UnityConnect 2

User Guide

March 2021 Version 3.0 (UnityConnect 2 Version 3.2)



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Getting Started

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Software Version

This guide is current as of UnityConnect 2 service pack 3.2.

Welcome

UnityConnect 2 connects your lab systems (instrument, LIS, middleware, etc.) to your Unity QC software (Unity Real Time 2). This connection allows QC data to flow from your lab systems to the Unity QC software without the need to manually enter data.

Information within this guide is current as of software version 2.9.8.

Benefits of UnityConnect 2

UnityConnect 2 offers additional benefits that simplify deployment and usability when automating QC results.

- Centralized SQL Server database management
- Web-enabled for intranet remote management
- Centralized code mapping support for multiple Unity QC configurations
- Single point of configuration simplifies Unity QC test configuration updates
- Customized alerts
- Concurrent user access
- Modern User Interface (UI)
- International language support



Notes and Important Items

This guide uses symbols to indicate notes and important items that provide additional information and information of special importance, pictured below:

Note

A note indicates information supplementing the main text. A note supplies information that may only apply in special cases. For example:



Note: The **Error** column gives the reason the data was rejected.

Important

An important item provides information essential to the completion of a task. Do not disregard information in an important note. For example:



Important: When your lot switch occurs, correctly manage the lot switch in the software at that time. Otherwise, data that belongs with the new lot will incorrectly be placed with the old lot.



Data Delivery Methods

Your lab is set up with one or more of the following three possible data delivery methods. Your IT department, coupled with Bio-Rad's support specialists, should be able to assist you in determining which method your lab is using.

Data Stream

- Run time data streaming is an automated process, at times bi-directional for laboratory device autoverification.
- Data streams over in "run time" as QC is being run.
- QC data transmits directly from the data source (instrument, LIS, middleware) to UnityConnect 2 via additional hardware devices as needed either by serial (RS232) or TCP (RJ45) connection.



Scheduled

- UnityConnect 2 is set up to monitor a designated folder at scheduled intervals and to pull any available data from that folder. The scheduled intervals could be every few seconds, minutes, days, weeks, etc.
- QC data does NOT cross in "real time." However, depending on how frequently it is scheduled, it can appear so (if perhaps it pulls data every few seconds or minutes that contains new record only).
- The scheduled connectivity process can be automated or semi-automated:
 - Automated: The lab's IT has programmed the LIS/middleware to be automatically read by UnityConnect 2 or to automatically create a data file and place it in the designated folder for UnityConnect 2 at scheduled intervals.
 - Semi-Automated: A lab team member must manually create a QC data file and save it to a
 designated folder that UnityConnect 2 is programmed to read.





File Upload

- This is a manual process.
- QC data does NOT cross over in "real time."
 - Those in the lab may create a data file as frequently as they like, but typically will create their QC file and upload it to UnityConnect 2 at the end of each month.
 - Users may create a QC data file from their instrument/LIS/middleware. The file can be saved on their computer, a network, a disc or thumb drive, etc. The location does not matter as long as they can browse to the file.





Layout

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Access and Login

Log in to UnityConnect 2 using the same ID and password used for your Unity QC software.

- If you are accessing UnityConnect 2 on the computer where its database is set up, go to: http://localhost:8080/unityconnect
- If you are accessing UnityConnect 2 from another network computer, go to: http://computer name:8080/unityconnect



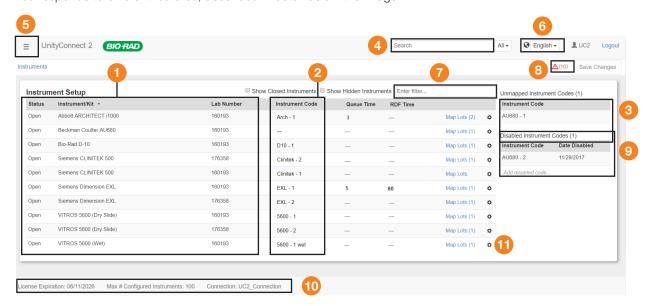
Note: The bold italicized portion indicates the actual name of the computer where the service is set up.



General Layout

Any time a code for a new instrument, control lot, test, or qualitative response is introduced into UnityConnect 2, you will need to map the new item.

The general layout and features of the UnityConnect 2 software are pictured below. Each numbered circle corresponds to different features, described in detail below the image.



- 1 Status, Instrument/Kit, and Lab Number
 - Information in the first three columns from the left, labeled **Status**, **Instrument/Kit**, and **Lab Number**, shows information for the Unity QC software setup.
- Instrument Code
 Information on the right, labeled Instrument Code, shows information crossing over from the lab's data source (instrument, LIS, or Middleware).
- 3 Unmapped Instrument Codes

Unmapped Instrument Codes are listed on the far right. This list shows items pending mapping from the instrument, LIS, or middleware. The drop-down menu under the **Instrument Code** column allows you to select from the pending **Unmapped Instrument Codes**.



Note: Mapping new items will be covered in detail in Chapter 4, Code Mapping.

Search box

You can search for a specific instrument, lot, or test in the **Search box** to locate an item more quickly.

