DCC.crp	5/28/2019 2:38 PM	CRP File	36 KB		
🗄 Documents							
👃 Downloads							
👌 Music							
Distures	~						
	File name:	1			Celi	go Report Template (*	v (aro.

5. In the Look in field, navigate to the folder that contains the report template to import.

The system displays the report templates folders that contain a corresponding XML file. The file extensions for the XML files are as follows:

• Report Template: .crp (Celigo Report Template).

- 6. Do one of the following to select the report template(s) that you want to import:
 - To select a single file: In the File name field, type a name for the report template that you want to import.
 - To select multiple files, Ctrl+click.
- 7. Click Open.

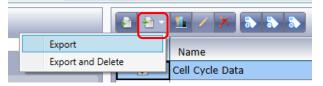
The system begins the import operation and a progress screen appears.

The system imports the .crp files (XML format) to the database.

Clicking Cancel will cancel the import operation.

10.8 Exporting Report Templates

Figure 144. Export Button



The Export button (Figure 144) allows the user to export checked report templates from the Celigo database into a file format. The Export and Delete button performs the same task as the export operation, but also will delete the checked projects that were exported after the export operation is successful.

To export report templates

- 1. Log into the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 101 above).

- 3. Select the Report Templates Tab.
- 4. In the right pane, check the report templates you want to export.
- 5. Click Export.
- 6. Navigate to the designated or default folder (Figure 145), if applicable.
- 7. Enter File name.
- 8. Click Save.

Figure 145. Exporting Report Template Dialog

Exporting Report To	emplat	tes						×
$\leftarrow \rightarrow \neg \uparrow$	> Th	is PC > Documents > Celigo > Rep	ort Templates		∽ Ö	Search Report Templa	ates	Q
Organize 👻 Nev	v folde	r						?
💻 This PC	^	Name	Date modified	Туре	Size			
3D Objects		Cell Cycle Data.crp	5/28/2019 2:38 PM	CRP File	36 H	(B		
Desktop		DCC.crp	5/28/2019 2:38 PM	CRP File	36 H	(B		
😫 Documents								
👆 Downloads	~							
File name:	Cell C	ycle Data.crp						~
Save as type:	Celigo	Report Template (*.crp)						~
L								
 Hide Folders 						Save	Cancel	

NOTE: The default directory for settings will be the following: C:\Users\<username>\Documents\Celigo\Report Templates

• Report Template: .crp (Celigo Report Template).

10.9 Deleting Report Templates

Figure 146. Delete Button



The Delete button (Figure 146) allows the user to delete checked Report Templates from the Celigo database.

To delete report templates

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 101 above).

- 3. Select the Report Template Tab.
- 4. Search as needed to find the items you want to delete (section 9.1).
- 5. In the right-hand pane check the detail items that you want to delete.

To do this, left-click the checkbox to the left of the report template or select the **Check All** button (Figure 140), as applicable. To uncheck all, select the **Uncheck All** button (Figure 114).

6. At the top of the projects view in the Report Templates Tab, click Delete.

The system deletes all check marked items from the database.

10.10 Tagging Report Templates

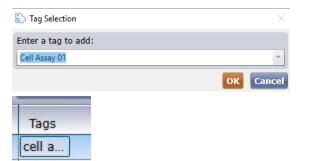
Figure 147. Add Tag Button



The Add Tag button (Figure 147) allows the user to add a tag to checked report templates. When first clicking on the Add Tag button, a dialog will appear asking the user to type in a new tag. As the user types a tag, a list will appear of tags matching the text typed if any exist. Once the tag has been entered, the user clicks OK to complete the operation and then a tag will appear next to the checked items.

Figure 148. Add Tag Selection Dialogs

Tag Selection	×
Enter a tag to add:	
1	~
	OK Cancel



To tag report template

1. In the Start tab, in the task screen, click **Manage Data**.

The Data Management screen appears (Figure 101 above) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the report templates view of the Report Templates Tab, check all report templates that you want to associate a tag with.

To do this, left-click the checkbox to the left of the report template or select the **Check All** button (Figure 140), as applicable. To uncheck all, select the **Uncheck All** button (Figure 141).

- 3. Click the **Add Tag** button (Figure 147) and the Tag Selection dialog (Figure 148) will appear.
- 4. In the Tag Selection dialog, enter a new or existing tag to associate with all the checked projects to and click **OK**.

As text is typed, all matching tags will be displayed in dropdown.

5. After the OK button is pressed, the tag is associated with all checked items.

10.11 Removing a Tag from Report Templates

Figure 149. Delete Tag Button



The Delete Tag button (Figure 149) allows the user to delete a tag from checked report templates. When first clicking on the Delete Tag button, a dialog will appear (Figure 150) asking the user to type in a tag to remove. As the user types a tag, a list will appear of tags matching the text typed if any exist. If a tag is typed that is associated with the checked report templates, that tag will be removed when the user clicks OK. If a tag is typed that is not associated with the checked report templated.

Figure 150. Delete Tag Selection Dialog

	OK Cancel
	~
Enter a tag to delete:	
🔊 Tag Selection	×

🔊 Tag Selection	×
Enter a tag to delete:	
cell	~
	OK Cancel

Figure 151. Delete All Tags Button



The Delete All Tags button (Figure 151) allows the user to delete all tags from checked report templates.

To remove a specific tag from report templates

1. In the Start tab, in the task screen, click Manage Data.

The Data Management screen appears (Figure 101 above) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the report template view of the Report Templates Tab, check all report templates that you want to dissociate a tag from.

To do this, left-click the checkbox to the left of the report template or select the **Check All** button (Figure 140), as applicable. To uncheck all, select the **Uncheck All** button (Figure 141).

- 3. Click the **Delete Tag** button (Figure 146) and the Tag Selection dialog will appear.
- 4. In the Tag Selection dialog, enter an existing tag to dissociate from the checked report templates to and click **OK**.

As text is typed, all matching tags will be displayed in dropdown.

5. After the OK button is pressed, the tag, if it is found associated with the checked items, is removed from the item.

To remove all tags from report templates

1. In the Start tab, in the task screen, click **Manage Data**.

The Data Management screen appears (Figure 101 above) with the files and folders that the logged-in user has permission to view (by means of the Scientist or Local Administrator permission selected when the user profile was created).

2. In the report templates view of the Report Templates Tab, check all report templates that you want to clear all tags from.

To do this, left-click the checkbox to the left of the report template or select the **Check All** button (Figure 140), as applicable. To uncheck all, select the **Uncheck All** button (Figure 141).

- 3. Click the **Delete All Tags** (Figure 151) button.
- 4. After the button is pressed, all tags are removed from all report templates currently checked.

11. Data Administration

HOME DATA	•	Velcome, Local Administra	tor Log Out 🛆	Application Experimen Plate: Scan:	us: ONOT Connected No Application Select t: No Experiment Loade No Plate Loaded No Scan Loaded It: No Results Loaded	ed d		
Data Projects Settings Repo	ort Templates Summa	sry						
Database Summary		Over Time Folder B	eakdown Created By Break	down				
Connection				Over Tim	o by:	Space - ()		
Data Source: Database:	srv-netdb-01 CeligoTest	650-		Over Th	ie by			
Counts		600-						
Plates: Scans: Scan Results:	146 364 544	550-						
Experiments: Analysis Settings: Classification Settings:	37 18 0	450-						
Space Used Space: Available Database Space: Available Filestream Space:	028.231.08 35.522.08 416.079.08	400 (c) 350 250 200 130 50 5/27/2018 12:00:00	AM 7/20/2018 12:00:00 AM	9/12/2018 12:00:00 AM	11/7/2018 12:00:00 A Time		3/18/2019 12:00:00 AM	5/11/2019 12:00:00 AM
Back							Recover Free	Space Refresh

Figure 152. Data Management Summary

The Data Management screen is broken into five separate views: Data, Projects, Settings, Report Templates and Summary. The Summary Tab (Figure 153) displays to the user a database summary and other miscellaneous administration information for the Celigo database. The Summary Tab is only displayed to local administrator users and is broken up into 4 areas: Database Summary, Over Time, Folder Breakdown, and Created by Breakdown.

