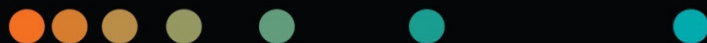
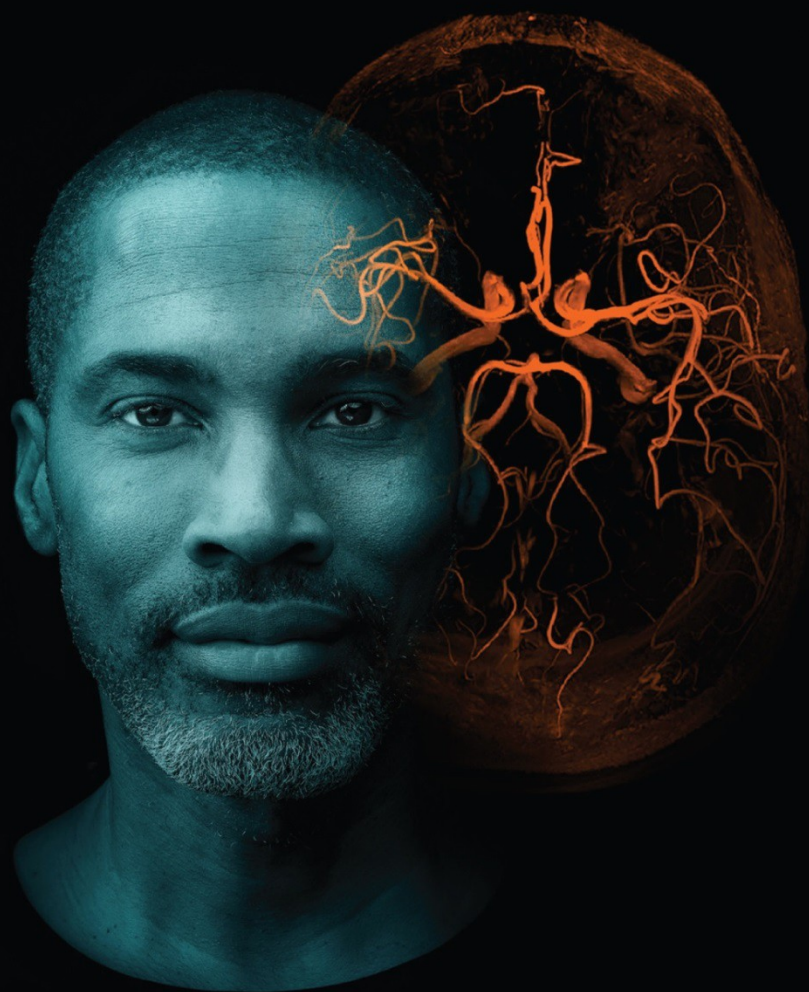


Atellica® Data Manager

Onsite

Training Workbook



Siemens Healthineers

Atellica® Data Manager

Onsite Training Workbook



Atellica, CentraLink and all associated marks are trademarks of Siemens Healthcare Diagnostics Inc. or its affiliates. All other trademarks and brands are the property of their respective owners. Product availability varies by country and is subject to varying regulatory requirements. Please contact your local representative for availability.

©2022 Siemens Healthineers. All rights reserved.

Table of Contents

- 1: Welcome**
- 2: System Overview**
- 3: Sample & Result Management**
- 4: Quality Control**
- 5: Customizing**
- 6: Troubleshooting**

1 Welcome

Siemens Healthineers Training would like to welcome you to basic training for Atellica® Data Manager.

This course is designed to teach you the skills needed to operate, maintain, customize, and troubleshoot the Atellica Data Manager.

Our staff welcomes the opportunity to present this training program to you.

Course Objectives

After participating in this training, you will be able to:

- Describe icons found on the Home screen.
- Explain the communication flow of Atellica Data Manager.
- Explain sample and result statuses.
- Use the Sample Query Browser to search for samples.
- Use Review and Edit to search for results
- Use Order Entry to manually enter a work order.
- Use the QC icon to review quality control results.
- Set up new QC lots.
- Copy QC Population data to instruments.
- Create new users.
- Create custom counters.
- Create shortcuts.
- Use the Watchdog Dashboard to identify and resolve system alerts.

Atellica® Data Manager Onsite Training

Course Validation Checklist

The participant places a checkmark beside the competency when it is completed. When all competencies are checked, the instructor and participant sign and date below as record of completion.

Topics	Competencies	Completed
System Overview	Describe icons found on the Home screen.	
	Explain the communication flow of Atellica Data Manager.	
Sample & Result Management	Explain sample and result statuses.	
	Use the Sample Query Browser to search for samples.	
	Use right click menu options found in the Sample Query Browser.	
	Use Review & Edit to search for results.	
	Use functions found in Review & Edit.	
	Use right click menu options found in Review & Edit.	
	Use Order Entry to manually enter a work order.	
	Use Result Entry to manually enter results.	
Quality Control	Use the QC icon to review quality control results.	
	Use the QC tab to reset QC severity.	
	Set up new QC lots.	
	Classify a QC population status.	
	Copy QC Population data to instruments.	
Customization	Create new users.	
	Create custom counters.	
	Create shortcuts.	
Troubleshooting	Use the Watchdog Dashboard to identify and resolve system alerts.	

Instructor: _____

Participant: _____

Date: _____

What was most helpful to you during this program?

How can we improve this program to make it more meaningful to you?