5 Triple bar icon

Clicking on the **triple bar icon** opens a menu with options to access **Map Local Codes**, **File Upload**, and **Settings** features. The icon turns green when you hover or click on it.

6 Language Selection

To change the **Language Selection** setting, click the drop-down menu next to the globe icon in the upper right hand corner. The default language setting is English.

7 Filter

Search for items by filtering for Instrument, Lot, and Test.

8 Alert icon

An alert icon will appear when mapping is required. The number in parentheses next to the icon indicates the total number of unmapped codes on that page, or subsequent pages, for either instrument codes, control codes, test codes and/or response codes. Click on the Alert icon to view details. If applicable, click on the alert details to navigate to subsequent screens for performing the necessary code mapping.

9 Disabled Instrument Codes

These are codes crossing over from the data source (instrument, LIS, or middleware) that should not be mapped or imported into Unity QC software. See "Disable Items" on page 27 for detailed steps on how to **Disable Instrument Codes**.

Connection and License Information

The bottom of the screen shows information pertaining to **License Expiration date**, **Max # Configured Instruments** (maximum number of instruments configured), and Connection.

Cog icon

The **Cog icon** allows for additional functionality at each stage of the mapping process. For example: at the Instrument Setup, the cog icon allows the user to Hide, Duplicate, Enable Reagent Queueing or Enable Redundant Data Filter. At the Lot Setup, the cog icon allows the user to "Duplicate." At the Test Setup, the cog icon is only made available when configuring Vitros Slide Generations (Use Slide Gen Scheduler).



Data Delivery

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Data Delivery Methods

Your lab uses one or more of three possible methods for data delivery: **Data Stream**, **Scheduled**, or **File Upload**. Refer to the "Data Delivery Methods" on page 3 for more details about the types of data delivery.

Data Stream and **Scheduled** methods occur on an automated or semi-automated basis, as described on page 3. The **File Upload** method requires manually uploading QC files and is detailed below.

Upload a QC Data File

This information applies to those whose data delivery method requires manually uploading QC files.

In order to get your data into your Unity QC software, you will need to create a QC data file from your data source (instrument, LIS, middleware, etc.) and upload it to UnityConnect 2.



Steps for Uploading a QC Data File

1 After you've created your QC file, click the **triple bar** icon and select **File Upload**.



- 2 If you have more than one channel display name, select the channel that corresponds with your file source.
- 3 Click **Browse** and select your QC data file.
- 4 Select the **Beginning Date** and **Ending Date** for the file.
 - a) To upload the entire file, leave First Point In File and Last Point In File selected.
 - b) Select Specific Date if:
 - the QC file contains more than one month of data.
 - you only want to capture a portion of the data file.
- 3 Click Upload.

Check Upload Status

After you upload your QC file, the software will start reading and processing that file's contents. You can check the status of that process in the Upload History page so you will know when everything is complete in UnityConnect 2.

There are four possible statuses you may see in the Upload History screen:

- If it states "Uploaded" or "Queued," the file is still waiting to be read.
- If it states "Processing," the file is being read, and it might have found new codes in the file that it is prompting you to map.
- If it states "Done," everything is complete (including any new required mapping) and the data has been imported to your Unity QC software.
- If it states "No Data," then the uploaded file was either incorrect (according to the channel name) or rejected, based upon specific criteria set within the Data File Options.



Steps for Checking the Upload Status

- 1 From the **File Upload** screen, click **Upload History**.
- 2 Check the File Status. (Click Upload History to refresh and view the updated status.)
- 3 You can return to the mapping screen to see if an alert is prompting you to do new mapping. To do so, click the triple bar icon and select Map Local Codes.

Unity QC Software Rejected Data

If data appears to be missing from your Unity QC software, check the Rejection Log within your Unity QC software to see if the missing data is listed. "Rejected data" from the Unity QC software can occur for multiple reasons arising from within the software itself.



Note: This type of "rejection" is different than data rejected due to rule violations. This "rejection" may include dates out of sequence, invalid values, lot expired, etc.

Rejection Log for Desktop Software

This section applies to customers using desktop Unity QC software (such as Unity Real Time 2).

If data is missing, check the Rejection Log to see if it was rejected (meaning that the data was processed in UnityConnect 2, but a problem kept it from passing from UnityConnect 2 into the Unity QC software).

If you see rejected data in the Rejection Log, we recommend calling software support to help you resolve the rejection issue.

Steps for Viewing the Rejection Log

- 1 Click the Rejection Log button or select Tools > Utilities > Import > View Rejection Log.
- 2 If needed, make selections in the drop-down menus to filter the list, such as filtering by type of error, and click **Apply**.
- 3 Review the details of the rejected data listed in the table.



Note: The Error column gives the reason the data was rejected.

4 Once the rejections have been addressed, click **Delete**.



Note: Deleting old rejection messages will help avoid later confusion.



Code Mapping

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Overview

"Mapping" means that the codes used to identify the instruments/lots/tests/qualitative responses in your Unity QC software match with the codes your data source (instrument/LIS/middleware) uses to identify them. Once items are mapped, UnityConnect 2 can translate incoming data codes into the codes currently used in your Unity QC software.