Figure 153. Summary Tab in Data Management

Data	Projects	Settings	Report Templates	Y	Summary	٦
						_

11.1 Viewing Database Summary Information

The Database Summary displays summary information for the database that the Celigo software is connected to. The data shown here contains connection information, count information for each data and setting item, and storage space information.

atabase Summary	
Connection	
Data Source:	srv-netdb-01
Database:	CeligoTest
Counts	
Plates:	146
Scans:	364
Scan Results:	544
Experiments:	37
Analysis Settings:	18
Classification Settings:	0
space	
Used Space:	628.231 GB
Available Database Space:	35.622 GB
Available Filestream Space:	416.079 GB

Figure 154. Database Summary Stats

To view Database Summary Information

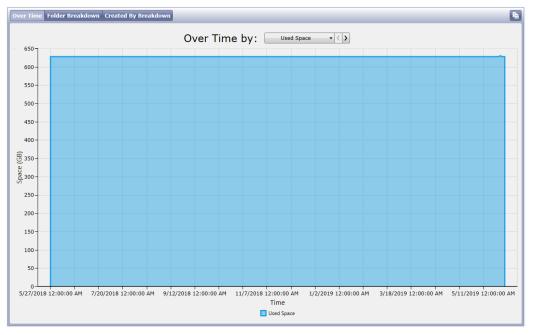
- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click **Manage Data**.

The Data Management screen appears (Figure 101 above).

3. In the Data Management screen, click the Summary Tab (Figure 153). The summary information will appear on the left side of the screen.

11.2 Viewing Over Time Information

Figure 155. Over Time Data Display



The Over Time section (Figure 155) displays up to a year's worth of various information for the Celigo database. Charts for the following can be displayed: Used Space, Database Available Space, Filestream Available Space, Plates, Scans, Scan Results, Experiments, Analysis Settings, and Classification Settings.

To view Over Time Information

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click Manage Data.

The Data Management screen appears (Figure 101 above).

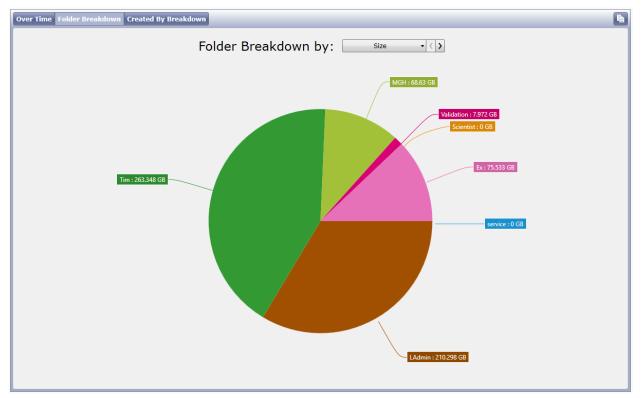
- 3. In the Data Management screen, click the Summary Tab.
- 4. In the right side of the screen, select the Over Time option you want to have a report for.
- 5. Optionally, you can copy the chart information currently displayed as an image to the clipboard by clicking the Copy to Clipboard button (Figure 156) in the top right of the screen.

Figure 156. Copy to Clipboard Button



11.3 Viewing Folder Breakdown Information

Figure 157. Folder Breakdown Data Display



The Folder Breakdown section (Figure 157) displays what portion of the Celigo database resides in each Celigo folder. Charts for the following can be displayed: Size, Plates, Scans, Scan Results, Experiments, Analysis Settings, and Classification Settings.

To view Folder Breakdown Information

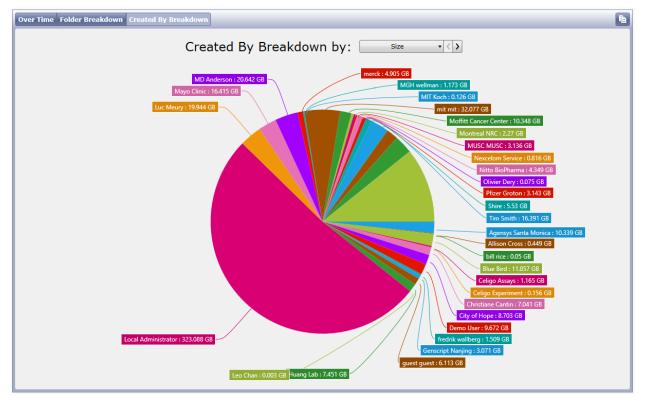
- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click **Manage Data**.

The Data Management screen appears (Figure 101 above).

- 3. In the Data Management screen, click the Summary Tab.
- 4. Select the Folder Breakdown button to display the Folder Breakdown screen.
- 5. In the right side of the screen, select the Folder Breakdown option for which you want to create a report.
- 6. Optionally, you can copy the chart information currently displayed as an image to the clipboard by clicking the Copy to Clipboard button (Figure 156) in the top right of the screen.

11.4 Viewing Created by Breakdown Information

Figure 158. Created by Breakdown Data Display



The Created by Breakdown section (Figure 158) displays what portion of the Celigo database was created by each user. Charts for the following can be displayed: Size, Plates, Scans, Scan Results, Experiments, Analysis Settings, and Classification Settings.

To view Folder Breakdown Information

- 1. Log in to the Celigo application.
- 2. In the Start tab's task screen, click **Manage Data**.

The Data Management screen appears (Figure 101 above).

- 3. In the Data Management screen, click the Summary Tab.
- 4. Select the Created By Breakdown button to display the Created By Breakdown screen.
- 5. In the right side of the screen, select the Created By Breakdown option you want to have a report for.
- 6. Optionally, you can copy the chart information currently displayed as an image to the clipboard by clicking the Copy to Clipboard button (Figure 156) in the top right of the screen.

12. Managing Plate Profiles

Plate profiles are the plate formats that are used for scanning various plate and flask types on the Celigo cytometer.

You manage plate profiles in the Plate Profile Management window. Managing plate profiles consists of viewing, deleting, importing, and exporting.

All users have the permissions to view plate profiles.

The following are permission levels and the associated actions that can be taken on plate profiles:

- Scientist Can view only active plates
- Local Administrator Can view active and deleted plates, and can import, export, and delete plates

For more information on user permissions, see Adding a User section 3.1.

12.1 Viewing Plate Profiles

To view plate profiles

1. In the Start tab, select Administration > Manage Plate Profiles.

The Plate Profile Management window appears (Figure 159) with the first line item highlighted. The following figure shows the display for users with Local Administrator permissions.

Figure 159. Plate Profile Management Window

32 Plate Profile Management fate Profiles (all measurements in mm) Plates that on A1 Y Position the current Manufact ng A1 X Po
 Worth Integril Atte
 X Spectrop 1 Spectro

 40
 21
 940
 57.5
 24

 21
 21
 441
 57.5
 24

 25.2
 42
 105.4
 26.5
 58

 22
 24
 142
 20
 38

 78
 70
 477.3.92
 120
 120

 105
 58
 120
 120
 120

 35
 35
 962.113
 36.253
 39.263

 36
 36
 1.40
 1.30
 20
 -Slide holder (2/3 cover slip) 43 43.5 34.13 user has slip) -Slide Holder (square cover I-Slide Holder (2/3 cover slip permissions 23.192 76.1 65 24.587 34.13 42.79 44 23.103 to view (only active plates
 35
 35
 662.113
 30.253
 30.203

 34.8
 34.8
 951.149
 30.12
 30.12

 34.6
 34.6
 940.247
 38.55
 38.611

 35
 35
 462.113
 39
 39

 35.
 35.1
 971.205
 40.12
 40.15

 21.95
 21.95
 378.407
 26.065
 26.065
 24.76 25.1 24.8 23.664 24.8 6 Well Coming** 3516 Plate 6-Well CytoOne® 0C7682-73 Corning Supported 6 23.16 vs. also 00 CC7682-23.2 deleted 12 Well BD Falcon*** 353043 Plate plates) Corning 16.776 Plate Profile Prev Plate Profile Details General Vell BD Falcon[™] 353046 Plate Only Local 2 3 Administrators can see these buttons A В

The Plate Profile Management window (Figure 159) displays the list of all plate profiles, with their specifications.