2 System Overview

System Overview

Resources

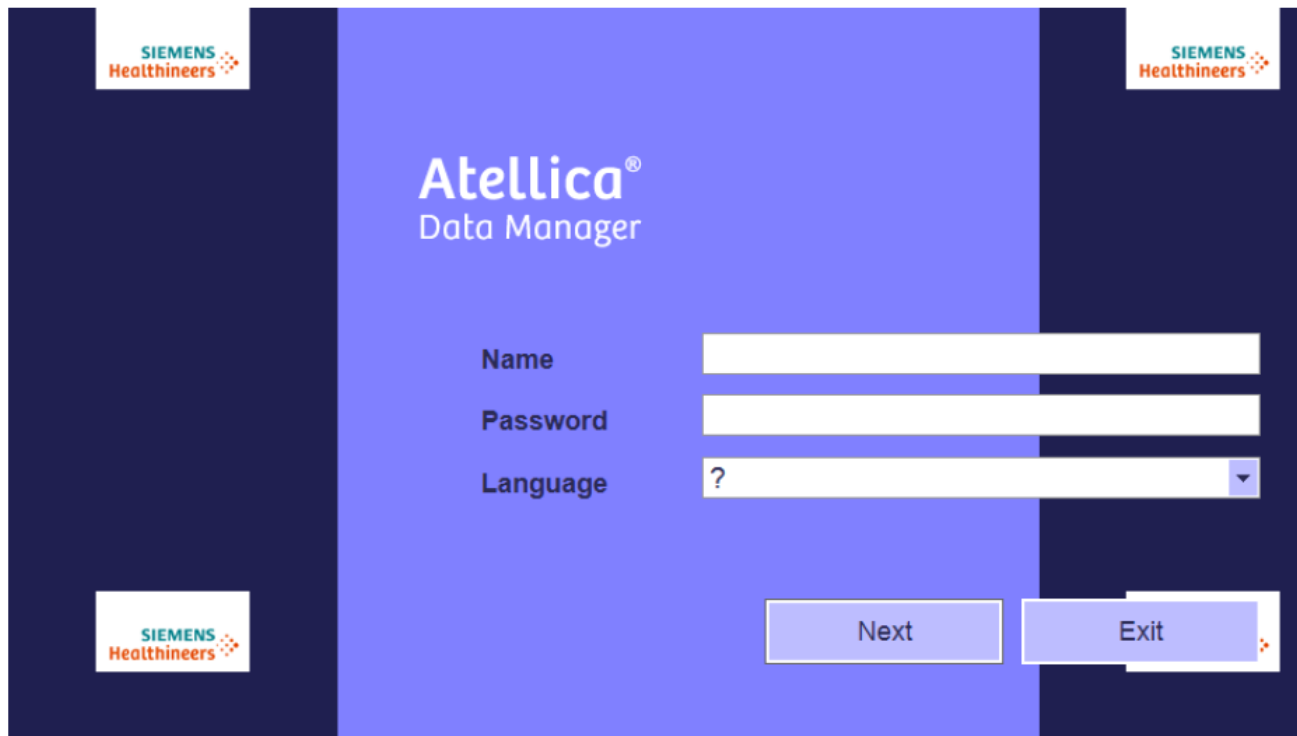
- *Atellica® Data Manager PEP to Go*
- *Atellica® Data Manager Operator's Guide*

Objectives

After completing this module, you will be able to:

- Describe icons found on the Home screen.
- Explain the communication flow of Atellica Data Manager.


Logging On



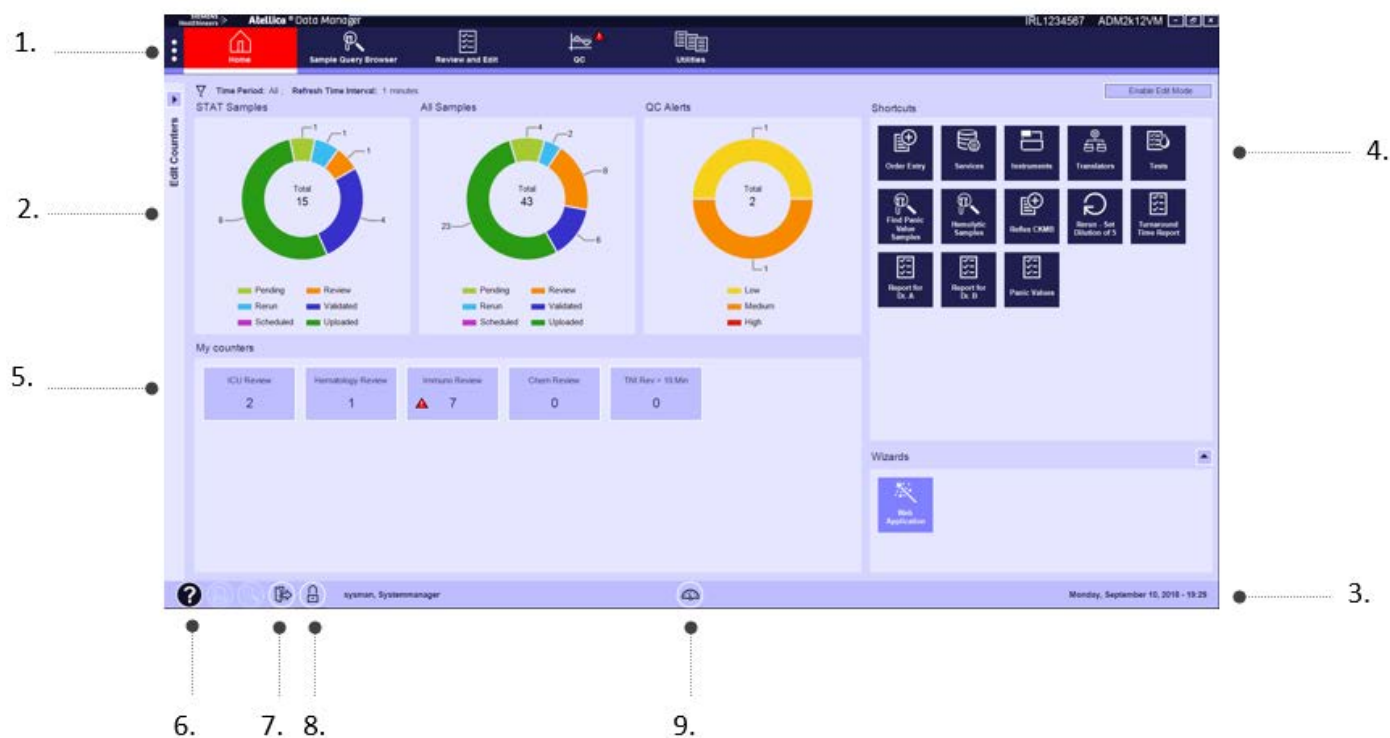
The login screen for Atellica Data Manager features a blue background with the Siemens Healthineers logo in the top corners. The title 'Atellica® Data Manager' is centered. Below it are three input fields: 'Name', 'Password', and 'Language'. The 'Language' field is a dropdown menu currently showing a question mark. At the bottom right are two buttons: 'Next' and 'Exit'.