There are two stages involved in managing a new instrument, control, test, or processing qualitative results:

- Stage 1: Set up the new control and/or test in your Unity QC software.
 - Remember that instruments are associated with the test setup in the Unity QC software. (There is not a specific "adding instruments" process.)
 - If you need a reminder on how to add controls or tests, refer to your Unity QC software User Guide.
- Stage 2: Map the new instrument, control, test, or qualitative response in UnityConnect 2.

Map a New Instrument

If your lab purchases a new instrument, after setting it up in your Unity QC software and starting to receive data, you will need to map it in the Instrument Setup screen in UnityConnect 2.

Once the instrument is mapped, you will proceed with mapping its controls. (See directions for mapping a new control under "Map a New Control" on page 12.)



Steps for Mapping an Instrument

Access the Instrument Setup screen (the default web page upon login). You can also access this screen via the "Instruments" link, located in the toolbar at the top of the screen.



Note: New instrument codes are staged within the "Unmapped Instrument Codes" right-hand navigation bar.

- Locate the instrument you want to map based on the appropriate identifiers in the Instrument/Kit and Lab Number columns.
 - Filtering can help quickly locate the Instrument/Kit by typing the instrument name in the Enter filter search box located to the right of the Instrument Code column.
- Hover over and click the empty space for **Instrument Code**.
- Click the appropriate drop-down arrow and map the appropriate instrument code.
- Click Save Changes.

Map a New Control

When starting a new control, after configuration has been completed within your Unity QC software, you will need to map the codes (found during processing of data) in the Lot Setup screen in UnityConnect 2.

Once the new control and lot codes are mapped, you will also need to map its tests. (Directions for mapping a new test are under "Map a New Test" on page 13).

Steps for Mapping a New Control

In the Instrument Setup screen, click the Map Lots link for the appropriate instrument. The link will indicate the number of unmapped control lots in parentheses.



Note: Access unmapped codes directly by clicking on the red information icon, which displays unfinished lot mapping.

- Click the **plus icon** + to add additional levels, if needed.
- Select the desired level number, if needed.
- Select the appropriate lot code from each drop-down to map it to the control, lot, and level listed on the left.
- Click Save Changes.



Map a New Test

To start running a new test, after you set it up in your Unity QC software and begin receiving incoming data, you will need to map the test in the Test Setup screen in UnityConnect 2.

If you get a new instrument, make sure you map the instrument and controls first; then, proceed with mapping the tests. (See directions for mapping a new instrument on page 11 and a new control on page 12)

Steps for Mapping a New Test

- From the Instrument Setup screen, navigate to the Lot Setup screen for the appropriate instrument by clicking on the Map Lots link on the far right.
- Click the Map Tests link, located to the right of the Lot Code column. (The link will include a number in parentheses, indicating the number of tests that need mapping.)
- For each test that needs mapping, click the drop-down arrow and select the appropriate test code.
- 3 Click Save Changes.
- If test mapping is needed for other lots, click the toolbar link at the top of the page (next to the Instruments link) to return to the Lots screen.

Map Qualitative Responses

This information only applies to customers who wish to import results for qualitative or semi-quantitative tests.

Both Bio-Rad and non-Bio-Rad qualitative controls may be transformed with UnityConnect 2.

"Response codes" are the codes or descriptions used for possible test results. For instance, Bio-Rad uses "Negative" as a possible result, but a lab might use "NEG" or "-" instead. The lab codes must be mapped to the Bio-Rad codes.

There are two stages involved with managing a new qualitative or semi-quantitative test:

- Stage 1: Set up the test in your Unity QC software.
 - If you need a reminder on how to add tests or configure qualitative responses, refer to your Unity QC software User Guide.
- Stage 2: Map the test responses in UnityConnect 2.

Steps for Mapping Qualitative Responses

- Navigate to the Test Setup screen (use the Map Tests link for the qualitative control) and click the Map **Responses** link beside the test.
- 2 For each response listed on the left, select the corresponding response code.
- 3 Click Save Changes.



Schedule VITROS Slide Generation Changes

This information only applies to those who have a VITROS instrument that uses slide generations (dry slides). Slide gens must be managed in UnityConnect 2 regardless of the data source (type of instrument or LIS from which the data is sent).

In UnityConnect 2, slide generations are managed using the "Slide Generation Scheduler" tool, which categorizes incoming data based on the date/time that has been configured for each slide generation number's starting date.

When you first configure a new VITROS dry slide test, you must set up the Slide Generation Scheduler for that new test. (Directions for setting up the Scheduler are on page 15.)

Right before you start using a new slide gen, you MUST update the Scheduler to include that new slide generation number, along with the starting date/time for the new slide gen.



Important: Make sure that someone in the lab is able (and knows how) to update the Scheduler any time a new slide gen cartridge is added to the instrument. Otherwise, data for the new gen will incorrectly be sent with the old gen number.