Close

- 2. Scroll to view any plate profiles not in view.
- 3. If you want to view a well layout, click the name of the applicable plate profile.

The well layout appears in the Plate Profile Preview section.

12.2 Deleting Plate Profiles



NOTE: Deleting plate profiles requires Local Administrator permissions.

To delete a plate profile

- 1. Locate the plate profile that you want to delete by scrolling to it in the Plate Profiles list per Viewing Plate Profiles section 12.1.
- 2. In the Plate Profiles pane, click the plate profile you want to delete so that it is highlighted.
- 3. Click Delete.

A Confirm Delete message box appears similar to the following (Figure 160).

Figure 160. Confirm Delete Message Box

Confirm Delete...

🚺 Delet

Delete plate profile '4-Slide Holder (square cover slip)'?

Yes	No	

4. Click Yes.

The system does one of the following:

- If a plate profile is requested to be deleted and has *not* yet been used for imaging, the system deletes the profile. In the future, the plate will not be listed in the Enter Plate Details screen.
- If the plate profile is requested to be deleted and *has* been used for imaging, the system only *marks* the plate profile as deleted. In the future, the plate will not be listed in the Enter Plate Details screen, but any analysis and results associated with that plate will be viewable.

12.3 Importing Plate Profiles



NOTE: Importing plate profiles requires Local Administrator permissions.

When you import a plate profile (also called a plate definition), you are importing into the database in XML format.

To import a plate profile

1. In the Plate Profile Management window, click Import.

The Open dialog box appears (Figure 161).

888 Imp 8 →
→
↑
→
This PC → Documents → Celigo → Plate Profiles ✓ ひ Search Plate Profiles Q Organize 🔻 New folder 🖽 👻 🔟 🕐 ^ □ Name Date modified Size This PC Type 3D Objects 4-Slide Holder (2_3 cover slip).cpd 5/28/2019 2:47 PM CPD File 2 KB 6-Well CytoOne_CC7682-7506 Plate.cpd 5/28/2019 2:47 PM CPD File 2 KB Desktop CPD File
 3 KB 12-Well BD Falcon_353043 Plate.cpd 5/16/2019 4:10 PM CPD File 3 KB Downloads 💧 Music Dictorer ✓ Celigo Plate Definition Files (.cr ✓ File name: 6-Well Nunc_140675 Plate.cpd Open 🔻 Cancel

Figure 161. Import Plate Profile – Open Dialog

2. In the Look in folder, navigate to a folder that contains the plate profile to import.

The system displays the plate profile folders that contain a corresponding .cpd (Celigo plate data) file (XML format).

- 3. In the File name field, type a name for the plate profile that you want to import.
- 4. Click Open.

The system begins the import operation and a progress screen appears.

The system validates the .cpd (Celigo Plate Definition) file (XML format) and then imports it to the database. If there were no errors, you will see the added plate profile in the Plate Profiles pane.

Clicking Cancel will cancel the import operation.

12.4 Exporting Plate Profiles



NOTE: Importing plate profiles requires Local Administrator permissions.

When you export a plate profile, you are exporting from the database to a hard drive in XML format.

To export a plate profile

- 1. Locate the plate profile that you want to export by scrolling to it in the Plate Profiles list per Viewing Plate Profiles section 12.1.
- 2. In the Plate Profiles pane, click the plate profile you want to export so that it is highlighted.
- 3. Click Export.

A Save As dialog box appears (Figure 162).

Figure 162. Export Plate Profile – Save As Dialog

→ ~ ↑	> This	PC > Documents > Celigo > Plate Profile	es		✓ Ö Search Plat	e Profiles	Q
Organize 🔻 Nev	v folder					-	
This PC	^	Name	Date modified	Туре	Size		
3D Objects		4-Slide Holder (2_3 cover slip).cpd	5/28/2019 2:47 PM	CPD File	2 KB		
Desktop		📄 6-Well CytoOne_CC7682-7506 Plate.cpd	5/28/2019 2:47 PM	CPD File	2 KB		
Documents		6-Well Nunc_140675 Plate.cpd	5/28/2019 2:47 PM	CPD File	3 KB		
Downloads	~	12-Well BD Falcon_353043 Plate.cpd	5/16/2019 4:10 PM	CPD File	3 KB		
File name:	4-Slide	Holder (square cover slip).cpd					
Save as type:	Celigo	Plate Definition Files (.cpd) (*.cpd)					

- 4. In the Save in menu, navigate to a folder location.
- 5. In File name, type a filename for the file.
- 6. Click Save.

The system saves the plate profile to the selected folder in XML format with a .cpd (Celigo Plate Definition) file extension.

This page intentionally blank

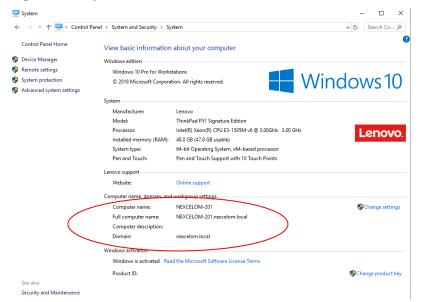
13. Database Access

Perform the following procedure to set up access permissions to the Celigo database on customer instruments.

13.1 **Preparation**

Start with a blank system. This system will have some prerequisites installed, specifically SQL Server with the default Celigo user account configured as a SQL Server Administrator allowing access to the management tools and our application. The system (Computer name) in the following example is called Celigo-PC-###.

Figure 163. System Information





CAUTION: Do not delete the original Celigo account (admin account for older Celigo models) or make any changes to it until you have performed this procedure and confirmed that the users are able to log in to SQL Server Management Studio and launch the Celigo application.

13.2 Procedure

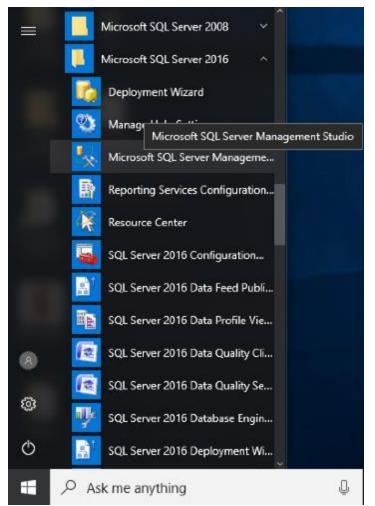


CAUTION: This procedure is to be performed by qualified Information Technology personnel only. Failure to perform this procedure correctly can delete the current database and all subsequent data will be lost.

1. Make sure that you have performed the steps in Preparation section 13.1.

2. In SQL Server Management Studio, connect to the local database as follows:a) Open SQL Server Management Studio.

Figure 164. SQL Server Management Studio Location in Start Menu



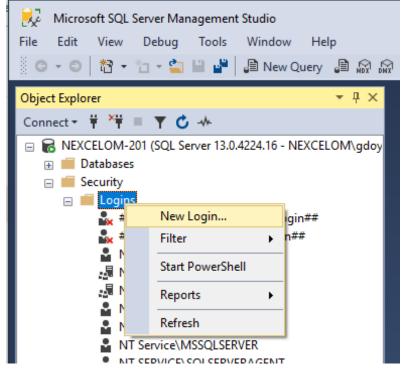
- b) Make the following selections:
 - Server type Database Engine
 - Server name (local)
 - Authentication Windows Authentication

🖵 Connect to Server		×
	SQL Server	
Server type:	Database Engine	\sim
Server name:	NEXCELOM-201	\sim
<u>Authentication:</u>	Windows Authentication	\sim
<u>U</u> ser name:	NEXCELOM\gdoyle	\sim
<u>P</u> assword:		
	Remember password	
	Connect Cancel Help Options	>>

Figure 165. SQL Server Connect to Server Login

- c) Click Connect.
- 3. In SQL Server Management Studio, navigate to security\logins folder.
- 4. Right-click Logins and select New Login.