Option	Description	Training Login Info
Name	User login name (Lab dependent)	LabManager
Password	Login password (Case sensitive)	Siemens123!

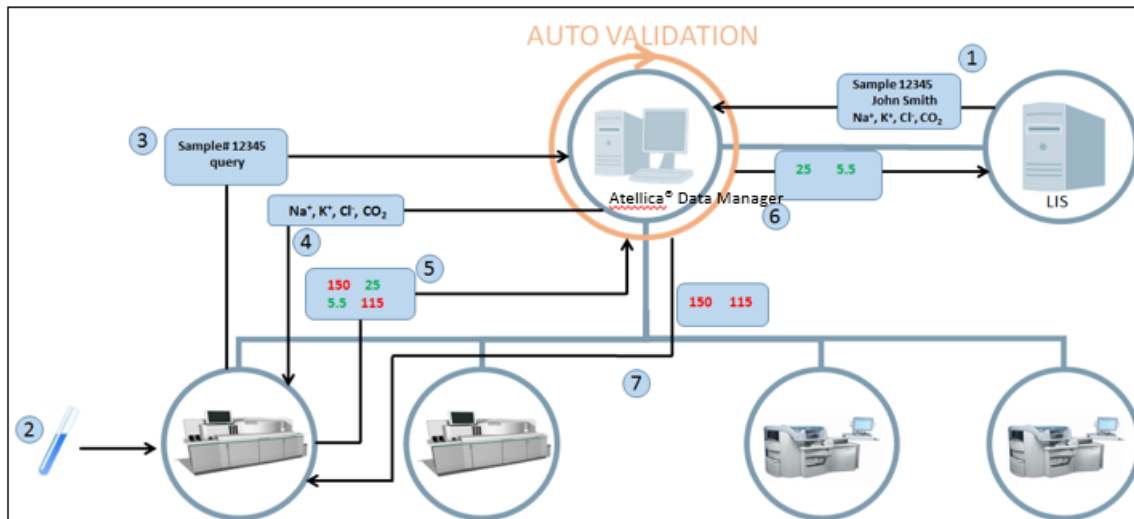
Logging off

Select  to sign out of the Atellica Data Manager.

System Overview



Communication Flow



Place these data flow steps in the order in which they occur.

- ___ Orders download from the LIS to Atellica Data Manager
- ___ Sample is introduced to instrument
- ___ Instrument reads barcode & queries Atellica Data Manager for the orders
- ___ Atellica Data Manager sends the orders to the instrument
- ___ Instrument processes tests and sends results to Atellica Data Manager
- ___ Atellica Data Manager transmits the results to the LIS
- ___ Atellica Data Manager requests reruns* and reflex tests as needed

*Laboratory Information Systems (LIS) may also request reruns and reflex tests as needed

Exercise 1 – System Overview

1. Log on to the Atellica Data Manager
 - a. What are the names of the tabs found on the Command Bar?

2. Review the charts displayed on the Home screen
 - a. What is the total number of all samples?

 - b. What is the total number of STAT samples?

 - c. How many QC alerts does the system have?