There are two stages involved in managing new slide generations. It is a good idea to do both of these BEFORE starting the new slide generation, to avoid confusion or wrongly classified data:

- Stage 1: Manage the slide gen change for the test in the Unity QC software. (If needed, refer to your Unity QC software User Guide for directions.)
- Stage 2: Add the new slide gen and Effective Date/Time to the Slide Generation Scheduler in UnityConnect 2.

Steps for Updating the Slide Generation Scheduler for a New Slide Gen

- Navigate to the Test Setup screen (use the Map Tests link for the qualitative control) and click the Slide generation link in the Reagent column.
- The Edit Slide Generations dialog box will open. Click Add new entry.
- Select the date and time when QC will first be performed on the new slide gen. 3
- Click Close.
- Click Save Changes.



Set Up Scheduler

If you are starting a new VITROS dry slide test, you need to set up the Slide Generation Scheduler for it.

Set up the Scheduler **BEFORE** you map the test. Otherwise, when you initiate the Scheduler, it will undo your test mapping and you will have to map the test code again.



Note: If a test has already been in use and mapped when you set up the Scheduler, it may not include that test code in the drop-down list when you try to remap it. In that case, you would need to manually type in the test code. We suggest taking a screenshot of the mapping before you start to add the scheduler (so you can refer to the screenshot image afterward to ensure you have entered the test code exactly as it originally appeared).

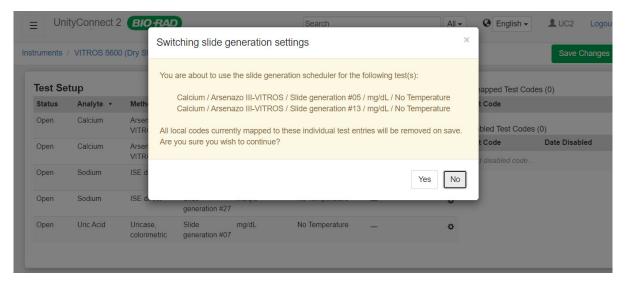
If you have already been running a test and have already changed slide gens, but the Slide Generation Scheduler was never used, you will need to set it up retrospectively.

Steps for Setting Up the Slide Gen Scheduler

- Navigate to the **Test Setup** screen (click the **Map Tests** link for the control) and click the **cog icon** next to the test that needs to be set up. Select **Use Slide Gen Scheduler**.
- 2 Click the Slide generation link in the Reagent column.
- 3 The Edit Slide Generations dialog box will open. Click Add new entry.
- 4 Enter the slide gen number.
- 5 Select the date and time when that gen will first be (or was) QC'd.
- 6 Click Close.

Additional Information

If you have already mapped the test code, when you click the **cog icon** and select **Use Slide Gen Scheduler**, you will see the following image:





This image notifies you that it will remove the test mapping. You will need to click **Yes**, set up the Scheduler, then map the test code again.

If you have already mapped a VITROS test without setting up the scheduler, when you start a new slide gen, it will list the new slide gen as a new test. When you attempt to map it, you will see the Error changing test code message because you cannot map two different items to the same test code.

In that situation, use the cog icon of the first test (and the first slide gen) to set up the scheduler. When you see the message about switching slide generation settings, click Yes.



Note: Remember, this will remove your current test mapping. After the Scheduler is set up, remap that test.

Alert Notifications for Unmapped Codes

If you prefer to manage the upload process directly to follow through with code mapping requirements, then email alerting may not be needed. However, e-mail alerting can be used to notify a user or multiple users when the uploaded file is being "Processed," indicating that code mapping may be required in order to finalize the QC automation process.

The following steps will assist you in setting up email alerts.

Steps for Configuring Email Alerts

Click the **triple bar icon** and select **Settings**.



Note: Default settings are English for language and a Notification Interval of 15 minutes. Notification Interval determines how often the program will check for required mapping and send an email alert.

Click Add New Entry to add a user email address. Repeat this action for all additional desired addresses.



Note: Disable email addresses at any time by clicking the toggle icon on (Green) or off (Grey). Remove email addresses by hovering next to the toggle icon and clicking the X.

3 Click Save Changes.

Received Email Alerts

The email alert will contain information regarding the type (Instrument Codes, Lot Codes, Test Codes or Response Codes) and the total count of unmapped codes that require user intervention. The email provides a direct link to the UnityConnect 2 web application, allowing the user to log in from any PC and perform the mapping requirement.



Lot Switches

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Overview

This section addresses how to manage a lot switch. The process you'll follow for a lot switch depends on the type of data delivery method your lab uses. (Further information about the various methods is available in the section for "Data Delivery Methods" on page 8.)

Data Stream Method

There are two possible ways to handle lot switches if your connectivity method is a data stream. The directions you will need to follow depend on the type of codes that come from your data source (instrument, LIS, or middleware):

- Unique Lot Codes: If the codes in your data source change from lot to lot, we call those "unique" codes. Each lot and level has a unique identifier, so UnityConnect 2 is able to detect when you have started a new lot because it receives new codes for it.
- Generic Lot Codes: If the codes in your data source stay the same from lot to lot (or the bar codes stay the same from lot to lot), we call those "generic" codes. UnityConnect 2 cannot detect when you have started a new lot because the incoming codes have not changed.