Figure 166. Creating a New Login



5. In the Login name field (Figure 167), type the fully qualified user or group name (including the domain) of the user or group to which you want to provide access, as shown in the following figure. In this example, the new user is DBPROBLEMTESTER\Test Admin. You can also use the Search button to search for a user or group in your active directory.



CAUTION: Be sure to keep the Default database selection as master. This will allow you to log in if the database is somehow removed or modified.

Figure 167. New Login Window

Select a page					
Select a page General	🖵 Script 🔻 😮 Help				
Server Roles				<u> </u>	
User Mapping Securables	Login name:	DBPROBLEMTEST	TER\Test Admin	Sea	rch
Securables	Windows authentication				
	SQL Server authentication				
	Password:				
	Confirm password:				
	Specify old password				
	Old password:				
	Enforce password policy				
	Enforce password expiration	ition			
	🗹 User must change passv	word at next login			
	Mapped to certificate			\sim	
Connection	O Mapped to asymmetric key			\sim	
Server: NEXCELOM-201	Map to Credential			~ A	dd
Connection:	Mapped Credentials	Credential	Provider		
NEXCELOM\gdoyle					
View connection properties					
rogress				Ren	nove
Ready	Default database:	master		~	
Was P		<default></default>		~	
	Default language:	<uelauit></uelauit>		~	

On the Server Roles page (Figure 168), keep **public** and **sysadmin** selected. Sysadmin will allow the new user full access to all management functions. Sysadmin should be reserved for the Superuser only.

Note: Only the Sysadmin can select the Recover Free Space button.

It is recommended to define user roles and map the user permissions (i.e., select the Securable and then set, Grant, With Grant, and Deny, specific permissions).

Note: DB_Owner role is set to allow user to change the database settings, but cannot create or delete database permission.

Figure	168.	New	Login	User	Roles
--------	------	-----	-------	------	-------

Login - New		_		\times
Select a page	🖵 Script 🔻 😯 Help			
 General Server Roles User Mapping Securables Status 	Server role is used to grant server-wide security privileges to a user. Server roles: bulkadmin dbcreator diskadmin processadmin public securityadmin serveradmin setupadmin setupadmin y sysadmin			
Connection				
Server: NEXCELOM-201 Connection: NEXCELOM\gdoyle				
Progress				
Ready				
		ОК	Can	cel

6. Test that the new user is able to log in to Microsoft SQL Server Management Studio and launch the Celigo application.

Note: In order to test the new user login ability, logout of Windows and login as the new user.

7. Repeat steps 4 through 6 for each user or group that you want to give database access.

13.3 Troubleshooting

If the Windows Security dialog appears (Figure 169) at any time it may be because the instrument is not yet on the domain and/or the login credentials do not have access permissions.

Figure 169. Windows Security Prompt

Enter the na	ork Password e and password of an account with permissions for
yntellect.ho	ne.
or example	ser, user@example.microsoft.com, or domain\user name
	User name
	User name Password
	Password
	Password

If you are planning to rename the computer, please be advised that this may cause the local machine login credientials for sql server to break and that the logins may need to be deleted and re-added to allow for the logins to access the database after the computer re-name.

14. SQL Authentication

This section provides the procedures for setting up SQL Authentication mode for the Celigo database in the case you prefer to use that mode of authentication instead of the Windows login mode. There are only two major steps involved: creating a database login and adjusting the QueryEngineConfig.xml file. After that, you should be able to start up the Celigo application and it will guide you through the rest. The software will ask you to enter the credentials for the SQL login you created and then restart itself. If everything was entered correctly, the software will encrypt the login credentials in the QueryEngineConfig.xml file and you will be able to start using the Celigo.

NOTE: SQL Authentication method is only available in software versions 3.2 and later.

14.1 Create a SQL database login

Create a login following the steps from above in section 13.2(Procedure) with the only difference being we need to select SQL Server Authentication (See Figure 166, Figure 167, and Figure 168) and give it a password.

14.2 Setup the QueryEngineConfig.xml file

Perform the following steps to setup the Celigo database in SQL Authentication mode.

- 1. Open and edit C:\ProgramData\Nexcelom Bioscience\Celigo\ConfigFiles\QueryEngineConfig.xml.
- 2. Add in a new setting element with the following values inside of the section element:

<setting key=IsSqlAuthenticationMode>

<string>true</string>

</setting>

3. Save File

Path: C:\ProgramData\Nexcelom Bioscience\Celigo\ConfigFiles

- 4. Copy edited file
- 5. Paste copied file into both Backup folders One and Two (Figure 170)

📙 🛛 🛃 🧧 🖓 ConfigFiles				- 0	×
File Home Share	View				~ 🕐
\leftarrow \rightarrow \checkmark \uparrow \square « Wind	ows (C:) > ProgramData > Nexcelom Biosc	ience > Celigo > Con	figFiles	∨ Ö Search	Co 🔎
🕳 Google Drive 🖈 ^ 🚺	Name ^	Date modified	Туре	Size	^
Admin Guide	BackupOne	4/19/2019 10:10 AM	File folder		
ECR 190412-2	BackupTwo	4/19/2019 10:10 AM	File folder		
Suides	AlignmentConfig.xml	8/28/2018 11:10 AM	XML File	1 KB	
S PM	CalibrationConfig.xml	5/23/2019 9:18 AM	XML File	3 KB	
	CaptureConfig.xml	4/4/2019 3:45 PM	XML File	14 KB	
ineDrive 🍊 🗠	ChannelConfig.xml	5/28/2019 9:38 AM	XML File	8 KB	
💻 This PC	DevApplication.xml	5/28/2019 2:46 PM	XML File	2 KB	
3D Objects	FocusCalibration.xml	4/4/2019 3:45 PM	XML File	3 KB	
Desktop	FocusConfig.xml	4/19/2019 9:45 AM	XML File	45 KB	
	GalvoCalibrationConfig.xml	4/4/2019 3:45 PM	XML File	23 KB	
Documents	HardwareDefaultConfig.xml	4/4/2019 3:45 PM	XML File	1 KB	
Downloads	HardwareUnitTestConfig.xml	8/28/2018 11:10 AM	XML File	1 KB	
b Music	🔁 leaphardwarecalibration.config	8/28/2018 11:10 AM	XML Configuratio	10 KB	
Pictures	NavigationConfig.xml	4/4/2019 3:45 PM	XML File	1 KB	
🔣 Videos	🧾 QueryEngineConfig - local.xml	4/19/2019 10:19 AM	XML File	1 KB	
Windows (C:)	🧾 QueryEngineConfig - network.xml	5/22/2019 9:46 AM	XML File	1 KB	
v	OuervEnaineConfia.xml	5/22/2019 9:46 AM	XML File	1 KB	¥
21 items					

Figure 170. Config File Backup Folders

6. Now start the Celigo application. Once you do this you should see a prompt asking for the username and password that you entered in section 14.1 (Create a SQL database login).

15. Database Maintenance

To ensure proper Celigo cytometer functionality, reasonable performance, and the ability to retrieve backup files, periodic database maintenance tasks must be performed by the person assigned the administrator role for the system.

Database maintenance consists of the following main tasks. Please familiarize yourself with the steps for each task and keep this document close to the Celigo server for reference while performing the tasks:

- Deleting Unneeded Files from the Celigo Data Drive
- Freeing Up Data Drive Space from Deleted Plates, Scans, or Scan Results
- Scheduling Database Backups and Maintenance Tasks

In the event that data is lost, Celigo field service personnel will be able to retrieve the data from the backup files.

- Restoring Database Backups
- Defragmenting the Data Drive
- Anti-virus Rule Recommendations



NOTE: The displays in this section show backup to the C drive. It is highly recommended, however, that you instead back up to a USB 3.0 external drive or network location.

15.1 Deleting Unneeded Files from the Celigo Data Drive



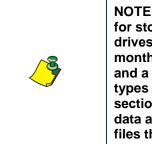
CAUTION: There are several large files used by the operating system that should not be removed. Check with your IT Administrator before removing files that you are not sure about.