3. Select the **Help** icon on the Home screen. What displays?

4. What is the difference between the Sign out icon and the Lock icon?

3 Sample & Result Management

Sample & Result Management

Resources

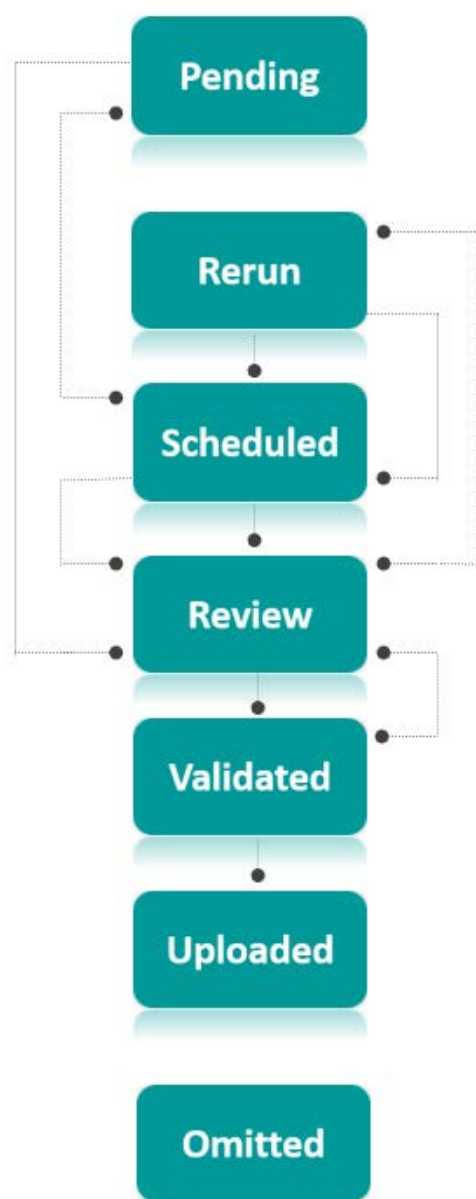
- *Atellica® Data Manager PEP to Go*
- *Atellica® Data Manager Operator's Guide*

Objectives

After completing this module, you will be able to:

- Explain sample and result statuses.
- Use the Sample Query Browser to search for samples.
- Use right click menu options found in the Sample Query Browser.
- Use Review & Edit to search for results.
- Use functions found in Review & Edit.
- Use right click menu options found in Review & Edit.
- Use Order Entry to manually enter a work order.
- Use Result Entry to manually enter results.

Result Status



- **Pending (PND):** Request is created and downloaded from the LIS
- **Rerun (RRN):** Request with results has been marked for rerun
- **Scheduled (SCH):** Request has been downloaded to the instrument
- **Review (REV):** Test result needs to be manually reviewed
- **Validated (VAL):** Result has been validated by the operator or automatically
- **Uploaded (UPL):** Result has been uploaded to the LIS
- **Omitted (OMT):** Request has been omitted and will not be uploaded to the LIS

**Note:**

The status of a sample reflects the earliest status of a test request within the sample.

**Note:**

Only PND and RRN allows a result to be eligible for instrument query.

Exercise 2 – Sample Status

Determine the overall sample status for each example.