Streaming Unique Codes

This applies if your connectivity method is a data stream, and your data source (instrument/LIS/middleware) uses unique lot codes. (Information about determining your type of source codes is in the previous section, **Streaming Method**.)

There are two stages involved for a lot switch in the Unity software:

- Stage 1: Duplicate the lot in the Unity QC software. (If needed, refer to your Unity QC software User Guide for directions.)
- Stage 2: Map and duplicate lots in UnityConnect 2:
 - When alerted, map the new lot.
 - Duplicate the tests from the old lot to the new lot.



Note: If you have multiple mirror instruments running all of the same controls/tests, you can save time during a lot switch by completing the mapping for one instrument, then duplicating that instrument to the remaining instrument/s.

Steps for Mapping a New Lot

- 1 When the alert indicates mapping is needed, click the **Map Lots** link for the instrument that requires mapping.
- 2 Click the **plus icon** + to add additional levels, if needed.
- 3 Select the level number you want to add, if needed.
- 4 Select the appropriate lot code from each drop-down to map it to the control, lot, and level listed on the
- 5 Click Save Changes.
- 6 Click the cog icon or for the original lot number and click Duplicate.



Note: Duplicating will transfer the tests' mapping from the old to the new lot to save time.

7 Make sure that the correct new lot is selected in the **To** field and click **Apply**.



Note: Once you've duplicated, you can click the **Map Tests** link to see that the new lot's tests have already been mapped based on the previous lot's tests.



Streaming Generic Codes

This applies if your connectivity method is a data stream, and your data source (instrument/LIS/middleware) uses generic lot codes. (Information about determining your type of source codes is on page 17 under "Streaming Method.")

After the last run on the old lot and before the first run on the new lot, you must manually change the lot codes of the old lot in UnityConnect 2. The lot codes for the old lot and the new lot cannot be the same, so the old codes must be adjusted before data starts crossing for the new lot.



Important: When your lot switch occurs, correctly manage the lot switch in the software at that time. Otherwise, data that belongs with the new lot will incorrectly be placed with the old lot.

Once the old lot codes are changed and the new lot is run, UnityConnect 2 will alert you that the codes for that new lot need to be mapped.

There are two stages involved for a lot switch in the Unity software:

- Stage 1: Duplicate the lot in the Unity QC software. (If needed, refer to your Unity QC software User Guide for directions.)
- Stage 2: Manage lots in UnityConnect 2:
 - After the last run of the old lot, change the lot code for that old lot.
 - Start running the new lot.
 - When alerted, map the new lot.
 - Duplicate the tests from the old lot to the new lot.

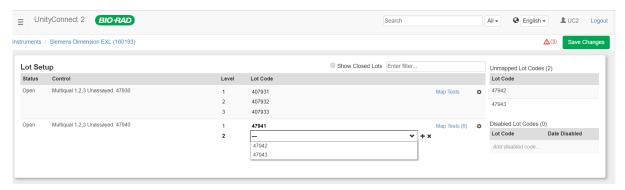
Steps for Changing Old Lot Codes (Prior to the New Lot Being Run)

- 1 Click the **Map Lots** link for the instrument that will be starting a new lot.
- 2 Click on the lot code for each level of the old lot and manually type a change to the lot code (such as typing "old") so it no longer shows the same code that the new lot will use.
- 3 Click Save Changes.



Steps for Mapping a New Lot (After the New Lot is Run)

- 1 When the alert indicates mapping is needed, click the **Map Lots** link.
- 2 Click the **plus icon** + to add additional levels, if needed.
- 3 Select the level number you want to add, if needed.
- 4 Select the appropriate lot code from each drop-down to map it to the control, new lot number, and level listed on the left.
- 5 Click Save Changes.



6 Click the cog icon for the original lot number and click **Duplicate**.



Note: Duplicating will transfer the tests' mapping from the old to the new lot to save time.

7 Make sure the correct new lot is select in the **To** field and click **Apply**.



Note: Once you've duplicated, you can click the **Map Tests** link to see that the new lot's tests have already been mapped based on the previous lot's tests.

Scheduled Method

Scheduled Unique Codes

This applies if your lab's connectivity method is scheduled uploads. (For information about the various connectivity methods, see "Data Delivery Methods" on page 8.)

There are two stages involved for a lot switch in the Unity software:

- Stage 1: Duplicate the lot in the Unity QC software. (If needed, refer to your Unity QC software User Guide for directions.)
- Stage 2: Map and duplicate lots in UnityConnect 2:
 - When alerted, map the new lot.
 - Duplicate the tests from the old lot to the new lot.

Steps for Mapping a New Lot

- When the alert indicates mapping is needed, click the Map Lots link for the instrument that requires mapping.
- 2 Click the **plus icon** + to add additional levels, if needed.
- Select the lab number you want to add, if needed. 3
- Select the appropriate lot code from each drop-down to map it to the control, lot, and level listed on the left.
- Click Save Changes.
- Click the cog icon for the original lot number and click **Duplicate**.



Note: Duplicating will transfer the tests' mapping from the old to the new lot to save time.

Make sure the correct new lot is selected in the **To** field and click **Apply**.