By deleting unneeded files from the Celigo data drive, you create free space, increasing Celigo computer speed and reliability. This section describes how to delete the following files that you determine are not needed:

- Database backup files
- Plates, scans, or scan results files
- Temp directory files
- Miscellaneous files and directories

15.1.1 Deleting Database Backup Files

Database backup files typically end in .bak and are extremely large, usually greater than 1 GB and often greater than 100 GB. The Celigo cytometer uses the C:\backup directory to store backups of application configuration files.



NOTE: Define a strategy for backing up important data for storing off of the Celigo C:\ (and D:\ if applicable) drives. Consider keeping three months' worth of monthly backups, a month's worth of weekly backups, and a week's worth of nightly backups. (For the backup types and reasons, see Scheduling Database Backups section 15.3). This strategy will protect against loss of data and ensure that you are not keeping more large files than you will likely need.

To delete database backup files

- Right-click the backup file and select Delete.
- If applicable, also go to your Recycle Bin and remove the files using the same instructions.

The space from the deleted file immediately becomes available for use.

15.1.2 Deleting Plates, Scans, or Scan Results

Make sure to regularly delete any plates, scans, and scan results that are not necessary to ongoing projects; the image data accumulates quickly. The images captured during a scan are large files, accounting for more than 90% of the disk space that the Celigo application uses. The plates, scans, and scan results are stored in an SQL server database.



NOTE: For Celigo prior to v3.0, the deletion of plates, scans, or scan results requires a subsequent checkpoint operation to free up the space from the deletion; your deletion of the other types of files described in this section will immediately result in the freeing up of data drive space operation.

To delete plates, scans, or scan results

- 1. Do one of the following:
 - If you want to archive the plates, scans, or scan results for possible future use, archive them per Exporting Plates, Scans, or Scan Results at section 7.8. Then continue to step 2.
 - If you do *not* want to archive the plates, scans, or scan results for possible future use, continue to step 2.
 - If you want to immediately request that the system begin freeing up space from the deleted files, click the **Recover Free Space** button at the bottom right of the Data Management window (Figure 62).

Note: Recover Free Space button is only available to the Sysadmin user.

2. Delete the plates, scans, or scan results from the Celigo drive and free up the space from the deleted files by performing Deleting Plates, Scans, Scan Results, or Settings section 7.10 and 9.9.

15.1.3 Deleting Miscellaneous Files and Directories

Delete from the Celigo data drive any additional miscellaneous files and directories that you have determined are not needed.



CAUTION: There are several large files used by the operating system that should not be removed. Check with your IT Administrator before removing files that you are not sure about.

To delete miscellaneous files and directories

Right-click the unwanted file and select Delete.

The space from the deleted file immediately becomes available for use (may have to clear from the Recycle Bin first).

15.2 Freeing Up Data Drive Space from Deleted Plates, Scans, or Scan Results

For Celigo Software Prior to v3.0:

When you delete plates, scans, or scan results from the Celigo data drive (see section 7.10), space is not yet freed up for use until the system performs a data drive space free-up process, called a checkpoint. Specifically, during a checkpoint process, the SQL server recovers deleted data blocks to the Windows file system at a gradual rate as to not impact the computer's processing power.

For Celigo Software v3.0 and Higher (And SQL Server 2012 or newer):

Checkpoints are automatically issued during deletion operations for Celigo Software v3.0 and higher. In addition, to speed up the free-up process, a Recover Free Space operation was provided that will immediately recover the deleted data blocks. This operation requires a large amount of resources and is recommended to be run only during times of non-operation. This operation is only available to users running their Celigo with an SQL Server 2012 or newer database.

It is recommended to define a maintenance schedule as to when to click the Recover Free Space button. To perform this too infrequently may mean it will take a great deal of time to recover the database's free space.

You can immediately start the freeing up of data drive space at any time.

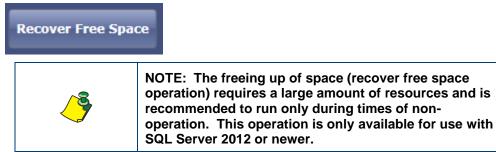


NOTE: A checkpoint operation freeing up space from deleted plates, scans, or scan results may take several days for the system to complete, regardless of whether you perform an immediate checkpoint request or schedule it.

To immediately start the freeing up of data drive space

• Click **Recover Free Space** (Figure 171) at the bottom of the Data Management window.

Figure 171. Recover Free Space Button



15.3 Database Manual Backup

Perform the following procedure to manually back up the database.

15.3.1 Procedure



CAUTION: This procedure is to be performed by qualified Information Technology personnel only. Failure to perform this procedure correctly can result in failed backups for the database or even delete the current database.

- 1. Make sure that you have performed Database Access section 13.
- 2. In SQL Server Management Studio, connect to the local database per section 13.2.
- 3. Select the database that you want to back up. Typically this will be called Celigo, but it is possible there can be other names. Right-click the database name and select **Tasks >** Backup (Figure 172).

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Ready	untre dors A	Import FMF File Import Data Export Data Copy Database. Manage Database Encryption

Figure 172. Back Up Task

The Back Up Database - name of database window (Figure 173) appears. In the Source section, the database field will already be populated with the name you right-clicked.

🛢 Back Up Database - Celigo				_		×
Select a page	🖵 Script 🔻 😮 Help					
 General Media Options 						
Backup Options	Source					
	Database:	Celigo				\sim
	Recovery model:	SIMPLE				_
						_
	Backup type:	Full				\sim
	Copy-only backup					
	Backup component:					
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NEXCELOM\gdoyle					Contents	3
₩ View connection properties						
Progress						
Ready						
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Figure 173. Back Up Database Window

For maximum backup speed, it is highly recommended that you select the network file location or a USB 3.0 external drive as the file path.

- 4. Make the following selections:
 - Backup type: Full
 - **Destination:** Disk
- 5. If there are any unwanted directories listed under Destination, click on them and click **Remove**.
- 6. Click Add.
- 7. Click the... button to browse for a location to save the backup to.
- 8. Once the target location is found, give your backup a name (filename.bak) and click **OK**.



NOTE: For maximum backup speed, is highly recommended that you select the USB 3.0 external drive as the file path. The database may be directly backed up to the network or copied from a USB 3.0 to the network for maximum data safety.

- 9. Click **OK** again and you will return to the Back Up Database window and see your location has been added to the Destination list.
- 10. In the left-hand pane, select Options: Backup pages.

The default options (e.g., Backup options) are adequate for typical backup operations. Change the entries as needed.

11. Click **OK**.

The backup starts. This operation can take a large amount of time depending on the backup size.

15.4 Scheduling Automatic Database Backups

Perform a database backup regularly for use as recovery files in the event that a hard drive fails. This activity is separate from the recommended periodic deletion of unnecessary data and archiving of data for longer term storage.

The two types of backup strategies that accomplish this approach are:

- Full backup
- Differential backup

By combining these two backup strategies to overlap throughout the week, the Celigo data will be protected from serious loss. The strategy described below will copy all the data except the scans acquired since the last backup to the day of the failure. To supplement the backup strategy, export important scans to an archive location soon after they have been acquired.

15.4.1 About Full Backups

There are several different types of full backups. The simplest form is sufficient for Celigo data backup purposes. The full backup described below will copy all data and configuration information into a single backup file that you move to an alternate archive location and can use to recover from a data drive catastrophic failure.



NOTE: A full backup can take 8 hours or longer to complete and cannot be performed while other database activity is occurring. It is best to perform a full backup on late Saturday night, which will allow for the backup to run through Sunday if necessary without impacting the database access too much.

15.4.2 About Differential Backups

Differential backups archive all the data that have changed since the last backup was performed. These backups can be overlaid on top of full backups to provide a complete data set without requiring the same amount of down time or disk space.

You should perform a differential backup nightly to ensure that all scanned data is protected from loss. Like the full backup, a differential backup must be run without other activity on the system and can last up to a few hours to complete. Therefore, schedule differential backups to run when the system is not being used; very busy labs could get away with running this type of backup every other day if the risk of data loss is a lower priority than a few hours of down time, but this is very risky.