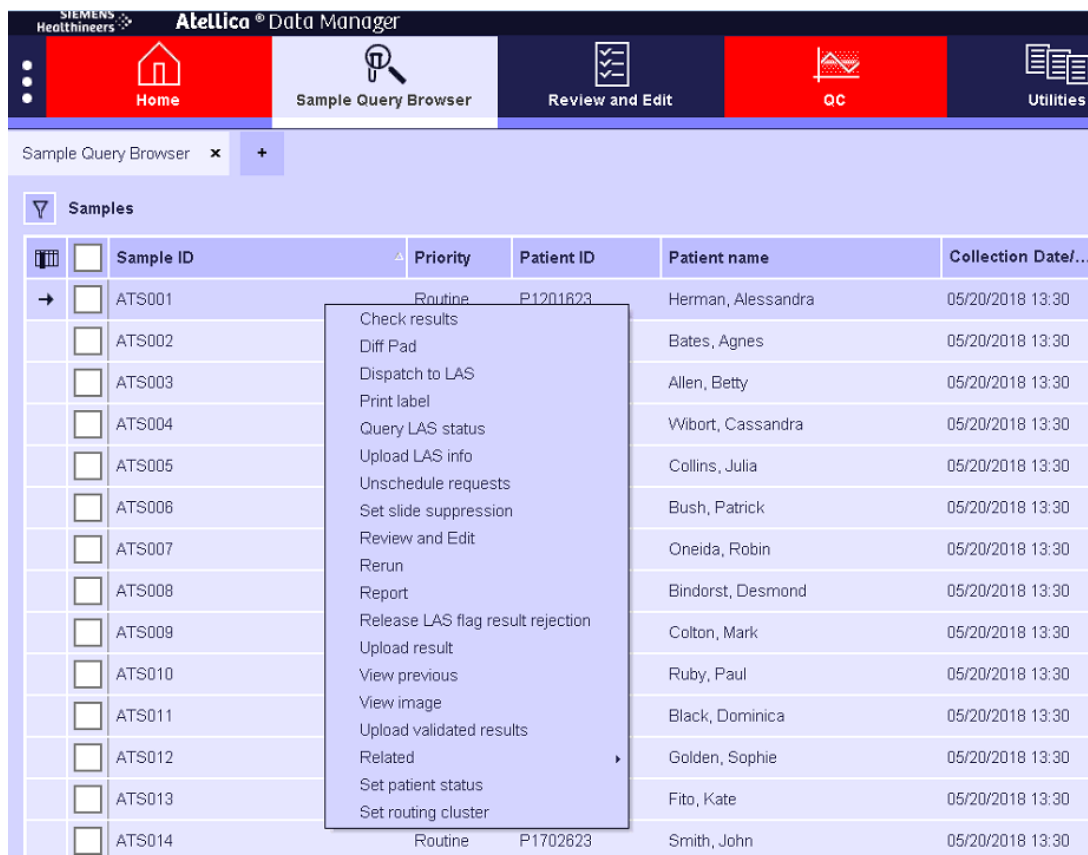
Test	Status
HCG	UPL
Overall Status	

Test	Status
CK	SCH
CKMB	SCH
CTnl	RRN
Overall Status	

Test	Status
B12	UPL
FOL	PND
TSH	UPL
T4	UPL
T3	UPL
Overall Status	

Test	Status
BUN	SCH
CREA	SCH
Na	REV
K	REV
CL	REV
Overall Status	

Sample Query Browser – Right Click Menu Options



Option	Definition
Unschedule Requests	Enables operators to reroute samples for which the system never receives results.
Review and Edit	Navigates to the review and edit window for the sample selected.
Rerun	Targets all tests in a REV status to be rerun
Upload result	Allows you to specify the test and LIS Channel for upload. Select the check box include uploaded , to reupload tests that have already been transmitted to the LIS.
View previous	Displays previous patient data or previous run data
Upload validated results	Uploads validated results to the LIS. Will work if at least one request is in status Validated. Partial upload of results is possible. Select the check box include uploaded , to reupload tests that have already been transmitted to the LIS.

Exercise 3 – Sample Management

1. Using the **Sample Query Browser**, search for all samples in REV status.
 - a. Describe how to select a single record:
 - b. What do you select so that the total number of samples is displayed in the status bar at the bottom?
 - c. How many results are retrieved in this search?
 - d. What button allows a user to modify an existing sample search?
2. Modify the search to include “At least one request in status.”
 - a. How many results are retrieved with this search?
 - b. Why are there samples in a status other than REV in this results list?
3. Select Sample Query Browser. Perform a search for sample **201277**.
 - a. What window appears when a user double clicks on the sample record?
 - b. How can a user confirm what instrument this sample was tested on?
4. Perform a new Sample Query search by clicking on the ‘+’ (plus) under the Command bar and opening a new tab. Perform a search for all samples in a **SCH** status (At least one request in status) found on **Advia2120_1**
 - a. From this window, list the steps to unschedule all samples displayed.

Exercise 4 - Create a Patient Order

1. Create a patient order using the information below.
 - a. Sample ID: 12345
 - b. Priority: STAT
 - c. Collection D/T: Today's date
 - d. Requests: PT INR, APTT sec
2. When would you manually create a patient order?

The 'Order Entry' window is divided into several sections:

- Top Section:** Contains fields for 'Sample ID' (with a dropdown arrow), 'Requesting LIS' (set to 'Site default LISChannel'), 'Priority' (set to 'Routine'), 'Status' (with a dropdown arrow), and 'Collection D/T' (with a date picker).
- Left Section (Main/LAS/More tabs):** Contains a group of fields for patient information: 'Sample type', 'Container type', 'Cap type', 'Patient ID', 'Patient last name', 'Patient first name', 'Sex', 'Birth date', 'Species' (set to 'Human'), 'Patient status', 'Location', 'Encounter', 'Physician ID', 'Physician last name', 'Physician first name', and 'Entering organization'.
- Right Section:** Contains a 'Requests...' field with a dropdown arrow and a large list box for adding or selecting requests.
- Far Right (Action Buttons):** A vertical stack of buttons: 'Duplicate', 'Cut', 'Copy', 'Paste', 'Clear', 'Advanced' (with a dropdown arrow), and 'Custom Actions' (with a dropdown arrow).
- Bottom Section:** Contains navigation arrows (back, forward, etc.) and three buttons: 'Merge', 'OK', and 'Cancel'.

Review and Edit – Severity

(NS) Norm Severity

- Value indicating the degree to which a result is out of the normal range

(DS) Delta Severity

- Value indicate the failure of a delta check

(QS) QC Severity

- Value indicating the violation of QC rules

(IS) Instrument Severity

- Value indicating the presence of an instrument flag

Norm Severity	Result Classification	Action
NS ± 1	Abnormal result; not critical	Result auto validated by CentraLink
NS ± 3	Critical result	Review result, comments, and instrument flags; validate or rerun
NS ± 7	Result above linearity (AMR)	Wait for second result before validating
NS ± 9	Result > AMR x dilution factor	Make a manual dilution. Review comments and instrument flags; validate or rerun.
Delta Severity	Result Classification	Action
DS ± 2	Failed delta check	Review current and previous results. Review comments and instrument flags; validate or rerun.
QC Severity	Result Classification	Action
QS 2	Failed Westgard rule_____	Troubleshoot, rerun QC; reset Method severity if QC is in range
QS 3	Failed Westgard rule_____	Troubleshoot, rerun QC; reset Method severity if QC is in range
Instrument Severity	Result Classification	Action
IS 2	Flag indicates problem with result	Review instrument flags and troubleshoot

Review and Edit – Right Click Menu Options

The screenshot displays the 'Review and Edit' tab in the Atellica Data Manager. The top navigation bar includes 'Home', 'Sample Query Browser', 'Review and Edit' (active), 'QC', and 'Utilities'. Below the navigation bar, the 'Sample Query' section shows filters for 'Samples with Minimal status 'Review', Maximal status 'Review'' and 'Request Options: From 'Pending', To 'Uploaded''. The patient information section includes fields for Sample ID, Patient ID, Patient Name, DOB, Sex, Age, Priority, Collection Time, and Patient Location. The test results table has columns for Test, Sts, Current, Unit, Norm, Current D/T, F, Previous Run, and Previous Result. A right-click context menu is open over the 'LH' test result, listing various actions available for that test.