Note: Once you've duplicated, you can click the Map Tests link to see that the new lot's tests have already been mapped based on the previous lot's tests.

Scheduled Generic Codes

If your lab is set up with a scheduled data delivery method, and your data source (instrument/LIS/middleware) uses generic codes, contact software support regarding assistance with lot switches.



File Upload Method

There are two possible ways to handle lot switches if your connectivity method involves uploading files. The directions you will need to follow depend on the type of codes that come from your data source (instrument, LIS, or middleware):

- Unique Lot Codes: If the codes in your data source change from lot to lot, we call those "unique" codes. Each lot and level has a unique identifier, so UnityConnect 2 is able to detect when you have started a new lot because it receives new codes for it.
- Generic Lot Codes: If the codes in your data source stay the same from lot to lot (or the bar codes stay the same from lot to lot), we call those "generic" codes. UnityConnect 2 cannot detect when you have started a new lot because the incoming codes have not changed.

Uploading Unique Codes

This applies if your connectivity method is a file upload, and your data source (instrument/LIS/middleware) uses unique lot codes. (Information about determining your type of source codes is under "Data Stream Method" on page 17.)

There are two stages involved for a lot switch in the Unity software:

- Stage 1: Duplicate the lot in the Unity QC software. (If needed, refer to your Unity QC software User Guide for directions.)
- Stage 2: Map and duplicate lots in UnityConnect 2:
 - Upload your QC data file as usual. (Directions for uploading files are under "Steps for Uploading a QC Data File" on page 9.)
 - When alerted, map the new lot.
 - Duplicate the tests from the old lot to the new lot.



Note: If you have multiple mirror instruments running all of the same controls/tests, you can save time during a lot switch by completing the mapping for one instrument, then duplicating that instrument to the remaining instrument/s.

Steps for Mapping a New Lot

- 1 When the alert indicates a mapping is needed, click the **Map Lots** link for the instrument that requires mapping.
- 2 Click the **plus icon** + to add additional levels, if needed.
- 3 Select the levels you want to add, if needed.
- 4 Select the appropriate lot code from each drop-down to map it to the control, lot, and level listed on the left.
- 5 Click Save Changes.



6 Click the cog icon or for the original lot number and click Duplicate.



Note: Duplicating will transfer the tests' mapping from the old to the new lot to save time.

7 Make sure the correct new lot is selected in the **To** field and click **Apply**.



Note: Once you've duplicated, you can click the **Map Tests** link to see that the new lot's tests have already been mapped based on the previous lot's tests.

Uploading Generic Codes

This applies if your connectivity method is a file upload, and your data source (instrument/LIS/middleware) uses generic lot codes. (Information about determining your type of source codes in under "Data Stream Method" on page 17.)

If you create and upload one QC data file at the end of the month, but a lot switch occurred in the middle of the month, you will upload that file for the first part of the month (the old lot's data), then upload it again for the second part of the month (the new lot's data).

After uploading the final data for the old lot and before uploading the beginning data for the new lot, you must manually change the lot codes of the old lot in UnityConnect 2. The lot codes for the old lot and the new lot cannot be the same, so the old lot's codes must be adjusted before the new lot is uploaded.

Once the new lot's data is uploaded, UnityConnect 2 will alert you that the codes for that new lot need to be mapped.

There are two stages involved for a lot switch in the Unity software:

- Stage 1: Duplicate the lot in the Unity QC software. (If needed, refer to your Unity QC software User Guide for directions.)
- Stage 2: Manage lots in UnityConnect 2:
 - Upload the first part of the month before the lot switch occurred. (Directions for uploading QC data files are under "Upload a QC Data File" on page 8.)
 - Manually change the lot code for the old lot.
 - Upload the second part of the month after the lot switch occurred.
 - When alerted, map the new lot.
 - Duplicate the tests from the old lot to the new lot.



Steps for Changing Old Lot Codes

- 1 After uploading the first part of the month before the lot switch occurred, click the **Map Lots** link for the instrument that will be starting a new lot.
- 2 Click on the lot code for each level of the old lot and manually type a change to the lot code (such as typing "old") so it no longer shows the same code that the new lot will use.
- 3 Click Save Changes.

Steps for Mapping New Lots

- 1 Upload the second part of the month after the lot switch occurred. When the alert indicates mapping is needed, click the **Map Lots** link.
- 2 Click the **plus icon** + to add additional levels, if needed.
- 3 Select the level number you want to add, if needed.
- 4 Select the appropriate lot code from each drop-down to map it to the control, new lot number, and level listed on the left.
- 5 Click Save Changes.
- 6 Click the cog icon for the original lot number and click **Duplicate**.

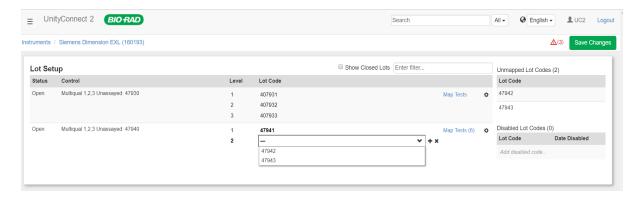


Note: Duplicating will transfer the tests' mapping from the old to the new lot to save time.

7 Make sure the correct new lot is selected in the **To** field and click **Apply**.



Note: Once you've duplicated, you can click the **Map Tests** link to see that the new lot's tests have already been mapped based on the previous lot's tests.





Optional Settings

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Sort By Columns

In the various mapping pages, you can sort items (alphabetically or numerically) in the left-side columns that display your Unity QC software information. (You cannot sort in the right-side columns in which you have mapped your source codes.)

Sorting, though not required, can help you locate items more easily.

Click the column header to sort the list. Click again to sort in reverse order.



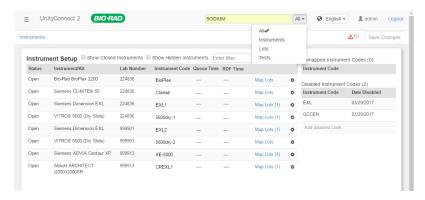
Search

You can search for a specific instrument, lot, or test in the Search field to locate an item more quickly.

For instance, if you wanted to check the mapping for sodium, rather than having to use the mapping links to drill down to the test screen, you could directly search for "sodium" and go straight to the associated test.

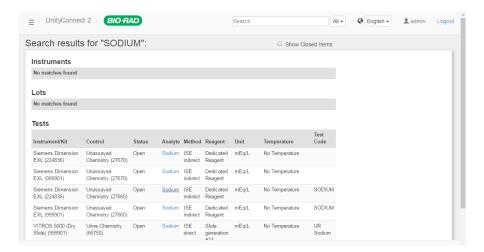
Steps for Searching

- 1 Locate the Search field at the top of the screen.
- 2 Choose a filter from the drop-down arrow next to the Search field to refine your search. (The default search setting is **All**, with options for **Instruments**, **Lots**, or **Tests**.)



Type the item name in the Search field.

3 Click the link for the needed item.



Disable Items

If a code crosses from the data source into UnityConnect 2, but you don't need to include that item in your Unity QC software, you can disable that code.

Steps for Disabling a Code

- 1 Locate the unneeded code at the top right of the screen under the section Unmapped Lot Codes. Click Disable next to the unneeded code to disable it.
- Once disabled, the code moves to the Disabled Lot Codes list below. Any associated data will not be imported into the Unity QC software.
- You can also manually add to the list of disabled codes by clicking the Add disabled code option under the Disabled Lot Codes section.
- 4 If you need to start using a disabled item, click the X icon to enable it. The next time that item is run, you will be prompted to map it.



Note: Or, proactively type the code into its respective location in preparation for the QC run (observing character case sensitivity).

Closed Items

Within your Unity QC software, there may be some closed instruments, lots, or tests ("closed" meaning the item was set up in the Unity QC software but put onto the closed list because it is not in use).

You can view or hide closed items in UnityConnect 2.

In most cases, you would want to hide them in order to avoid confusion or clutter. However, sometimes it can be helpful to view closed items if you need to check previous mapping or duplicate mapping.

Use the check box located at the top of the screen to show or hide closed items.



Hide Instruments

If you have an instrument in your Unity QC software that does not need to be seen in UnityConnect 2 (such as a non-connected instrument for which you manually enter data), you can hide it.

This can help keep your screens organized and clutter-free.

Steps for Hiding an Instrument

- 1 Click the cog icon next to the instrument and choose Hide.
- 2 Use the check box (located at the top of the screen) to show or hide those instruments.

Duplicate Instruments

If you need to set up a new instrument, and it needs to have all of the same lots, tests, and configuration as an existing instrument, you can duplicate the existing one.

Duplicating an instrument saves time. You will not have to map the lots and tests for the new instrument because it will copy everything from the existing instrument to the new one automatically.

Before you begin setting up the new instrument in UnityConnect 2, make sure all of its lots and tests are already set up in your Unity QC software.



Note: There is also a duplication feature in the Unity QC software that lets you copy one lab number's setup to a new lab number.

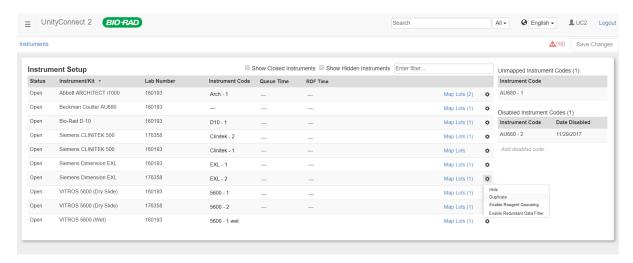


Note: If you have multiple instruments running the same controls/tests, you can save time during a lot switch by completing the mapping for one instrument, then duplicating that instrument mapping to the remaining instrument(s).