15.4.3 Checking the SQL Server Agent Service

To enable automatic backups, the SQL Server Agent Service must be enabled, allowing the scheduling setup to be successful.

- 1. Click Start.
- 2. Type services.msc
- 3. Click on the Services application that appears.
- In the Services pane, double-click SQL Server Agent (MSSQLSERVER). The SQL Server Agent (MSSQLSERVER) Properties window appears (Figure 174).
- 5. In the Startup type menu, make sure that Automatic is displayed. If it is not displayed, select it and click **OK**.
- 6. If the status for SQL Server Agent (MSSQLSERVER) is not already Started, right click on it and click **Start**.

Figure 174. SQL Server Agent (Service) Properties

• 🖤 🔃	Q 📑 🛛 🖬 🖿 🖬 🖬 🕨		
Services (Local)	Services (Local)		
	SQL Server Agent (MSSQLSERVER)	Name	SQL Server Agent (MSSQLSERVER) Properties (Local Computer)
	Stop the service Restart the service Description: Executes jobs, monitors SQL Server, fires alerts, and allows automation of some administrative tasks.	Genuthy Center Genuthy	General Log On Recovery Dependencies Service name: SOLSERVER/ADEXT Display name: SOLSERVERPI Description: Executes jobs, monitors SOLSERVER) Description: Executed SOLSERVER) Description: Executed SOLSERVER) Philosencodings, service status, contained Status: Stated Status: Stated Contained Sources Contained Sources Contained Sources Contained Sources Provides status: Stated Automatic Local System, Provides status: Stated Manual Network S., Provides Tell, Stated Manual Network S., Provides Tell, Stated Manual Networks, Provides Jun, Stated Automatic Local System,

If you plan on choosing a network location as the target for scheduled database backups, the SQL Server Agent service must be run with an account that has access to the network location. By default, the service runs with a local SQL account. Do the following to run the service as a different user.

- 7. Open the SQL Server Agent service properties (Figure 174).
- 8. At the top, click the Log On tab.
- 9. For the This account field, type the fully qualified user name (including domain) of the account that has access to the network location. Otherwise you can click the Browse button to search your active directory for the desired account.
- 10. Type in the password for the selected account twice and click OK.
- 11. Restart the service by right clicking on it and choosing either **Restart** or **Start**.

If you plan on choosing a network location as the target for manual database backups, repeat the above steps for the service SQL Server (MSSQLSERVER).

15.4.4 Scheduling Full or Differential Backups

The same basic steps are performed for either a full or differential backup, and are presented for both cases below in a single procedure. Perform the procedure two times – once for scheduling a full backup, and then again for scheduling a differential backup.

To schedule full or differential backups

- 1. Check that the SQL Server Agent service is set to Automatic per section 15.4.3.
- 2. Open Microsoft SQL Server Management Studio, right-click the Maintenance Plans folder (Figure 175) and select New Maintenance Plan.



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Server Object	5
🖃 🛑 Replication	
🗉 💼 PolyBase	
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Management R Policy Ma	
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in and a set	Maintenance Plan Wizard
To Dista	March R. Anna
🗉 🛑 Lege	View History
🗉 💼 Integrat	Reports +
■ 易 SOL Ser ■ ④ XEvent I	Refresh
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- 3. The New Maintenance Plan Name box appears. Type in a name such as:
 - Celigo Full Backup
 - Celigo Differential Backup

Click OK and the new Maintenance Plan will appear in the SQL Server window (Figure 176).

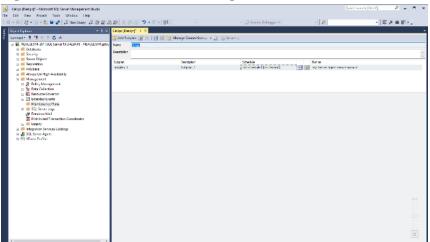


Figure 176. Maintenance Plan Editing

4. In the upper right pane of the SQL Server window, double-click the Subplan_1 line item.

The Subplan Properties dialog box appears (Figure 177).

Figure 177. Subplan Properties Dialog Box

🛃 Subplan	_		\times	
Name:	Celigo Full Backup			
Description:	Automated Full Backup of Celigo database			
Schedule:	Not scheduled (On Demand)			
Senedule.	Not scheduled (On Demand)			
Run as:	SQL Server Agent service account			~
		ОК	Can	
		UK	Can	cei

- 5. In the Subplan Properties dialog box, make selections as follows:
 - In Name, enter one of the following, as applicable:
 - o Celigo Full Backup
 - Celigo Differential Backup
 - Enter a description for the Subplan
- 6. Click the Calendar control button (Figure 177)
- 7. The New Job Schedule window appears (Figure 178)

🛄 New Job Schedule				_		\times
Name:	Celigo.Celigo Full Backup			Jobs in S		
Schedule type:	Recurring		~	Imabled		
One-time occurrence						
Date:	5/28/2019 V Time:	3:48:24 F	PM ≑			
Frequency						_
Occurs:	Weekly ~]				
Recurs every:	1 week(s) on					
	Monday W	ednesday	Friday	Saturda	у	
	Tuesday	ursday		Sunday		
Daily frequency						-
Occurs once at:	12:00:00 AM					
Occurs every:	1 💠 hour(s) 🗸	Starting at:	12:00:00 AM	*		
		Ending at:	11:59:59 PM	*		
Duration						_
Start date:	5/28/2019	O End date:	5/28/	/2019 🔲 👻		
		No end date:				
Summary						_
Description:	Occurs every week on Sunday a	t 12:00:00 AM. Sche	dule will be used	starting on 5/28/2	2019.	<u>î</u>
		-				-
		L	OK	Cancel		

Figure 178. New Job Schedule Window

8. Schedule the full or differential backups.

To do this, make selections as follows (Figure 179 or Figure 180):

- Schedule type Recurring
- Frequency
 - o Occurs Weekly
 - Recurs every 1 week
 - Full Backup typically 1 day chosen
 - o Differential Backup typically multiple days chosen
- Daily Frequency 12:00:00 AM or whatever time you choose

New Job Schedule	
Name:	Celigo Celigo Full Backup Jobs in Schedule
Schedule type:	Recurring V I Enabled
One-time occurrence	
Date:	5/28/2019 V Time: 3:48:24 PM
Frequency	
Occurs:	Weekly
Recurs every:	1 🗢 week(s) or
	Monday Wednesday Friday Saturday
	Tuesday Thursday Sunday
Daily frequency	
Occurs once at:	12:00:00 AM
Occurs every:	1
	Ending at: 11:59:59 PM
Duration	
Start date:	5/28/2019 🖉 🗸 End date: 5/28/2019 🖉
	No end date:
Summary	
Description:	Occurs every week on Sunday at 12:00:00 AM. Schedule will be used starting on 5/28/2019.
	OK Cancel Help

Figure 179. New Job Schedule – Celigo Full Backup Example



New Job Schedule	
Name:	Celigo.Celigo Full Backup Jobs in Schedule
Schedule type:	Recurring V Enabled
One-time occurrence Date:	5/28/2019 V Time: 3:48:24 PM 💿
Frequency	
Occurs:	Weekly
Recurs every:	1 week(s) on
\subset	Monday Wednesday Friday Saturday
	🗌 Tuesday 📄 Thursday 💟 Sunday
Daily frequency	
Occurs once at:	12:00:00 AM
Occurs every:	1
	Ending at: 11:59:59 PM 🜲
Duration	
Start date:	5/28/2019 🕞 🗸 🔿 End date: 5/28/2019 🗍 🗸
	No end date:
Summary	
Description:	Occurs every week on Sunday at 12:00:00 AM. Schedule will be used starting on 5/28/2019.
	OK Cancel Help

- 9. Click **OK** to accept the Job Schedule Properties settings.
- 10. Click the next **OK** to accept the Subplan Properties (Figure 181).
- 11. Click **View > Toolbox** to enable the Toolbox. You can move it to wherever is most convenient for yourself.

Figure 181. Backup Subplan Dialog

规 Celigo [Design]" - Microsoft SQL Server Management Studio File Edit View Project Tools Window Help ※ ○ - ○ 稔 - `□ - `□ = 말 말 @ New Query 』 유 읎	2 A A I X II A I 7 - C - MI
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Server Objects E Replication PolyBase	Subplan Description Subplan_1 Subplan_1 Full Backup Full Backup
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- 12. In the Toolbox under Maintenance Plan Tasks, drag the Back Up Database Task onto the workspace to the right.
- 13. Double-click the new Task icon to open the Back Up Database Task Window.
- 14. In the Back Up Database Task window, make the following selections:
 - For full backups (Figure 181):
 - Backup type Full.
 - Database(s) Specific databases Click the arrow on the right and select the Celigo database (Figure 182).
 - Folder: Enter or browse to target location to save backup, preferably to an external hard drive if one exists, or network location.

NOTE: It is not recommended to use the computer's local drives.

- Check Verify Backup Integrity checkbox. This will verify that the backup does not contain errors.
- For differential backups (Figure 184):
 - Backup type Differential.
 - Database(s) Specific databases Click the arrow on the right and select the Celigo database (Figure 182).
 - Folder: Enter or browse to target location to save backup, preferably to an external hard drive if one exists, or network location.

NOTE: It is not recommended to use the computer's local drives.

 Check Verify Backup Integrity checkbox. This will verify that the backup does not contain errors.

○ All <u>d</u> atabases		
○ <u>S</u> ystem databases		
○ All <u>u</u> ser databases (exclud	ding master, model, msdb	o, tempdb)
<u> <u> </u> </u>		
Celigo		^
Celigo52		
master		
🗌 model		~
Ignore databases where the set of the	he state is not online	
	ОК	Cancel

Figure 182. Database Selection Dialog

Figure 183. Back Up Database General, Destination, and Options tabs for Full Backups

💼 Back Up Database	Task				×
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General Destination	Options				
Backup type:	¢	Full	>		~
Database(s):		Specific database	5		
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Database					
○ Files and fileg	roups:				
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eneral Destination Options		
Back up databases across one o		
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		Remove
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If backup files exist:	Append	
O Create a backup file for every di		
Create a sub-directory for ea		
Folder:	C:\Program Files\Microsoft SQL Server\MSSQL13.	MSSQLSERVER\M!
SQL credential:		Create
Azure storage container:		
URL prefix:	https:// <storageaccount>.blob.core.windows.net/</storageaccount>	
Backup file extension:	bak	
OK	Cancel View T-SQL	Help
Back Up Database Task		
Back Up Database Task	erver connection	~ New
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eneral Destination Options		V New
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nnection: Local se eneral Destination Options Set backup compression: Backup set will expire: After On	Use the default server setting 14 to days 6/18/2019	V New
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nnection: Local se eneral Destination Options Set backup compression: Backup set will expire: On Copy-only backup Verify backup integrity Backup encryption Algorithm: Certificate or Asymmetric key: For availability databases, ignore Block size	Use the default server setting 14 Image: Continue on error AES 128	V New
nnection: Local se eneral Destination Options Set backup compression: Backup set will expire: On Copy-only backup Verify backup integrity Backup encryption Algorithm: Certificate or Asymmetric key: For availability databases, ignore	Use the default server setting 14 days 6/18/2019 Perform checksum Continue on error AES 128 ereplica priority for backup and backup on primary settings 65336 bytes	V New

Connection:	Local serv	ver connection				~	<u>N</u> ew
General Destination C	Options						_
Backup type:		Different	ial				(
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 Files and filegroup 	ups:						
Back up to:		Disk	~				
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Back Up Database Task		<u>C</u> ance	el	<u>V</u> iew T-SQL		Help)
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nnection: eneral Destination Op Set backup compression Backup set will expire On Conv-only backup Verify backup integrif Backup gncryption Algorithm: Certificate or Asymm	Local serve tions	AES 128	Use the defaul 14 6/18/2019 Perform ch Continue o	t server setting		v .	
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Figure 184. Back Up Database General and Options tabs for Differential Backups

• Click **OK** to return to the maintenance plan editor window (Figure 185).

Figure 185. Linking Tasks

Back Up	Database Task
---------	---------------



- 15. Save the maintenance plan by clicking the Save or Save As icon (Figure 186).
- Right click on the Maintenance Plans folder and click **Refresh**. If you expand the folder you should see your saved maintenance plan as a file. (Figure 187)

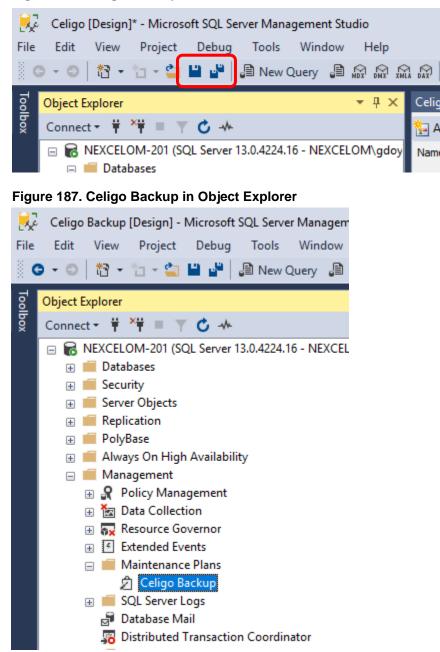


Figure 186. Celigo Backup Maintenance Plans

17. Be sure to plug in and turn on an external USB 3.0 drive and leaving it connected to prevent disk letter changing

15.5 Restoring Database Backups

Perform the following procedure to manually restore a backed up database. If you need to restore a database onto a network database server, please contact Nexcelom Customer Service.

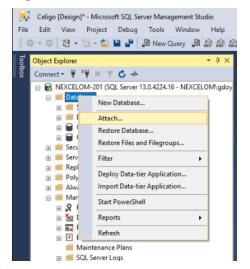
15.5.1 Procedure



CAUTION: This procedure is to be performed by qualified Information Technology personnel only. Failure to perform this procedure correctly can result in failed backups for the database or even delete the current database.

- 1. Make sure that you have performed Database Access section 13.
- 2. Open SQL Server Management Studio and login.
- 3. Right-click Databases and select Restore Database... (Figure 188)

Figure 188. Restore Database



The Restore Database window appears (Figure 189).

🗐 Script 👻 😮 He	elp						
Source							
Database:							
_							`
O Device:							
Databas	se:						
Destination							
Database:							``
Restore to:						Timel	ine
Restore plan							
Backup sets to re	estore:						
Restore	Name	Component	Туре	Server	Database	Position	
<							3
					V	erify Backup	Media
	Device: Database: Destination Database: Restore to: Restore plan Backup sets to re Restore	Device: Database: Destination Database: Restore to: Restore plan Backup sets to restore: Restore Name	Device: Database: Destination Database: Restore to: Restore plan Backup sets to restore: Restore Name Component	Device: Database: Destination Database: Restore to: Restore plan Backup sets to restore: Restore Name Component Type	Device: Database: Destination Database: Restore to: Restore to: Restore plan Backup sets to restore: Restore Name Component Type Server	O Device: Database: Destination Database: Restore to: Restore plan Backup sets to restore: Restore Name Component Type Server Database	Device: Detabase: Destination Database: Restore to: Restore plan Backup sets to restore: Restore Name Component Type Server Database Position

Figure 189. Restore Database Window

4. Select the Device radio button and then click the... button located to the right. The dialog in Figure 190 should appear:

Figure 190. Select Backup Devices Dialog

Select backup devices		- • ×
Specify the backup media a	nd its location for your restore operation	1.
Backup media type:	File	•
Backup media:		
		Add
		Bemove
		Contents
	QK	Cancel Help

- 5. Click the **Add** button and browse to and select the backup file you intend to restore and click **OK**. The file you selected should be added under Backup Media.
- 6. Click **OK** and return to the Restore Database window.
- In the Restore Database dialog under the Destination section, set the Database name to Celigo (Figure 191) or Celigo # (e.g., Celigo 2) if the database already exists.

8. Ensure that the appropriate database is checked in the Restore plan section (Figure 191).

Figure 191. Restore Database Settings Example

Se. Restore Database - Celigo							6	- U -
🕕 Reatly								
Select a page General Film Options	Script - CHelp Source Destabase Deprice Destabase Destabase Destabase Destabase Destabase Bestore to: Restore plan Begkup sets to restore Bastas Destabase Destabase Destabase Destabase Destabase Destabase Destabase Destabase Destabase Destabase Destabase Destabase Destabase Destabase Destabase	Celigo Celigo The last	backup taken	(Mond	QL Server/MSSQL11. ny, May 21, 2012 2:36 Server PWY-CEUGO-257	05 PM)		imeline
Connection (cost) (NEXCELOM/undobrowolska) View connection properties Progress Done	4					(Verify Bas	, kup Media
					ОК	Cane	*	Help

- 9. Click on Files in the left hand side, and make sure that the 3 files all have the same path (unless this is a network database) and are named the following:
 - Celigo.mdf
 - Celigo.ldf
 - Celigo.ImageStreams

NOTE: If the restored database has a different name than the default Celigo then these files must be named with the restored database name

- RestoredDBName.mdf
- RestoredDBName.ldf
- RestoredDBName.ImageStreams

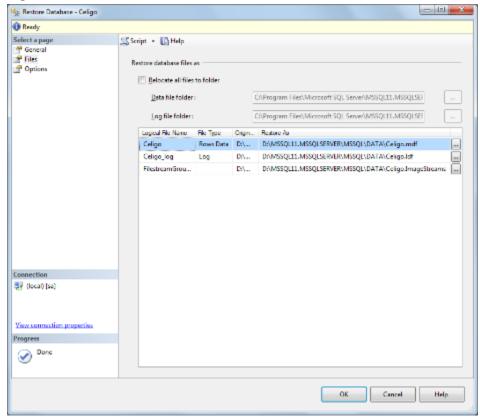


Figure 192. Restore Database File Names

10. Click the OK button to begin the restoration.

- Database restoration can take some time. Original Celigos (Dell T3500) on average were able to do about 50GB in ~1 hour (meaning a 300GB database would take ~6 hours). All newer Celigo computers are able to restore at a much faster rate.
- You will see a prompt when your database restoration has completed.
- 11. After restoring a database, be sure to also apply the correct user permissions to enable users to access the database when logged in. See section 13.

15.6 Defragmenting the Data Drive

The Celigo cytometer's data drive(s) can become fragmented over time from creation and deletion of large image files. As the disk drive fragments, its performance decreases, which can negatively impact the Celigo application's scan performance. To ensure that fragmentation does not become a performance problem, the hard drives should be defragmented approximately once every week.

You can either defragment the data drive immediately or schedule a recurring defragmentation. Celigo computers are setup with default defragmentation schedules already in place. If these have not been altered, then defragmentation is already occurring on the Celigo computer on a weekly basis.

If your computer is a more recent Celigo computer, one of the hard drives is a SSD. Do not perform defragmentation on SSD hard drives.

15.6.1 Defragmenting the Data Drive Immediately

To defragment the data drive immediately



NOTE: Be sure to perform or schedule defragmentation so that it occurs while the Celigo application is *not* acquiring images or analyzing plates.

1. Using the Windows File Explorer, right-click on the data drive that you want to defragment and then select **Properties**.

Model specific Data Drive:

- If you have these models, T3500 and/or T3600, defrag the C:\ Drive.
- For all other models, defrag the D:\ Drive only.

The Properties dialog box shown appears (Figure 193).

Figure 193. Disk Properties Window

Local Disk (C;) P	roperties	Marra .	×
Security	Previ	ous Versions	Guota
General	Tools	Hardware	Sharing
Error-checking			
This opt	tion will check	k the volume for	
		() San	ck Now
Defragmentation	-		
This opt	tion will defra	gment files on the vo	une.
~		👘 <u>D</u> efrage	sent Now
Backup			
🔊 This opt	ion will beck	up files on the volum	· ·
		Back	up Now
	OK	Cancel	Apply

- 2. Click the **Tools** tab.
- 3. In the Defragmentation section, click **Defragment Now**. The Disk Defragmenter dialog box appears (Figure 194).

	tes on or connected to your c	omputer are shown.	analyze them to find out if	
atus				
Drive	Media type	Last run	Current status	
📥 OS (C:)	Solid state drive	5/13/2019 11:47 AM	Optimization not available	
🕳 Data (D:)	Hard disk drive	6/10/2019 11:34 AM	OK (0% fragmented)	
			Analyze	Optimize
				Ç Optimize
				Optimize Change settings
cheduled optimize				

Figure 194. Disk Defragmenter Window

- 4. In Disk Defragmenter, select the (D:) disk you wish to defragment and click **Defragment Disk**.
- 5. You can stop the Defragmentation process at any time by returning to this window and clicking **Stop operation**.

15.6.2 Scheduling Defragmentation

To schedule defragmentation

1. Using the Windows File Explorer, right-click the data drive that you want to defragment and then select **Properties**.

The Properties dialog box shown appears (Figure 193).

- 2. Click the Tools tab.
- 3. In the Defragmentation section, click **Defragment Now** (you click this button even for scheduling).
- 4. Click Configure schedule and the Modify Schedule window opens.
- 5. Check the checkbox for Run on a schedule.
- Adjust Frequency, Day and Time as needed. Be sure to schedule the defragmentation process for a time period where the Celigo is not being used or has low-usage.
- 7. Click **Select Disks**, check the checkbox for all disks you wish to put on the defragmentation schedule and click **OK**.
- 8. Click **OK** again to return to the Disk Defragmenter.
- 9. Click **Close** and your defragmentation schedule is set.

15.7 Stopping Defragmentation

To stop defragmentation

1. If the Disk Defragmenter window is not open, open it by using the Windows File Explorer to right-click the drive that you want to stop defragmenting and select **Properties**.

The Properties dialog box appears.

- 2. Click the **Tools** tab.
- 3. In the Defragmentation section, click **Defragment Now**.

The Disk Defragmenter window appears.

4. In the Disk Defragmenter window, click Stop operation (Figure 195).

Figure 195. Stopping Disk Defragmentation

Drive	Media type	Last run	Current status	
🖕 OS (C:)	Solid state drive	5/13/2019 11:47 AM	Optimization not available	
👝 Data (D:)	Hard disk drive	Running	Pass 2: 100% consolidated	
			Stop	1
cheduled optimiza	tion		Stop	
cheduled optimiza On	tion		Stop Change setti	
	tion			

15.8 Anti-Virus Rule Recommendations

The following are anti-virus rule recommendations to prevent database corruption and loss of data. Please configure the antivirus to exclude all of the following items:

SQL Server processes

- SQL Server (MSSQLSERVER)
 - Process used for all database accesses to the Celigo database.
- SQL Server Agent (MSSQLSERVER)
 - Process used for database tasks including database verification and automated backups.

File Extensions:

The below are all SQL Database file extensions. Database backups are of extension .bak

.mdf

- .ldf
- .ndf
- .trn
- .bak

The below are all (custom) extensions of data files that are generated/exported from the Celigo software

- .cync
- .cynp
- .cynl
- .cynr
- .cas
- .ces
- .CCS
- .crp
- .cpj

The below are all DENOVO FCS files

- .fcs
- .ice
- .acs

Folders:

- C:\Program Files\Nexcelom Bioscience
 - Celigo software installation directory.
- C:\Program Files\Microsoft SQL Server
 - Location of the master and default system databases.
 - This will cover all versions of SQL installed.
- D:\
- Location of Celigo database. We recommend this drive only be used for integrated Celigo database use and that external documents are not stored here.
- C:\ProgramData\Nexcelom Bioscience
 - \circ $\;$ Location of the Celigo software configuration files.

Windows Updates:

We do not manage Windows Updates on Celigo systems. By default, the Windows Updates settings are configured to update automatically once weekly, so if the computer is on your network, then the updates are controlled by either your WSUS server, or else just the default Windows Update servers.



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