Option	Definition
Advanced Rerun	Enables operators to configure repeat testing on tests that have already been processed at least once.
Edit Result Comment	Enables operators to append a coded comment (mnemonic) to a test result.
Omit	Enables operators to Omit test requests.
Revert	Enables operators to revert all requests for the selected sample to their previous result.
View QC	Enables operators to investigate quality control severities by navigating from the Review and Edit tab to the QC Results tab.
Unschedule	Enables operators to reroute samples for which the system never receives results.

Exercise 5 – Review & Edit

1. Select **Review and Edit**. Leave all the search criteria defaulted and click **OK**.
 - a. How many samples match the criteria of this search?

2. Perform a new Review and Edit search by clicking on the '+' (plus) under the Command bar and opening a new tab. Check off '**At least one request in status.**' Leave all other search criteria defaulted. Click **OK**.
 - a. How many samples match the criteria of this search?

 - b. What is the name of the Review and Edit dropdown that enables operators to select results by status? What status does this quick-select function default to?

3. What information is found in the slide-out Details panel on the right side of the Review and Edit screen?

4. Using Review and Edit, search for sample **ATS002**. How can a user view the results of different test groups?

5. Identify the Review and Edit icons below.
 - a. What is the name of the following icons?





- b. When selected, which icon displays any rules samples can trigger and provides access to suggested actions based on the triggered rules?

6. Identify the severities.
 - a. What does a DS of 2 indicate?
 - b. What does a NS of 1 indicate?
 - c. What does a NS of 3 indicate?
 - d. What does a QS of 3 indicate?
7. While processing a sample on their CS-5100 (coag), an operator saw that the instrument alarmed with an “insufficient sample” error. What type of severity would Atellica Data Manager trigger for this sample?

Exercise 6 – Result Management

1. Using Review and Edit, search for all samples in a REV status. Ensure all tests are selected and select **Validate** for the first sample. Does Atellica Data Manager automatically navigate to the next sample to be reviewed?
2. Using Review and Edit, search for sample **9502172**. Select the test **APTT sec**, then select **Rerun**.
 - a. What does the result status of APTT sec change to?
 - b. Select the APTT sec test again. Select **Revert**. What does the result status of APTT sec change to now?
3. Using Review and Edit, search for sample **201718** and view the results. What option does the scroll function change to when selected?
4. Using Review and Edit, search for sample **700528**. Right click on the test **Crea 2** and select **Advanced Rerun**. What is the first option found in the Advanced Rerun window? Rerun this test on instrument **Atellica2_CH930_2**
5. Using Review and Edit, right click on the **Crea 2** test for sample **700528** and select **Edit result comment**. Using a mnemonic, type in **/RR**. What is the new result comment that is displayed in the comment box?
6. Search for sample **900523**. Select **View Previous**. What is the sample ID for the results from 01/20/2020?

- | | |
|-----------------------|------|
| Atellica Data Manager | 3-13 |
|-----------------------|------|

4 Quality Control

Quality Control

Resources

- *Atellica® Data Manager PEP to Go*
- *Atellica® Data Manager Operator's Guide*

Objectives

After completing this module, you will be able to:

- Use the QC tab to review quality control results.
- Use the QC tab to reset QC severity.
- Set up new QC lots.
- Classify a QC population status.
- Copy QC Population data to instruments.

Exercise 7 – QC Results Tab

1. Select QC. Select the QC results tab and search for CA results from 05/01/2018 – 05/31/2018.

- a. What is the name of the slide-out panel that enables operators to modify a search for the QC results the system displays?

2. Circle the data point below that indicates the QC result has been omitted.



3. List the statistics that are available at the bottom of the QC Results tab.

4. True or False: Performing the QC Close Out procedure removes all QC data from the Current QC calculations and includes the closed-out data in the Cumulative QC calculations.

5. Match the severity with the appropriate definition.

Method Severity (MS) _____

West Gard Severity (WS) _____

Instrument Severity (IS) _____

Choice Severity (CS) _____

- a. Determined by the severity assigned to the Westgard check that was violated for this result.
- b. Displays the severity for a result that does not match any of the choices in the choice list associated with the result.
- c. The total assay severity for the QC result.
- d. Determined by the severity assigned to instrument flags.

6. Identify what severity is indicated by the QC alerts below.







7. What is the name of the QC tab that will indicate with a red underline when a QC severity has been triggered?

8. What is the name of the QC tab that allows an operator to draw a Levy Jennings (LJ) graph?

9. Using the QC Graph tab, search for CA data from 05/01/2018 – 05/31/2018.

- a. Without using the text box in the QC graph tab, how can an operator edit the date range of the displayed LJ graph?

- b. What happens when an operator clicks and drags the mouse over a cluster of QC data points displayed on the graph?

Exercise 8 – QC Result Management

1. True or False: A method will still auto-validate if it has an active QC severity.
2. True or False: A QC Population Status that is Inactive will not raise MS alerts for Westgard violations but will raise a MS alert from instrument flags on a QC result.
3. From the home tab, select the high priority QC alerts from the doughnut chart. What columns are highlighted red when a method has an active QC severity?
4. Using Review and Edit, search for sample ATS002.
 - a. What severity has triggered to keep this sample in REV status?
 - b. What right click menu option allows an operator to investigate this issue?
5. Using the QC Alerts tab, Reset the method severity for AFP.
 - a. What columns remain red after a method severity has been reset?
6. What must be done to all the patient samples that were affected by this QC severity?
7. What right-click menu option in the QC results window allows an operator to see all patient samples affected?
8. Using the QC Population Status tab, search for QC lot **546031**. Set this lot to Active for all populations. What color status indicates an active QC lot?