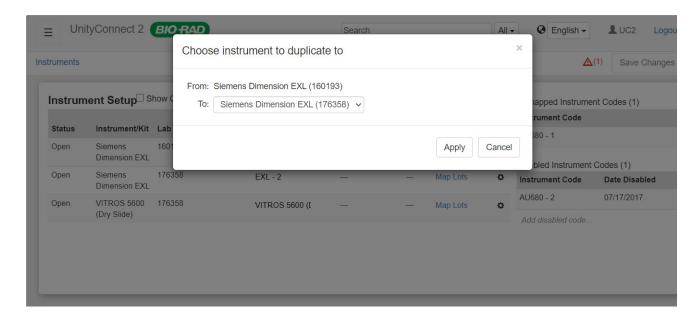


Steps for Duplicating an Instrument

- 1 Map the new instrument code.
- 2 Click the cog icon next to the original instrument and select **Duplicate**.



- 3 A pop-out will prompt you to choose the instrument to duplicate to.
- 4 In the **To** field, select the lab number for the new instrument and click **Apply**.





Note: Since everything is duplicated to the new instrument, no other mapping is needed.

Reagent Queueing

Reagent Queueing should be used if your instrument produces both production and stand-by reagent results that require separate grouping of the result runs in the Unity QC software.

Based on the lab's timing procedures for production and stand-by reagents that are uniquely identified in your data source (instrument, middleware or LIS), you can define how long UnityConnect will wait for all levels in use before releasing a test's QC results to the Unity QC software.

Manage the Timing of Data Import According to Levels in Use

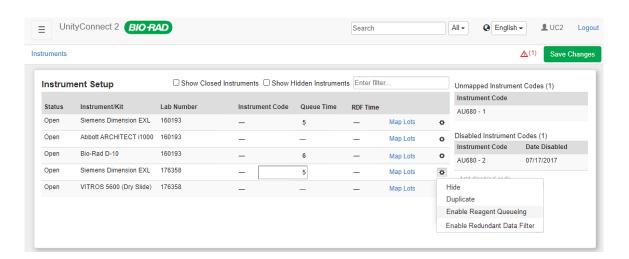
The control levels in use need to be defined in the Unity QC Software for each test. (Refer to the Unity Real Time 2 User Guide for more information.)

If UnityConnect receives results for all enabled test levels, the QC results will automatically be transmitted to the Unity QC software. If one or more enabled test levels is delayed, UnityConnect will hold all results for the test in the queue. When the defined queue time is reached, UnityConnect will transmit the collected results to the Unity QC software.

Steps for Defining Reagent Queueing

- 1 Click the Cog icon next to the instrument and select Enable Reagent Queueing.

 The Queue Time field will become active for the selected instrument.
- 2 Enter the specified time into the text field in minutes ranging from 1-1440 (24 hours).
- 3 Click Save to apply changes.





Note: If an additional queue time is no longer needed, the user can simply click the **Cog icon** and select **Disable Reagent Queueing**.



Redundant Data Filtering

The Redundant Data Filter (RDF) is a feature used to identify and block transmission of QC results that have already been sent to the Unity QC software. Activating this feature provides the added benefit of more efficient use of the rejection log within the Unity QC software, because the extra work of re-reviewing previously transmitted rejections is avoided. Instead, review time when determining why QC data was not imported is used to focus on unaddressed items in the Unity QC software's rejection log.

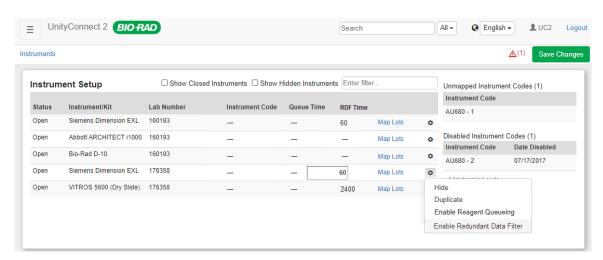
The RDF time is typically set based on how often the data source (instrument, middleware, or LIS) continuously creates new data files that contain previously transmitted results. For example, laboratories that use the "Scheduled" Data Delivery Method will often see both new and previously transmitted results in the auto generated QC data file(s). See Data Delivery Methods - Scheduled on page 3 for more information regarding scheduled files.

Manage the RDF Time

The RDF time is typically set based on how often the data source (instrument, middleware or LIS) creates a new data file for transmission. The time can be set for 1 to 1440 minutes (24 hours) by populating the **RDF Time** field. RDF can be activated and managed only from the Instrument Setup page in UnityConnect.

Steps for Defining Redundant Data Filtering

- 1 Click the Cog icon next to the instrument and select Enable Redundant Data Filtering. The RDF Time field will become active for the selected instrument.
- 2 Enter the specified time into the text field in minutes ranging from 1-1440 (24 hours).
- 3 Click Save to apply changes.





Note: If a RDF is no longer needed, the user can simply click the Cog icon and select Disable Redundant Data Filter.



Contact Bio-Rad

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Software Support

United States: 1-800-854-6737, extension 3

Canada: 800-361-1808

Software Support Representatives are available Monday through Friday, 5 am to 5 pm (Pacific Standard Time).



Important: If phoning Bio-Rad outside of normal working hours, leave a message and a Software Support Representative will return the call, typically within 24 hours.

Outside the United States, contact your local field application specialist.

QC Program Representative

For questions related to your peer group reports, call 800-854-6737, extension 4.



License, Warranty, and Trademarks

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