Exercise 9 – New QC Lots

1. Enter the QC lot information below to set up new QC lots:

Lot Number: 60301

Name: BioRad Multi

Level: 1

Expiration Date: 10/01/2021

Lot Number: 60303

Name: BioRad Multi

Level: 3

Expiration Date: 10/01/2021

2. Set the Target and Deviation for the new QC lots using the information below:

Lot Number: 60301

Test: BUN

Instrument: DimEXL_1

Target: 13.0

Deviation: 3.5

Lot Number: 60303

Instrument: DimExL_1

Test: BUN

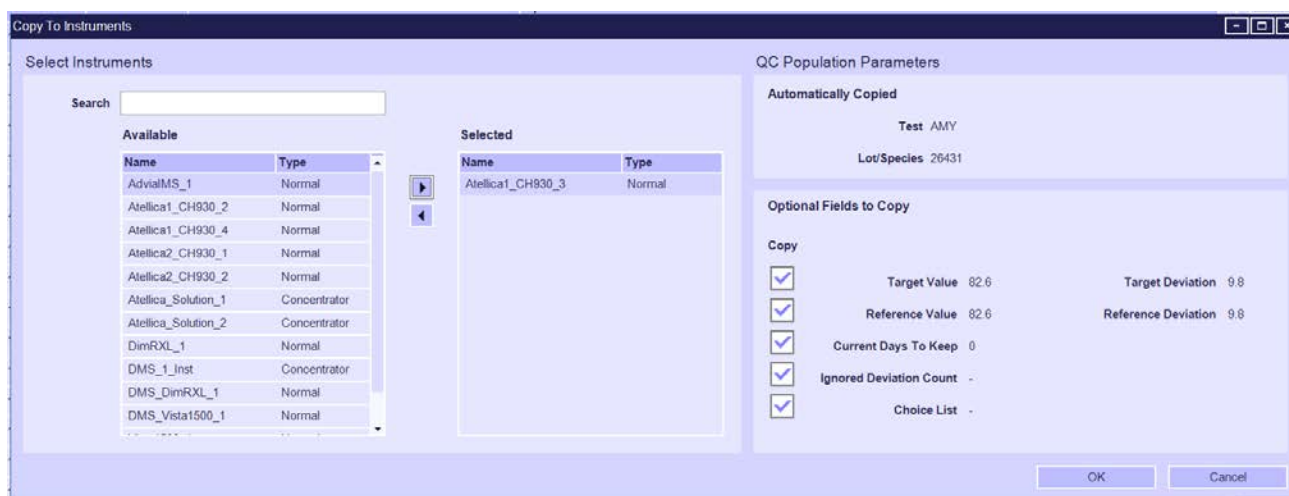
Target: 60.0

Deviation: 10.0

3. True or false: ADM will recognize undefined QC lots that are ran on instruments.

Exercise 10 – Copying QC Populations to Instruments

1. Navigate to the **QC Populations** screen using the following path: **Routine > Quality Control > QC populations**.
2. In the subsequent window that appears, called **QC population query**, leaving all the fields defaulted so that all QC populations are retrieved. Click **OK**.
3. Locate the QC population records for the following:
 - a. **Atellica_CH930_2** for **AMY**, **QC Lot 26431**
 - b. **Atellica_CH930_2** for **AMY**, **QC Lot 26432**
4. **Right-click** on each of these QC populations and select **Copy To Instruments**.
5. In this new window, select the **Atellica_CH930_3** for the list of available instruments, and use the icon point the right to place the instrument in the **Selected** column. Match the screenshot below.



6. Click **OK**. What information is displayed in the confirmation window?

5 Customization

Customization

Resources

- *Atellica® Data Manager PEP to Go*
- *Atellica® Data Manager Operator's Guide*

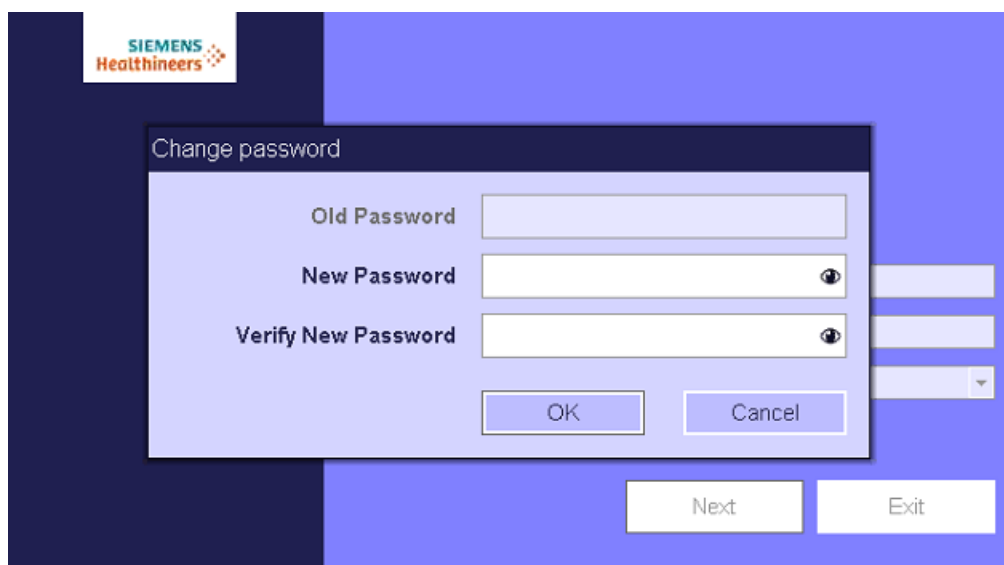
Objectives

After completing this module, you will be able to:

- Create new users.
- Create custom counters.
- Create shortcuts.

Creating New Users



- Only system managers can create new user logins.
- After creating a user, the system manager must assign a user role group.
- There are 4 user roles that ADM has by default:
 - a. Guest
 - b. User
 - c. System Manager
 - d. Developer
- Users must change passwords on first login.



Exercise 11 – Creating New Users

1. Create a new user for yourself and assign the user role assignment “User.”
 - a. To set up a new user, what login privilege must be used?
 - b. To reset another user’s password, what login privilege must be used?
2. Login as your new user.
 - a. What must a new user do immediately when logging in for the first time?




About My Counters Thresholds

- Atellica DM alerts the operator when a sample count exceeds its threshold.
The Home tab turns red and the relevant counter displays: 
- Acknowledging the alert causes the Command bar Home icon to change to:

- When the counter drops below the alert threshold value, Atellica DM removes the alert icon from both the command bar and the counter.

Exercise 12 – Creating Counters

1. Create a new Counter using the information below.
 - Counter name: CTNI Tests in REV.
 - Alert threshold value: 1.
 - Open in Review and Edit.
2. Create a new Counter to alert the operator when any samples have been PND for greater than 30 min. List the information specified to create this new counter.
3. Create a new Counter to alert the operator when any samples have been SCH for greater than 60 min. List the information specified to create this new counter.

Exercise 13 - Copying Counters

1. From the command bar, click on the **Menu** icon: 
2. Select **Tools > Copy Counters from other user.**
3. Double click in the field **From User** and Select the user: **Azizi.**
4. Select the check box next to each desired counter to copy, or select the check box **Counters to copy** to select all.
5. Select **OK.**
6. Enable the newly copied Counters by clicking on the  icon next to My Counters and selecting the toggle icon .



Exercise 14 - Creating Shortcuts

1. Delete the calculator shortcut.
2. Add a new shortcut. Recreate the calculator shortcut and drag it to the top of the shortcuts list.

6 Troubleshooting

Troubleshooting

Resources

- *Atellica® Data Manager PEP to Go*
- *Atellica® Data Manager Operator's Guide*

Objectives

After completing this module, you will be able to:

- Use the Watchdog Dashboard to identify and resolve system alerts.

Watchdog Dashboard

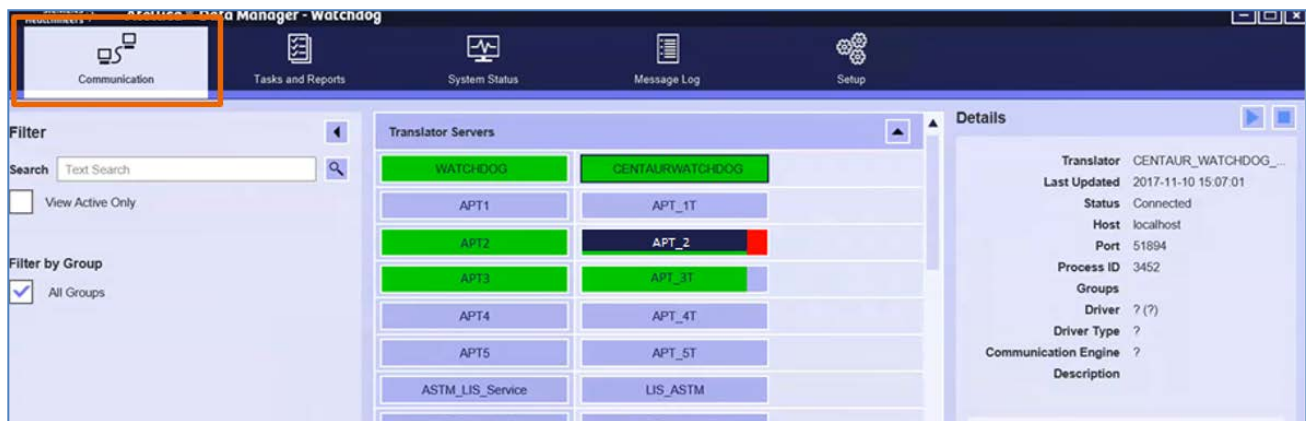


- A **red** Dashboard icon indicates there are alerts for 1 or more watchdog items
- A **yellow** Dashboard icon indicates there are warnings for 1 or more watchdog items

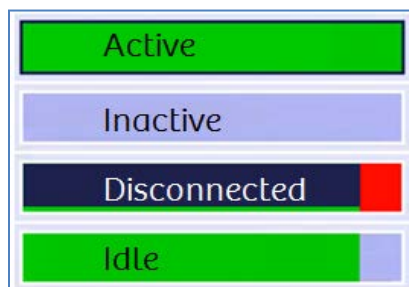
The alert severity of the Dashboard icon reflects the highest alert severity within the Watchdog service.

Watchdog Communication Tab

The Watchdog Communication tab displays the status of translators and services.



Available status' for translators and servers:



Exercise 15 - Watchdog Dashboard

1. How can operators access the Watchdog Dashboard?
2. How does the Watchdog dashboard indicate an active/connected translator?
3. How does the Watchdog dashboard indicate a disconnected translator?
4. Describe the steps to restart a connected server or translator in Watchdog:

