Starting up an instrument with low battery level

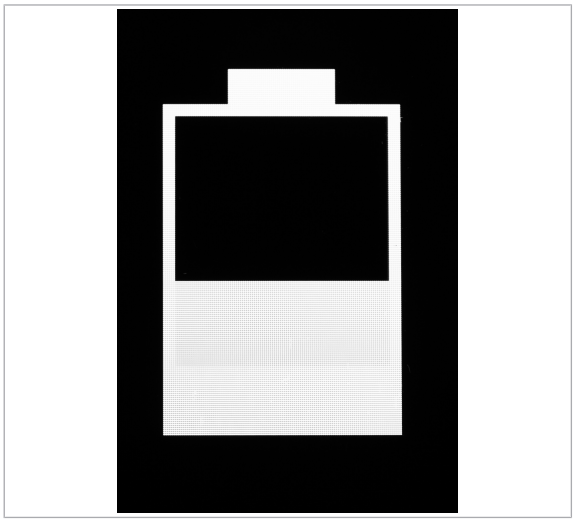
A turned-off instrument with low battery level (<15%) will not start up automatically when placed in the charging station. However, an instrument with sufficient battery level (>15%) starts up automatically.

In order for an instrument to start up and to operate, its battery must have sufficient charge (>15%). When it does not, the battery must be allowed to charge to a sufficient level so that the instrument can start up.

When left in the charging station until it has charged sufficiently, the instrument will not start up automatically. You must turn it on.

To start up an instrument with low battery level

1 Place the instrument in the charging station and do one of the following:
- If the instrument starts up normally, no further action is required.
- If the instrument buzzes, the screen turns white, and a short battery animation is displayed, the instrument has insufficient battery charge to start up. Leave the instrument in the charging station to charge.



2 After allowing the instrument battery to charge, leave the instrument in the charging station, and then press the on/off switch.
- ➔ If the instrument has sufficient battery charge, it starts up.
- ➔ If the instrument displays a white battery icon it still has insufficient battery charge to start up. Allow further charging time and then repeat this step.

Related topics

- Charging the instrument (104)

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Error messages

In this chapter 9

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About level 1 messages and level 2 errors

The cobas pulse user interface guides you through workflows based on the instrument configuration.

Information, warning, and error screens indicate when cobas pulse detects specific conditions or events.

Level 1 messages

Level 1 messages are displayed on the user interface. They can also be retrieved by the DMS.

There are 3 types of level 1 messages:

- Information
- Warnings
- Errors

Warnings and errors are triggered by an underlying level 2 error. Consequently a level 1 message will have one or more associated level 2 errors.

A level 1 message contains the following information:

- Message code (e.g., U-AN)
- Title
- Problem
- Guidance

The severity of the message is color coded.

- Information: no color
- Warning: yellow
- Error: red

Level 1 messages are displayed using the following formats:

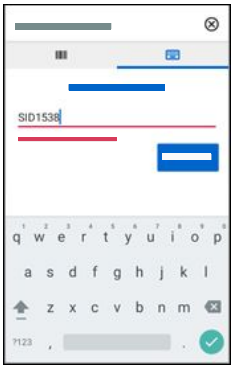
Information (dialog)

Warning (dialog)

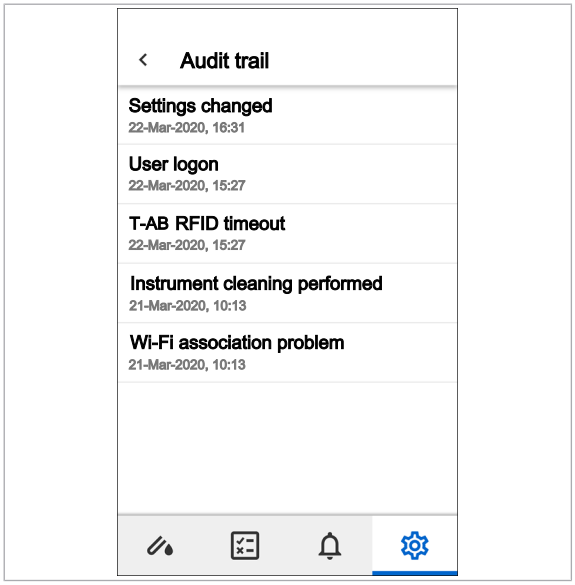
Warning with action (dialog)

Error (dialog)

Camera related message



Inline error below a text entry field



As well as being displayed on the user interface, level 1 messages are listed in the audit trail (> **Audit trail**).

Level 1 messages are grouped by the nature of the underlying issue/error, and represented by a letter. The letter is incorporated in the message code (e.g., T-AB)

Group	Issue type
H	Hardware
S	Sample
D	Strip/instrument
U	User
E	Environmental condition
I	System software
C	Glucose app
G	Generic errors
B	Barcode scanning (messages related to 'configuration by barcode')
T	RFID tag reading
O	OTE app

Level 1 messages goups

Level 1 messages (213)

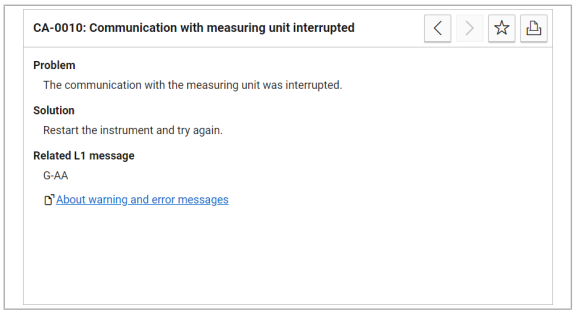
Level 2 errors

Level 2 errors indicate the issue underlying a level 1 message.

Level 2 errors can be viewed using the following methods:

- User assistance
- Instrument audit trail
- DMS

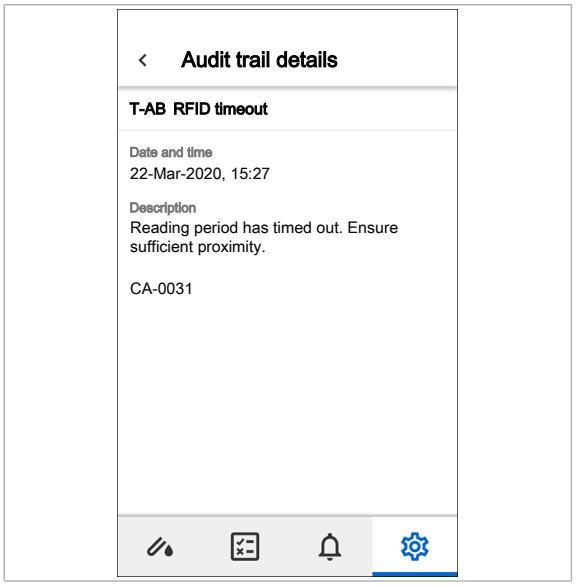
You use the level 2 error code to locate the error message details in the User Assistance.



When viewed in the User Assistance a level 2 error provides the following information:

- Error code (e.g., CA-0010)
- Title
- Problem
- Solution
- Trace to the level 1 error message (e.g., G-AA)

Using the instrument audit trail or the DMS, only the error code of the level 2 error is provided.



To view an underlying level 2 error of a level 1 message, in the **Audit trail** screen, tap the level 1 message. The **Audit trail details** screen is displayed, containing the level 2 error code.

Level 2 errors (229)

Level 1 messages

In this section

B-AA: Invalid barcode

Barcode is invalid.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

B-AB: Scan timeout

Scanning period has timed out.

Restart scanning

Severity

GUI Warning

DMS Note

About level 1 messages and level 2 errors (209)

B-AC: Wrong sequence

Wrong barcode scanned.*

Scan barcode %s of %s.*
*<individual barcode number> of <total number of barcodes>

Severity

GUI Error

DMS Note

About level 1 messages and level 2 errors (209)

B-AD: Configuration error

Check barcode configuration content.

Severity

GUI Error

DMS Note

About level 1 messages and level 2 errors (209)

C-AA: Database full

Ensure that the instrument is connected to the network.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

C-AB: Database error

Database was reset to the default settings.

Ensure that the instrument is connected to the network.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

C-AD: Connection error

Test strip lot data retrieval not possible.

Ensure that the instrument is connected to the network.

Severity

GUI Warning

DMS Note

About level 1 messages and level 2 errors (209)

D-AA: Test strip error

Repeat the test with a new test strip.

Severity

GUI Warning

DMS Critical

About level 1 messages and level 2 errors (209)

D-AB: Lot expired

Repeat the test with a test strip from a valid lot.

Severity

GUI Warning

DMS Warning

About level 1 messages and level 2 errors (209)

D-AE: Material expired

Use material from a valid lot to continue.

Severity

GUI Warning

DMS Warning

About level 1 messages and level 2 errors (209)

D-AF: Test strip error

Repeat the test with a new test strip. Follow proper usage in the handling recommendations.

Severity

GUI Warning

DMS Critical

About level 1 messages and level 2 errors (209)

D-AG: Insertion error

Eject the test strip and insert it correctly.

Severity

GUI Warning

DMS Note

About level 1 messages and level 2 errors (209)

D-AH: Unknown lot

Ensure that a correct test strip lot is used.

Severity

GUI Warning

DMS Warning

About level 1 messages and level 2 errors (209)

D-AJ: QC test required

Perform a QC test.

Severity

GUI Warning

DMS Warning

About level 1 messages and level 2 errors (209)

D-AK: Insertion error

Eject the test strip and insert it again when requested.

Severity

GUI Warning

DMS Note

About level 1 messages and level 2 errors (209)

D-AL: Test strip error

Test strip was removed during the test.

Repeat the test with a new test strip. Do not remove the test strip during processing.

Severity

GUI Warning

DMS Note

About level 1 messages and level 2 errors (209)

D-AN: Unknown kit lot

Unknown kit lot.

Severity

GUI Warning

DMS Note

About level 1 messages and level 2 errors (209)

D-AO: Test strip error

Always use the eject button to remove the test strip.

Severity

GUI Warning

DMS Note

About level 1 messages and level 2 errors (209)

D-AP: Wrong lot

Use the same test strip lot for all linearity test levels.

Severity

GUI Warning

DMS Note

About level 1 messages and level 2 errors (209)

E-AA: Temperature too low

Testing not possible.

Use the instrument at a higher temperature.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

E-AB: Temperature too high

Testing not possible.

Use the instrument at a lower temperature.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

G-AA: Instrument error

Turn off and restart the instrument.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

G-AC: Process error

Repeat the test with a new test strip.

Severity

GUI Warning

DMS Warning

About level 1 messages and level 2 errors (209)

G-AE: Instrument error

Action is not possible.

Severity

GUI Warning

DMS Warning

About level 1 messages and level 2 errors (209)

H-AC: Low battery

Charge the instrument.

Severity

GUI Warning

DMS Note

About level 1 messages and level 2 errors (209)

H-AF: Date/time lost

Enter the date and time before performing new tests.

Severity

GUI Error

DMS Note

About level 1 messages and level 2 errors (209)

H-AG: Ejection error

Eject the test strip using the eject button. If the problem persists, remove the test strip manually.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

H-AJ: Battery version error

Due to the nature of this issue, only the ID (H-AJ) of the message is displayed on the screen.

Incompatible battery detected. The instrument cannot be used.

Contact your Roche representative.

Replacing the battery (177)

About level 1 messages and level 2 errors (209)

I-AC: Software update error

Instrument cannot be used.

Ensure that the instrument is connected to the network.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

I-AE: Encryption error

An encryption error occurred. Results cannot be synchronized.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

I-AF: Software update error

A software update error occurred.

Severity

GUI Information

DMS Warning

About level 1 messages and level 2 errors (209)

I-AG: Synchronization failed

Synchronization with the DMS failed.

Severity

GUI Error

DMS Note

About level 1 messages and level 2 errors (209)

I-AH: Connection error

Connection to cobas infinity edge was interrupted.

Severity

GUI Error

DMS Note

About level 1 messages and level 2 errors (209)

I-AJ: Encryption warning

An encryption warning ocurred. Results are still being synchronized.

Severity

GUI Warning

DMS Warning

About level 1 messages and level 2 errors (209)

S-AB: Sample application error

Repeat the test with a new test strip. Apply sufficient sample when requested without moving the test strip.

Severity

GUI Warning

DMS Warning

About level 1 messages and level 2 errors (209)

S-AD: Sample type error

Repeat the test with a new test strip. Apply the following sample type: %s*
* %s = sample type (dependant on workflow i.e., blood, QC material, linearity material)

Severity

GUI Error

DMS Note

About level 1 messages and level 2 errors (209)

S-AF: Sample error

Repeat the test with a new test strip.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

T-AA: Invalid RFID tag

Read a correct RFID tag.

Severity

GUI Error

DMS Warning

About level 1 messages and level 2 errors (209)

T-AB: RFID timeout

Reading period has timed out. Ensure sufficient proximity.

Severity

GUI Warning

DMS Note

About level 1 messages and level 2 errors (209)

U-AA: Invalid user ID

User ID is invalid.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

U-AB: Invalid password

Password entered is invalid.

Severity

GUI Error

DMS Warning

About level 1 messages and level 2 errors (209)

U-AC: Patient not found

Patient ID was not found.

Severity

GUI Error

DMS Warning

About level 1 messages and level 2 errors (209)

U-AD: Invalid observer

Invalid observer

Severity

GUI Error

DMS Note

About level 1 messages and level 2 errors (209)

U-AE: Invalid patient ID

Patient ID is invalid.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

U-AF: User not found

User ID was not found.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

U-AG: Unexpected bottle

Scan bottle: %s, %s.*
* <kit type>, <kit level>

Dependant on the workflow:
<kit type> = 'QC' or 'Linearity'
<kit level> = Individual level number (e.g., 1 or 2 for 'QC')

Severity

GUI Warning

DMS Note

About level 1 messages and level 2 errors (209)

U-AJ: User not found

User was not found.

Severity

GUI Error

DMS Critical

About level 1 messages and level 2 errors (209)

U-AK: Patient not found

Patient was not found.

Severity

GUI Error

DMS Warning

About level 1 messages and level 2 errors (209)

U-AL: Password too short

Password is too short.

Severity

GUI Error

DMS Note

About level 1 messages and level 2 errors (209)

U-AM: Passwords do not match

Passwords do not match.

Severity

GUI Error

DMS Note

About level 1 messages and level 2 errors (209)

U-AN: Inconsistent insulin value

Value must be greater than 0 and less than 50 (maximum one decimal place).

Severity

GUI Error

DMS Note

About level 1 messages and level 2 errors (209)

U-AO: Invalid sample ID

Sample ID is invalid.

Severity

GUI Error

DMS Note

About level 1 messages and level 2 errors (209)

U-AP: Invalid sample ID

Sample ID is invalid.

Severity

GUI Error

DMS Note

About level 1 messages and level 2 errors (209)

U-AQ: Insufficient user rights

Action is not allowed.

Severity

GUI Error

DMS Note

About level 1 messages and level 2 errors (209)

Level 2 errors

In this section

CA

In this section

CA-0001: Unknown error

Problem	An unknown error occured.
Solution	Restart the instrument and try again. If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0002: Database access error

Problem A database access error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0003: Database access error

Problem A database access error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0004: Measuring unit communication error

Problem The instrument was not able to communicate with the measuring unit

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0005: Measuring unit communication error

Problem	The instrument was not able to communicate with the measuring unit.
Solution	Restart the instrument and try again.
Related L1 message	G-AA

About level 1 messages and level 2 errors (209)

CA-0006: Access to internal storage failed

Problem	The instrument was not able to access its internal storage.
Solution	Restart the instrument and try again.
Related L1 message	G-AA

About level 1 messages and level 2 errors (209)

CA-0007: Software error

Problem	The instrument is defective and cannot be used for testing.
Solution	Contact your Roche representative.
Related L1 message	G-AA

About level 1 messages and level 2 errors (209)

CA-0008: Test strip lot information not found

Problem

The lot information of the inserted test strip is missing. The inserted test strip cannot be used

Solution

Add the unknown test strip lot to the instrument database by using one of the following methods:

- Scan the strip vial container and let the instrument request the lot from **cobas® infinity** edge.
- Scan the complete lot information via a configuration barcode (generated in the **cobas® infinity** edge management portal).
- If the lot is already known in the DMS, configure the DMS to upload the lot information to the instrument.

Alternatively the user could use a test strip from a known/valid test strip lot.

Related L1 message

D-AH

About level 1 messages and level 2 errors (209)

CA-0009: Test strip lot expired

Problem

The used test strip lot is expired.

Solution

Repeat the test with a test strip from a valid lot.

Related L1 message

D-AB

About level 1 messages and level 2 errors (209)

CA-0010: Communication with measuring unit interrupted

Problem

The communication with the measuring unit was interrupted.

Solution

Restart the instrument and try again.

Related L1 message

G-AA

About level 1 messages and level 2 errors (209)

CA-0011: Software error

Problem	The instrument is defective and cannot be used for testing.
Solution	Contact your Roche representative.
Related L1 message	G-AA

About level 1 messages and level 2 errors (209)

CA-0012: Synchronization with DMS failed

Problem	The synchronization with the DMS failed. The instrument cannot transmit results or receive updated data from the DMS.
Solution	Ensure that the instrument is connected to the network and the DMS. Check the connectivity and availability of the DMS using the network status test.
Related L1 message	I-AG

About level 1 messages and level 2 errors (209)

CA-0013: Test strip inserted too early

Problem	The test strip was inserted too early.
Solution	Eject the test strip and insert it again when requested.
Related L1 message	D-AK

About level 1 messages and level 2 errors (209)

CA-0014: Test strip ID not recognized

Problem The instrument was not able to read the test strip ID (e.g. due to dirt or scratches).

Solution Eject the current test strip and insert a new test strip. If the problem persists, contact your Roche representative.

Related L1 message D-AH

About level 1 messages and level 2 errors (209)

CA-0015: Error during Glucose app startup

Problem An error occured during the startup of the Glucose app.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0016: Barcode with invalid ID scanned

Problem The user scanned an ID that does not comply to the configured patterns for the user ID or patient ID, and is rated as invalid by the instrument.

Solution Check if the ID which was rejected by the instrument complies to the intended ID patterns (length, structure, allowed values). Adapt the configured ID patterns (via DMS or via "configuration by barcode") if the scanned barcode shall be accepted by the instrument.

Related L1 message B-AA

About level 1 messages and level 2 errors (209)

CA-0017: QC lot expired

Problem The QC lot used has expired.

Solution Repeat the test using a valid QC lot.

Related L1 message D-AE

About level 1 messages and level 2 errors (209)

CA-0019: User ID not found

Problem The scanned user ID is unknown to the instrument.

Solution Ensure that the instrument is connected to the network and the DMS. Check the connectivity and availability of the DMS using the network status test.

Ensure that the DMS synchronizes the user list with the instrument.

Related L1 message U-AJ

About level 1 messages and level 2 errors (209)

CA-0020: Patient ID not found

Problem The scanned patient ID is unknown to the instrument.

Solution Ensure that the instrument is connected to the network and the DMS. Check the connectivity and availability of the DMS using the network status test.

Ensure that the DMS synchronizes the patient list with the instrument.

Related L1 message U-AK

About level 1 messages and level 2 errors (209)

CA-0021: RFID tag invalid

Problem An unsupported RFID tag was read.

Solution Only use supported RFID tags.

Related L1 message T-AA

About level 1 messages and level 2 errors (209)

CA-0022: Invalid password

Problem The user entered an invalid password.

Solution Enter a valid password. If the password has been changed recently, it might take a moment until it is propagated to all other instruments.

Related L1 message U-AB

About level 1 messages and level 2 errors (209)

CA-0023: Invalid patient ID

Problem The user entered an patient ID that does not comply to the configured patterns for the patient ID.

Solution Check if the entered patient ID which was rejected by the instrument complies to the intended patient ID pattern (length, structure, allowed values).

Adapt the configured pattern if the patient ID entered shall be accepted by the instrument.

Related L1 message U-AE

About level 1 messages and level 2 errors (209)

CA-0024: Password too short

Problem The password entered is shorter than the configured minimal password length.

Solution Enter a password that has the same or more characters than the configured minimal password length value.

Related L1 message U-AL

About level 1 messages and level 2 errors (209)

CA-0025: Passwords do not match

Problem While changing the user password on the instrument user interface, the user has entered two passwords that do not match.

Solution Enter both new passwords (without any errors) in order to change the user password.

Related L1 message U-AM

About level 1 messages and level 2 errors (209)

CA-0026: Invalid insulin units

Problem The user entered an invalid value for the insulin units.

Solution Enter a valid insulin value that is greater than 0 and less than 50 (maximum 1 decimal place).

Related L1 message U-AN

About level 1 messages and level 2 errors (209)

CA-0027: Invalid insulin units

Problem The user entered an value for the insulin units that contains more than one decimal place.

Solution Enter a valid insulin value what contains maximum 1 decimal place.

Related L1 message U-AN

About level 1 messages and level 2 errors (209)

CA-0028: Invalid user ID

Problem The user entered a user ID that does not comply to the configured pattern for the user ID.

Solution Check if the entered user ID which was rejected by the instrument complies to the intended user ID pattern (length, structure, allowed values).

Adapt the configured pattern if the entered user ID shall be accepted by the instrument.

Related L1 message U-AA

About level 1 messages and level 2 errors (209)

CA-0029: User ID not found

Problem The scanned user ID is unknown to the instrument.

Solution Ensure that the instrument is connected to the network. Check the connectivity and availability of the DMS using the network status test.

Ensure that the DMS synchronizes the user list with the instrument.

Related L1 message U-AJ

About level 1 messages and level 2 errors (209)

CA-0030: Scan timeout

Problem The barcode scanning period has timed out. Either the user did not scan the barcode correctly or the user tried to scan a barcode type which is deactivated in the instrument configuration.

Solution Restart the barcode scanning and ensure that the barcode is visible in the scan area on the instrument screen.

Related L1 message B-AB

About level 1 messages and level 2 errors (209)

CA-0031: RFID timeout

Problem The RFID tag reading period has timed out. Either the user placed the RFID tag too far away from the instrument or the user tried to scan an unsupported RFID tag.

Solution Restart the RFID tag reading and ensure sufficient proximity.

Related L1 message T-AB

About level 1 messages and level 2 errors (209)

CA-0032: Incorrect sample applied in a QC test or linearity test

Problem The user applied blood to the test strip instead of QC material or linearity material.

Solution Eject the current test strip and repeat the test with the corresponding QC material or linearity material.

Related L1 message S-AD

About level 1 messages and level 2 errors (209)

CA-0033: Incorrect sample applied in a glucose test

Problem The user applied QC material or linearity material to the test strip instead of blood.

Solution Eject the current test strip and repeat the test with blood.

Related L1 message S-AD

About level 1 messages and level 2 errors (209)

CA-0034: Wrong barcode sequence

Problem The user scanned the barcodes for configuration in the wrong order.

Solution Scan the barcodes in the indicated order.

Related L1 message B-AC

About level 1 messages and level 2 errors (209)

CA-0035: Wrong analyte scanned

Problem The user scanned a QC material that does not match the selected analyte.

Solution Scan the correct QC material that corresponds to the selected analyte.

Related L1 message U-AG

About level 1 messages and level 2 errors (209)

CA-0036: Wrong kit type scanned

Problem The user scanned a linearity material bottle instead of a QC material bottle.

Solution Scan the correct QC material bottle.

Related L1 message U-AG

About level 1 messages and level 2 errors (209)

CA-0037: Wrong QC level scanned

Problem The user scanned a QC material bottle that did not match the selected QC level.

Solution Scan the correct QC material level to continue the workflow.

Related L1 message U-AG

About level 1 messages and level 2 errors (209)

CA-0038: QC lot expired

Problem The lot of the scanned QC material has expired.

Solution Use a valid QC lot.

Related L1 message D-AE

About level 1 messages and level 2 errors (209)

CA-0039: Unknown QC lot scanned

Problem The scanned QC lot is not available on this instrument.

Solution

Add the lot to the instrument database on the instrument in Settings > Lot management.

Ensure that the instrument is connected to the network in order to enable the DMS to synchronize the kit lot database on the instrument.

Related L1 message

D-AN

About level 1 messages and level 2 errors (209)

CA-0040: TLS communication error

Problem

The TLS (Transport Layer Security) handshake between the DMS and the instrument failed.

The instrument cannot transmit results or receive updated data from the DMS.

Possible reasons:

- Configuration issue (e.g., the configured certificate of the DMS (stored in the **DMS TLS certificate**) has expired.
- Cybersecurity issue (e.g., man-in-the-middle attack).

Solution

Check the certificate stored in the **DMS TLS certificate**.

If the configured certificate has expired, update the certificate and set the **DMS TLS certificate check** configuration item to **Strict** again.

Check the connection between the instrument and the DMS using the **Network status test** option.

Check your network infrastructure for breaches.

Connect the instrument to a separate network and set the **DMS TLS certificate check** configuration item to **> Warning** in order to allow a connection to the DMS.

Related L1 message

I-AE

About level 1 messages and level 2 errors (209)

CA-0041: Database error

Problem A database error occurred.

Solution Restart the instrument and try again. If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0042: User ID not found

Problem The entered user ID is unknown to the instrument.

Solution Ensure that the instrument is connected to the network. Check the connectivity and availability of the DMS using the network status test.

Ensure that the DMS synchronizes the user list with the instrument.

Related L1 message U-AF

About level 1 messages and level 2 errors (209)

CA-0043: Patient ID not found

Problem The entered patient ID is unknown to the instrument.

Solution Ensure that the instrument is connected to the network. Check the connectivity and availability of the DMS using the network status test.

Ensure that the DMS synchronizes the user list with the instrument.

Related L1 message U-AC

About level 1 messages and level 2 errors (209)

CA-0044: Measuring unit communication issue

Problem The instrument was not able to start up the measuring unit.

Solution Go to the app library and open the Glucose app again. If the problem persists, restart the instrument.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0045: Configuration update failed

Problem The configuration barcode could not be processed.

Solution Check the contents of the configuration barcode and ensure that the configuration barcode is compatible with the instrument SW version.

Related L1 message B-AD

About level 1 messages and level 2 errors (209)

CA-0048: Test strip lot not yet passed QC

Problem The inserted test strip belongs to a test strip lot that has not passed the required QC tests yet.

Solution Required QC tests for new test strip lots is defined in the QC algorithm settings.

Perform all required QC tests with test strips of this lot to unlock the test strip lot for patient testing or use test strip of a lot that already has passed all QC tests.

Related L1 message D-AJ

About level 1 messages and level 2 errors (209)

CA-0050: Date / time settings lost

Problem The current date/time settings are lost (e.g., due to loss of power/battery change).

Solution Enter the date and time manually and ensure that the instrument is connected to the network.

Related L1 message H-AF

About level 1 messages and level 2 errors (209)

CA-0051: Invalid concentration value

Problem The measuring unit was not able to quantify the concentration of the measured sample.

Solution Eject the test strip and repeat the test with a new test strip.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0052: Invalid sample ID

Problem The entered sample ID for the proficiency material is not valid.

Solution Enter a valid sample ID.

The sample ID must contain between 1 and 20 printable characters (including white space).

Related L1 message U-AO

About level 1 messages and level 2 errors (209)

CA-0053: Strip lot data request timed out

Problem The instrument was not able to retrieve the strip lot data from cobas infinity edge.

Solution Ensure that the instrument is connected to the network.

Check that the instrument is connected to cobas infinity edge using the network status test.

Related L1 message C-AD

About level 1 messages and level 2 errors (209)

CA-0054: Wrong kit type scanned

Problem The user scanned a QC material bottle instead of a linearity material bottle.

Solution Scan the correct linearity material bottle.

Related L1 message U-AG

About level 1 messages and level 2 errors (209)

CA-0055: Wrong analyte scanned

Problem The user scanned a linearity material does not match the selected analyte.

Solution Scan the correct linearity material that corresponds to the analyte.

Related L1 message U-AG

About level 1 messages and level 2 errors (209)

CA-0057: Linearity lot expired

Problem The lot of the scanned linearity material has expired.

Solution Use a valid linearity lot.

Related L1 message D-AE

About level 1 messages and level 2 errors (209)

CA-0058: Unknown linearity lot scanned

Problem The scanned linearity lot is not available on this instrument.

Solution Add the lot to the instrument database on the instrument using **Settings > Lot management**.

Ensure that the instrument is connected to the network in order to enable the DMS to sync the kit lot database on the instrument.

Related L1 message D-AN

About level 1 messages and level 2 errors (209)

CA-0059: Multiple test strip lots used for linearity test

Problem The user has inserted a test strip which is from a different test strip lot than the strips used for the previous linearity test steps.

The user must use a strip from the same test strip lot for all steps in a linearity test.

Solution For linearity tests, always use test strips from the same test strip lot.

Related L1 message D-AP

About level 1 messages and level 2 errors (209)

CA-0060: Manual test strip removal

Problem

The user removed the test strip manually without using the eject button on the user interface. This can damage the instrument and must be avoided.

Solution

Never pull out the test strip manually.

Always us the eject button to remove the test strip.

Related L1 message

D-AO

About level 1 messages and level 2 errors (209)

CA-0061: Insufficient user rights

Problem

The user doesn't have the privileges to perform the requested action (e.g., being an observer for the observed test sequence).

Solution

To allow the requested action, grant the required user rights to the user ID in the DMS.

Ensure that the instrument is connected to the network and the DMS synchronizes the required user rights with the instrument.

Related L1 message

U-AQ

About level 1 messages and level 2 errors (209)

CA-0062: Observer and logged-on user are identical

Problem

The logged-on user tried to act as observer in the observed test sequence (OTS).

The logged-on user and the observer cannot be the same person.

Solution

Perform the observed test sequence (OTS) with two different users.

Another user with the user role "Observer" (OTS_OBSERVER) needs to log on during the observed test sequence.

Related L1 message U-AD

About level 1 messages and level 2 errors (209)

CA-0063: QC / linearity lot rejected

Problem The user tried to add a QC or linearity lot of which the target ranges are not known to the instrument.

Solution Ensure that the instrument receives the updated target ranges either via barcode scanning or via DMS before you add this QC or linearity lot.

Related L1 message D-AN

About level 1 messages and level 2 errors (209)

CA-0064: Measuring unit communication error

Problem The instrument was not able to communicate with the measuring unit.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0066: Folder not deleted

Problem The Glucose app could not delete a folder from the file system.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0067: Wi-Fi networks not deleted completely

Problem The instrument could not delete all stored Wi-Fi networks after the user tapped the **Delete instrument data** button.

Solution Restart the instrument and trigger the deletion of all instrument data in the GUI again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0068: Instrument restart failed

Problem The instrument could not be restarted.

Solution Restart the instrument.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0070: Invalid sample ID

Problem The scanned sample ID for the proficiency material is not valid.

Solution Scan a valid sample ID.

The sample ID must contain between 1 and 20 printable characters (including white space).

Related L1 message U-AP

About level 1 messages and level 2 errors (209)

CA-0071: Invalid database encryption key

Problem	The instrument detected corrupted data in its database and has reset the database to the default settings.
Solution	Ensure that the instrument is connected to the network and the DMS and that the instrument synchronizes the configuration, patient, user, and lot data.
Related L1 message	C-AB

About level 1 messages and level 2 errors (209)

CA-0072: Database error

Problem	A database error occurred.
Solution	Contact your Roche representative.
Related L1 message	G-AA

About level 1 messages and level 2 errors (209)

CA-0073: Instrument was charged during measurement

Problem	The instrument was placed into the charging station while a measurement was in progress. The measurement failed.
Solution	Do not place the instrument into the charging station during a measurement.
Related L1 message	G-AC

About level 1 messages and level 2 errors (209)

CA-0074: Result database full

Problem

One of the result database tables is full and the instrument is not able to store additional results. No further tests can be performed.

Solution

Ensure that the instrument is connected to the network and the DMS and that the instrument synchronizes the configuration, patient, user, and lot data.

Check the settings of the following configuration items:

- **Result deletion algorithm**
- **Result retention period (in days)**
- **Result upload required before result deletion**

Related L1 message

C-AA

About level 1 messages and level 2 errors (209)

CA0075: Software error

Problem

The instrument is defective and cannot be used for testing.

Solution

Contact your Roche representative.

Related L1 message

G-AA

About level 1 messages and level 2 errors (209)

CA-0077: Internal storage error

Problem

An error with the internal storage of the instrument occurred.

Solution

Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message

G-AA

About level 1 messages and level 2 errors (209)

CA-0078: TLS communication warning

Problem

The TLS (Transport Layer Security) handshake between the DMS and the instrument failed.

The instrument still transmits results and receives updated data from the DMS.

Possible reasons:

- Configuration issue (e.g., the configured certificate of the DMS (stored in the **DMS TLS certificate**) has expired.
- Cybersecurity issue (e.g., man-in-the-middle attack).

Solution

Check the certificate stored in the **DMS TLS certificate**.

If the configured certificate has expired, update the certificate and set the **DMS TLS certificate check** configuration item to **Strict** again.

Check the connection between the instrument and the DMS using the network status test.

Check your network infrastructure for breaches.

Connect the instrument to a separate network and set the **DMS TLS certificate check** configuration item to **> Warning** in order to allow a connection to the DMS.

Related L1 message

I-AJ

About level 1 messages and level 2 errors (209)

CA-0079: Certificate backup failed

Problem

The instrument could not backup the instruments security certificates.

Solution

Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0080: Entry does not exist anymore

Problem The user tried to access a database entry or result which has been deleted either by the instrument deletion algorithm or by the DMS.

Solution No action needed.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0081: Configuration by barcode error

Problem The user scanned a barcode that does not belong to the current barcode sequence for the configuration by barcode (e.g., user scanned an outdated barcode from an older barcode sequence).

Solution Continue scanning the barcode from the correct barcode sequence or abort the barcode sequence and restart the scanning process.

Related L1 message B-AC

About level 1 messages and level 2 errors (209)

CA-0082: Low battery

Problem No test can be performed due to low battery.

Solution Place the instrument in the charging station in order to charge the battery to a sufficient level.

Related L1 message H-AC

About level 1 messages and level 2 errors (209)

CA-0083: Invalid user ID

Problem

The user read a user ID via barcode that does not comply to the configured patterns for the user ID.

The scanned ID is invalid.

Solution

Check if the ID complies with the intended ID patterns (length, structure, allowed values).

Adapt the configured ID patterns (via the DMS or by using the **Configuration by barcode** option) so that the scanned barcode will be accepted by the instrument.

Related L1 message

B-AA

About level 1 messages and level 2 errors (209)

CA-0084: Invalid user ID

Problem

The user read a user ID via barcode that does not comply with the maximum length allowed for the user ID.

The scanned ID is invalid.

Solution

Check if the user ID violates the maximum length allowed of 20 characters.

Reduce the ID length to maximum 20 characters.

Related L1 message

B-AA

About level 1 messages and level 2 errors (209)

CA-0085: Invalid user ID

Problem

The user read a user ID via RFID tag that does not comply to the configured patterns for the user ID.

The scanned ID is invalid.

Solution

Check if the ID complies with the intended ID patterns (length, structure, allowed values).

Adapt the configured ID patterns (via the DMS or by using the **Configuration by barcode** option) so that the scanned barcode will be accepted by the instrument.

Related L1 message

T-AA

About level 1 messages and level 2 errors (209)

CA-0086: Invalid user ID

Problem

The user read an ID via RFID tag that does not comply with the maximum length allowed for the user ID.

The scanned ID is invalid.

Solution

Check if the user ID violates the maximum length allowed of 20 characters.

Reduce the ID length to maximum 20 characters.

Related L1 message

T-AA

About level 1 messages and level 2 errors (209)

CA-0087: Invalid patient ID

Problem

The user read a patient ID via barcode that does not match the configured validation pattern and is rejected by the instrument.

Solution

Check if the ID complies with the intended ID patterns (length, structure, allowed values).

Adapt the configured ID patterns (via the DMS or by using the **Configuration by barcode** option) so that the scanned barcode will be accepted by the instrument.

Related L1 message

B-AA

About level 1 messages and level 2 errors (209)

CA-0088: Invalid patient ID

Problem

The user read a user ID via barcode that does not comply with the maximum length allowed for the user ID.

The scanned ID is invalid.

Solution

Check if the user ID violates the maximum length allowed of 20 characters.

Reduce the ID length to maximum 20 characters.

Related L1 message

B-AA

About level 1 messages and level 2 errors (209)

CA-0089: Invalid patient ID

Problem

The user read an ID via RFID tag that does not comply with the configured patterns for the patient ID.

The scanned ID is invalid.

Solution

Check if the ID complies with the intended ID patterns (length, structure, allowed values).

Adapt the configured ID patterns (via the DMS or by using the **Configuration by barcode** option) so that the scanned barcode will be accepted by the instrument.

Related L1 message

T-AA

About level 1 messages and level 2 errors (209)

CA-0090: Invalid patient ID

Problem

The user read an ID via RFID tag that does not comply to the maximum allowed length for the patient ID.

The scanned ID is invalid.

Solution Check if the user ID violates the maximum length allowed of 20 characters.

Reduce the ID length to maximum 20 characters.

Related L1 message T-AA

About level 1 messages and level 2 errors (209)

CA-0091: Invalid QC material barcode

Problem The scanned QC material barcode is invalid (e.g., incorrect format).

Solution Ensure that you scan a QC material barcode intended for use with the cobas pulse instrument.

Related L1 message B-AA

About level 1 messages and level 2 errors (209)

CA-0092: Invalid linearity material barcode

Problem The scanned linearity material barcode is invalid (e.g., incorrect format).

Solution Ensure that you scan a linearity material barcode intended for use with the cobas pulse instrument.

Related L1 message B-AA

About level 1 messages and level 2 errors (209)

CA-0093: Invalid configuration barcode

Problem The configuration barcode scanned does not contain any configuration items.

Solution	Check the configuration settings in **cobas® infinity** edge.
Related L1 message	B-AA

About level 1 messages and level 2 errors (209)

CA-0094: Invalid configuration barcode

Problem	Changing of the result unit in your country is not allowed. No configuration change was applied.
Solution	Ensure that the configuration barcode does change the result unit.
Related L1 message	B-AD

About level 1 messages and level 2 errors (209)

CA-0095: Invalid configuration barcode

Problem	The configuration barcode scanned is invalid.
Solution	Check the configuration settings in **cobas® infinity** edge and try again with a newly generated barcode.
Related L1 message	B-AD

About level 1 messages and level 2 errors (209)

CA-0096: Incompatible configuration barcode

Problem	The configuration barcode scanned is not compatible with cobas pulse.
Solution	Check the configuration settings in **cobas® infinity** edge and try again with a newly generated barcode.

Related L1 message B-AD

About level 1 messages and level 2 errors (209)

CA-0097: Invalid configuration barcode

Problem The configuration barcode scanned is invalid.

Solution Check the configuration settings in **cobas® infinity** edge and try again with a newly generated barcode.

Related L1 message B-AD

About level 1 messages and level 2 errors (209)

CA-0098: Invalid configuration barcode

Problem The configuration barcode scanned is invalid.

Solution Check the configuration settings in **cobas® infinity** edge and try again with a newly generated barcode.

Related L1 message B-AD

About level 1 messages and level 2 errors (209)

CA-0100: Invalid configuration barcode

Problem The configuration barcode scanned is invalid.

Solution Check the configuration settings in **cobas® infinity** edge and try again with a newly generated barcode.

Related L1 message B-AD

About level 1 messages and level 2 errors (209)

CA-0101: Invalid configuration barcode

Problem The configuration barcode scanned is invalid.

Solution Check the configuration settings in **cobas® infinity** edge and try again with a newly generated barcode.

Related L1 message B-AD

About level 1 messages and level 2 errors (209)

CA-0102: Invalid configuration barcode

Problem The configuration barcode scanned is invalid.

Solution Check the configuration settings in **cobas® infinity** edge and try again with a newly generated barcode.

Related L1 message B-AD

About level 1 messages and level 2 errors (209)

CA-0103: Invalid configuration barcode

Problem The configuration barcode scanned is invalid.

Solution Check the configuration settings in **cobas® infinity** edge and try again with a newly generated barcode.

Related L1 message B-AD

About level 1 messages and level 2 errors (209)

CA-0104: Invalid configuration barcode

Problem The configuration barcode scanned is invalid.

Solution Check the configuration settings in **cobas® infinity** edge and try again with a newly generated barcode.

Related L1 message B-AD

About level 1 messages and level 2 errors (209)

CA-0105: Data integrity test failed

Problem The instrument detected corrupted data in its database and has reset the database to the default settings.

Solution Ensure that the instrument is connected to the network and the DMS, and that the instrument synchronizes the configuration, patient, user, and lot data.

Related L1 message C-AB

About level 1 messages and level 2 errors (209)

CA-0106: Internal storage error detected

Problem An error with the internal storage of the instrument occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0107: Result deletion failed

Problem One of the result database tables is full and the instrument was not able to delete a stored result.

Solution Ensure that the instrument is connected to the network and the DMS and that the instrument synchronizes the configuration, patient, user, and lot data.

Check the settings of the following configuration items:

- **Result deletion algorithm**
- **Result retention period (in days)**
- **Result upload required before result deletion**

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0108: Database limit reached for QC lot codes

Problem The database table capacity limit has been reached.

Solution Contact your Roche Representative.

Related L1 message G-AE

About level 1 messages and level 2 errors (209)

CA-0109: Database limit reached for linearity lot codes

Problem The database table capacity limit has been reached.

Solution Contact your Roche representative.

Related L1 message G-AE

About level 1 messages and level 2 errors (209)

CA-0110: Database limit reached for QC lots

Problem The database table capacity limit has been reached and no additional lots can be saved.

Solution Delete all lots that are no longer needed from the instrument database (either directly on the instrument or via the DMS).

Once an old lot is deleted, a new lot can be added to the instrument database.

Related L1 message G-AE

About level 1 messages and level 2 errors (209)

CA-0111: Database limit reached for linearity lots

Problem The database table capacity limit has been reached and no additional lots can be saved.

Solution Delete all lots that are no longer needed from the instrument database (either directly on the instrument or via the DMS).

Once an old lot is deleted, a new lot can be added to the instrument database.

Related L1 message G-AE

About level 1 messages and level 2 errors (209)

CA-0113: Database limit reached for test strip lots

Problem The database table capacity limit has been reached and no additional lots can be saved.

Solution Delete all lots that are no longer needed from the instrument database (either directly on the instrument or via the DMS).

Once an old lot is deleted, a new lot can be added to the instrument database.

Related L1 message G-AE

About level 1 messages and level 2 errors (209)

CA-0114: Password too long

Problem

The password entered is longer than the allowed 20 characters.

Solution

Enter a password which has the same or more characters than the configured minimal password length value, but not more than 20 characters.

Related L1 message

U-AB

About level 1 messages and level 2 errors (209)

CA-0115: Invalid certificate configuration update

Problem

The DMS TLS certificate (**DMS TLS certificate** configuration item), which was updated via the DMS, is invalid.

The instrument restored the previous certificate.

Solution

Ensure that the DMS TLS certificate (**DMS TLS certificate** configuration item) has the correct format.

If a PFX file is used, the instrument configuration must contain the corresponding password in the **DMS TLS certificate password** configuration item.

Related L1 message

G-AA

About level 1 messages and level 2 errors (209)

CA-0116: Different users log on as observer before and after OTS

Problem

A user who had not logged on as observer before the observed test sequence (OTS) tried to log on as observer after the test.

The same observer must log in before and after the test.

Solution

Ensure that the same user is logged on as observer before and after the observed test sequence (OTS).

Related L1 message U-AD

About level 1 messages and level 2 errors (209)

CA-0117: Invalid barcode content

Problem During a shared workflow step, the user scanned a barcode with invalid content.

Solution Ensure that the barcode scanned is valid, and that its content does not violate any validation rules.

Related L1 message B-AA

About level 1 messages and level 2 errors (209)

CA-0118: Invalid platform interface detected

Problem The instrument detected an incompatibility between the Glucose app and an installed third-party app.

Solution Ensure that the latest app software versions are installed on the instrument.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

CA-0119: Patient ID not found

Problem The patient ID scanned is unknown to the instrument.

Solution Ensure that the instrument is connected to the network. Check the connectivity and availability of the DMS using the **Network status test** option.

Ensure that the DMS synchronizes the user list with the instrument.

Related L1 message U-AK

About level 1 messages and level 2 errors (209)

CA-0120: Invalid test strip container barcode

Problem The test strip container barcode scanned is invalid (e.g., incorrect format).

Solution Ensure that you scan a strip container barcode intended for use with the cobas pulse instrument.

Related L1 message B-AA

About level 1 messages and level 2 errors (209)

CA-0121: Linearity lot expired

Problem Linearity lot has expired.

Solution Repeat the test using a valid (non-expired) linearity lot.

Related L1 message D-AE

About level 1 messages and level 2 errors (209)

CA-0122: Test strip lot expired

Problem Test strip lot has expired.

Solution Repeat the test using a valid (non-expired) test strip lot.

Related L1 message D-AE

About level 1 messages and level 2 errors (209)

CA-0123: DMS host cannot be reached

Problem

The instrument was not able to connect to the DMS server socket.

Solution

Ensure that the instrument is connected to the network and the DMS server can be reached (and not blocked by a firewall).

Check the connectivity and availability of the DMS using the **Network status test** option.

Related L1 message

I-AG

About level 1 messages and level 2 errors (209)

CA-0124: DMS server certificate check failed

Problem

The instrument was not able to validate the TLS server certificate of the DMS.

Solution

Check the certificate stored in the **DMS TLS certificate**.

If the configured certificate has expired, update the certificate and set the **DMS TLS certificate check** configuration item to **Strict** again.

Check the connection between the instrument and the DMS using the **Network status test** option.

Check your network infrastructure for breaches.

Connect the instrument to a separate network and set the **DMS TLS certificate check** configuration item to **> Warning** in order to allow a connection to the DMS.

Related L1 message

I-AE

About level 1 messages and level 2 errors (209)

CA-0125: Instrument client certificate check failed

Problem

The DMS server was not able to validate the TLS client certificate of the instrument.

Solution

Ensure that the DMS server has the correct TLS certificate chain installed to be able to validate the instrument TLS (client) certificate.

Ensure that the instrument and the DMS server have a valid current date and time.

Check the connection between the instrument and the DMS using the **Network status test** option.

Check your network infrastructure for breaches.

Connect the instrument to a separate network and set the **DMS TLS certificate check** configuration item to **> Warning** in order to allow a connection to the DMS.

Related L1 message

I-AE

About level 1 messages and level 2 errors (209)

CA-0126: Generic DMS connection error

Problem

A generic DMS connection error occurred.

Solution

Ensure that the instrument is connected to the network and the DMS.

Check the connectivity and availability of the DMS using the **Network status test** option.

Related L1 message

I-AG

About level 1 messages and level 2 errors (209)

CA-0127: cobas® infinity edge host cannot be reached

Problem

The instrument was not able to connect to the **cobas® infinity** edge server socket.

Solution

Ensure that the instrument is connected to the network and that the **cobas® infinity** edge server can be reached (and not blocked by a firewall).

Check the connectivity and availability of the **cobas® infinity** edge server using the **Network status test** option.

Related L1 message

About level 1 messages and level 2 errors (209)

CA-0128: cobas® infinity edge server certificate check failed

Problem

The instrument was not able to validate the TLS server certificate of **cobas® infinity** edge.

Solution

Ensure that the instrument and the **cobas® infinity** edge server have a valid current date and time.

Check the connection between the instrument and the **cobas® infinity** edge server using the **Network status test** option.

Check your network infrastructure for breaches.

If the problem persists, contact your Roche representative.

Related L1 message

I-AH

About level 1 messages and level 2 errors (209)

CA-0129: cobas® infinity edge host name check failed

Problem

The instrument was not able to validate the host name specified in the TLS server certificate of **cobas® infinity** edge.

Solution

Ensure that the actual host name/IP address of the **cobas® infinity** edge server matches the host name/IP address which is specified in the TLS server certificate.

If the problem persists, contact your Roche representative.

Related L1 message I-AH

About level 1 messages and level 2 errors (209)

CA-0130: Instrument client certificate check failed

Problem The **cobas® infinity** edge server was not able to validate the TLS client certificate of the instrument.

Solution Ensure that the instrument and the **cobas® infinity** edge server have a valid current date and time.

Check the connection between the instrument and the **cobas® infinity** edge server using the **Network status test** option.

Check your network infrastructure for breaches.

Ensure that the **cobas® infinity** edge server has the correct TLS certificate chain installed to be able to validate the instrument TLS (client) certificate.

If the problem persists, contact your Roche representative.

Related L1 message I-AH

About level 1 messages and level 2 errors (209)

CA-0131: cobas® infinity edge workflow expired

Problem A suspended **cobas® infinity** edge workflow has exceeded the execution acknowledgment timeout.

Solution Check the connection between the instrument and the **cobas® infinity** edge server using the **Network status test** option.

If the problem persists, contact your Roche representative.

Related L1 message I-AH

About level 1 messages and level 2 errors (209)

CA-0132: cobas® infinity edge execution timeout

Problem An acknowledgement was received which exceeds the execution acknowledgment timeout.

Solution Check the connection between the instrument and the **cobas® infinity** edge server using the **Network status test** option.

If the problem persists, contact your Roche representative.

Related L1 message I-AH

About level 1 messages and level 2 errors (209)

CA-0133: Negative cobas® infinity edge command acknowledgment received

Problem A command acknowledgement with negative outcome code was received from **cobas® infinity** edge.

Solution Check the connection between the instrument and the **cobas® infinity** edge server using the **Network status test** option.

If the problem persists, contact your Roche representative.

Related L1 message I-AH

About level 1 messages and level 2 errors (209)

CA-0134: Service data upload failed

Problem An error occurred while uploading service data to **cobas® infinity** edge.

Solution Check the connection between the instrument and the **cobas® infinity** edge server using the **Network status test** option.

If the problem persists, contact your Roche representative.

Related L1 message I-AH

About level 1 messages and level 2 errors (209)

CA-0135: Service log data upload failed

Problem An error occurred while uploading service log data to **cobas® infinity** edge.

Solution Check the connection between the instrument and the **cobas® infinity** edge server using the **Network status test** option.

If the problem persists, contact your Roche representative.

Related L1 message I-AH

About level 1 messages and level 2 errors (209)

CA-0136: Pseudonymization error

Problem An error occurred during data pseudonymzation for data upload to **cobas® infinity** edge.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message I-AH

About level 1 messages and level 2 errors (209)

CA-0137: Generic cobas® infinity edge connection error

Problem

A generic **cobas® infinity** edge connection error occurred.

Solution

Ensure that the instrument is connected to the network and to **cobas® infinity** edge.

Check the connectivity and availability of the **cobas® infinity** edge using the **Network status test** option.

Related L1 message

I-AH

About level 1 messages and level 2 errors (209)

CA-0138: Measuring range configuration error

Problem

The measuring range limits configured are inconsistent and do not comply to the following rule:
Reportable range lower limit ≤ Critical range lower limit ≤ Normal range lower limit ≤ Normal range higher limit ≤ Critical range higher limit ≤ Reportable range higher limit.

Solution

Ensure that the instrument configuration is updated with a configuration which complies with the stated rule (via the DMS or using the Configuration by barcode option).

Related L1 message

G-AA

About level 1 messages and level 2 errors (209)

MS

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MS-0002: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0003: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0004: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0005: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0006: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0007: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0008: SW update error

Problem Software update was not completed successfully.

Solution Trigger the software update process again via **cobas® infinity** edge.

Related L1 message I-AC

About level 1 messages and level 2 errors (209)

MS-0010: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0011: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0012: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0013: SW update error

Problem Software update was not completed successfully.

Solution Trigger the software update process again via **cobas® infinity** edge.

Related L1 message I-AC

About level 1 messages and level 2 errors (209)

MS-0015: Forced measuring unit shutdown

Problem Measuring unit was not shut down properly.

Solution The instrument can be used without any restrictions.

If the problem occurs on a regular basis, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0016: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0017: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0018: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0019: SW update error

Problem Software update was not completed successfully.

Solution Trigger the software update process again via **cobas® infinity** edge.

Related L1 message I-AC

About level 1 messages and level 2 errors (209)

MS-0020: Test strip ejection error

Problem The measuring unit failed to eject the test strip.

Solution Eject the test strip using the eject button.

If the problems persists, remove the test strip manually.

Related L1 message H-AG

About level 1 messages and level 2 errors (209)

MS-0021: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0022: SW update error

Problem Software update was not completed successfully.

Solution Trigger the software update process again via **cobas® infinity** edge.

Related L1 message I-AC

About level 1 messages and level 2 errors (209)

MS-0023: Measuring unit error

Problem The measuring unit detected an error during measurement.

Solution Repeat the test with a new test strip.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MS-0024: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0025: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0026: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0027: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0028: Strip insertion period timed out

Problem The user did not insert the test strip within the permitted time period.

Solution Repeat the test with a new test strip and apply sufficient sample when requested.

Related L1 message D-AA

About level 1 messages and level 2 errors (209)

MS-0029: Dosing period timed out

Problem The user did not apply the sample (blood or QC/Linearity material) to the test strip within the permitted time period.

Solution Repeat the test with a new test strip and apply sufficient sample when requested.

Related L1 message S-AB

About level 1 messages and level 2 errors (209)

MS-0030: Unexpected system shutdown

Problem A measuring unit error occurred.

Solution The instrument can be used without any restrictions.

If the problem occurs on a regular basis, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0032: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0033: Test strip inserted during shutdown

Problem The user initiated a shutdown although the measuring unit still indicated that a test strip is inserted.

Solution Eject the test strip before shutting down the instrument.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MS-0034: Measuring unit configuration error

Problem A measuring unit configuration error occurred.

Solution

Trigger a software update process again via **cobas® infinity** edge.

If the problem persists, contact your Roche representative.

Related L1 message

G-AA

About level 1 messages and level 2 errors (209)

MU

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MU-0090: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0091: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0092: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0094: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0095: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0096: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0097: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0098: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0120: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0130: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0131: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0132: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0133: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0134: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0135: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0136: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0137: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0138: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0139: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0140: Measuring unit error

Problem A measuring unit error occurred.

Solution Trigger a software update via **cobas® infinity** edge.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0141: Measuring unit error

Problem A measuring unit error occurred.

Solution Trigger a software update via **cobas® infinity** edge.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0142: Measuring unit error

Problem A measuring unit error occurred.

Solution Trigger a software update via **cobas® infinity** edge.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0143: Measuring unit error

Problem A measuring unit error occurred.

Solution Trigger a software update via **cobas® infinity** edge.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0145: Measuring unit error

Problem A measuring unit error occurred.

Solution Trigger a software update via **cobas® infinity** edge.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0146: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0147: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0148: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0149: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0150: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0151: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0152: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0153: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MS-0156: Temperature too low

Problem The instrument has detected that the instrument temperature is too low for testing and has activated the temperature lockout.

Solution Use the instrument at a higher temperature. The temperature lockout will be deactivated as soon as the instrument detects a supported instrument temperature.

Related L1 message E-AA

About level 1 messages and level 2 errors (209)

MU-0157: Temperature too high

Problem The instrument has detected that the instrument temperature is too high for testing and has activated the temperature lockout.

Solution Use the instrument at a lower temperature. The temperature lockout will be deactivated as soon as the instrument detects a supported instrument temperature.

Related L1 message E-AB

About level 1 messages and level 2 errors (209)

MU-0158: Measuring unit error

Problem A measuring unit error occurred.

Solution Repeat the test with a new test strip.

If the problem persists, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0159: Measuring unit error

Problem A measuring unit error occurred.

Solution The instrument can be used without any restrictions.If the problem occurs on a regular basis, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0160: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0161: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0162: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0163: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0165: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0167: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0168: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0169: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0170: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0171: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0172: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message D-AH

About level 1 messages and level 2 errors (209)

MU-0173: Ambient temperature error

Problem The instrument has detected that the ambient temperature is outside of the specified limits and has activated the temperature lockout.

Solution Use the instrument at the specified temperature. The temperature lockout will be deactivated as soon as the instrument detects a supported ambient temperature.

Related L1 message E-AB

About level 1 messages and level 2 errors (209)

MU-0174: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0175: Test strip mediator degradation fail-safe activated

Problem The measuring unit detected a test strip which seems to have been exposed to humidity stress. The test failed.

Solution Repeat the test with a new test strip. Follow proper usage in the handling recommendations.If this problem persists, use a new test strip from a different test strip container.

Related L1 message D-AF

About level 1 messages and level 2 errors (209)

MU-0176: Reused test strip fail-safe activated

Problem The measuring unit detected a test strip which seems to have already been used.

Solution Repeat the test with a strip from another container.

If this does not solve the issue, repeat the test with another strip and another instrument.

Related L1 message D-AF

About level 1 messages and level 2 errors (209)

MU-0178: Ascorbic-acid fail-safe activated

Problem The measuring unit detected high ascorbic-acid concentration in the sample. The test failed.

Solution Repeat the test with a new test strip. Follow proper usage in the handling recommendations.

If this problem persists while testing other patients, contact your Roche representative.

Related L1 message S-AF

About level 1 messages and level 2 errors (209)

MU-0179: Voltage measurement fail-safe activated

Problem The measuring unit detected an error during the voltage measurement. The test failed.

Solution Repeat the test with a new test strip. If this problem persists, contact your Roche representative.

Related L1 message D-AA

About level 1 messages and level 2 errors (209)

MU-0180: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0182: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G_AA

About level 1 messages and level 2 errors (209)

MU-0183: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0231: Test strip ejection error

Problem An error with the strip ejection mechanism occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message	H-AG

About level 1 messages and level 2 errors (209)

MU-0232: Test strip ejection error

Problem	An error with the strip ejection mechanism occurred.
Solution	Restart the instrument and try again. If the problem persists, contact your Roche representative.
Related L1 message	G-AA

About level 1 messages and level 2 errors (209)

MU-0241: Test strip ejection error

Problem	An error with the strip ejection mechanism occurred.
Solution	Restart the instrument and try again. If the problem persists, contact your Roche representative.
Related L1 message	G-AA

About level 1 messages and level 2 errors (209)

MU-0242: Measuring unit error

Problem	A measuring unit error occurred.
Solution	Contact your Roche representative.
Related L1 message	G-AA

About level 1 messages and level 2 errors (209)

MU-0243: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0245: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0246: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0247: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0249: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0250: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0251: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0252: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0253: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0254: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0256: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0257: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0258: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0259: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0260: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0261: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0262: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0263: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0267: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0273: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0320: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0321: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0323: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0324: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0325: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0326: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0327: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0328: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0329: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0340: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0341: Test strip ID decoding error

Problem The instrument could not read the test strip ID (e.g. due to dirt or scratches).

Solution Eject the test strip and insert a new test strip. If the problem persists, contact your Roche representative.

Related L1 message D-AA

About level 1 messages and level 2 errors (209)

MU-0342: Test strip ID decoding error

Problem The instrument could not read the test strip ID (e.g. due to dirt or scratches).

Solution Eject the test strip and insert a new test strip. If the problem persists, contact your Roche representative.

Related L1 message D-AA

About level 1 messages and level 2 errors (209)

MU-0343: Test strip insertion error

Problem The measuring unit detected that a test strip was not fully inserted or inserted upside down.

Solution Eject the test strip and insert it correctly.

Related L1 message D-AG

About level 1 messages and level 2 errors (209)

MU-0345: Test strip inserted upside down

Problem The measuring unit detected that the test strip was inserted upside down.

Solution Eject the test strip and insert it correctly.

Related L1 message D-AG

About level 1 messages and level 2 errors (209)

MU-0346: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0347: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0348: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0350: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0351: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0401: Measuring unit error

Problem A measuring unit error occurred.

Solution Contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0402: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0403: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0405: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0406: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0407: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0409: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0410: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0412: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0413: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0416: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0419: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0420: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0421: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0423: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0424: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0425: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0426: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0427: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0428: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0429: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0430: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0431: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0432: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0501: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0502: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0503: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0505: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0506: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0512: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0513: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0514: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0515: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0521: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0523: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0524: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0525: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0526: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0527: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0528: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0529: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0541: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0560: Measuring unit fail-safe activated

Problem The measuring unit detected a sample which triggered a fail-safe logic. The test failed.

Solution Repeat the test with a new test strip. If this problem persists, contact your Roche representative.

Related L1 message S-AF

About level 1 messages and level 2 errors (209)

MU-0561: Measuring unit fail-safe activated

Problem The measuring unit triggered a fail-safe logic for the applied sample. The test failed.

Solution Repeat the test with a new test strip. Follow proper usage in the handling recommendations.

Related L1 message S-AF

About level 1 messages and level 2 errors (209)

MU-0562: Measuring unit fail-safe activated

Problem The measuring unit triggered a fail-safe logic for the applied sample. The test failed.

Solution Repeat the test with a new test strip. Follow proper usage in the handling recommendations.

Related L1 message S-AF

About level 1 messages and level 2 errors (209)

MU-0563: Measuring unit fail-safe activated

Problem The measuring unit triggered a fail-safe logic for the applied sample. The test failed.

Solution Repeat the test with a new test strip. Follow proper usage in the handling recommendations.

Related L1 message S-AF

About level 1 messages and level 2 errors (209)

MU-0564: Test strip fail-safe activated

Problem The measuring unit triggered a fail-safe related to external environmental conditions for the inserted test strip. The test failed.

Solution Repeat the test with a new test strip. Follow proper usage in the handling recommendations.

Related L1 message D-AF

About level 1 messages and level 2 errors (209)

MU-0567: Measuring unit fail-safe activated

Problem The measuring unit triggered a fail-safe logic for the applied sample. The test failed.

Solution Repeat the test with a new test strip. Follow proper usage in the handling recommendations.

Related L1 message S-AF

About level 1 messages and level 2 errors (209)

MU-0901: Measuring unit error

Problem A measuring unit error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

MU-0905: Test strip contact error

Problem A test strip contact error occurred.

Solution Repeat the test with a new test strip. If this problem persists, contact your Roche representative.

Related L1 message D-AA

About level 1 messages and level 2 errors (209)

MU-0906: Test strip contact error

Problem A test strip contact error occurred.

Solution Repeat the test with a new test strip. If this problem persists, contact your Roche representative.

Related L1 message D-AA

About level 1 messages and level 2 errors (209)

MU-0910: Measuring unit error

Problem The measuring unit detected an error in the isolation resistance measurement which resulted in a failed test.

Solution Repeat the test with a new test strip. Do not apply sample too early. Do not re-use a test strip.

If the problem persists, contact your Roche representative.

Related L1 message D-AA

About level 1 messages and level 2 errors (209)

MU-0930: Sample application error

Problem The sample was applied to early.

Solution Repeat the test with a new test strip.Apply sufficient sample when requested without moving the test strip.

If this problem persists, contact your Roche representative.

Related L1 message S-AB

About level 1 messages and level 2 errors (209)

MU-0940: Sample application error

Problem The instrument could not detect a sample application within the given timeout.

Solution Repeat the test with a new test strip.Apply sufficient sample when requested without moving the test strip. If this problem persists, contact your Roche representative.

Related L1 message S-AB

About level 1 messages and level 2 errors (209)

MU-0941: Sample application error

Problem The instrument detected an unsteady sample application or insufficient sample volume was applied.

Solution Repeat the test with a new test strip.

Apply sufficient sample when requested without moving the test strip. If this problem persists, contact your Roche representative.

Related L1 message S-AB

About level 1 messages and level 2 errors (209)

MU-0945: Sample application error

Problem

The instrument detected an unsteady sample application, or the test strip was moved during sample application or sample detection.

Solution

Repeat the test with a new test strip.

Apply sufficient sample when requested without moving the test strip. If this problem persists, contact your Roche representative.

Related L1 message

S-AB

About level 1 messages and level 2 errors (209)

MU-0947: Sample application error

Problem

The instrument detected an unsteady sample application, or the test strip was moved during sample application or sample detection.

Solution

Repeat the test with a new test strip.

Apply sufficient sample when requested without moving the test strip. If this problem persists, contact your Roche representative.

Related L1 message

S-AB

About level 1 messages and level 2 errors (209)

MU-0951: Sample application error

Problem

The instrument detected an unsteady sample application, or the test strip was moved during sample application or sample detection.

Solution

Repeat the test with a new test strip.

Apply sufficient sample when requested without moving the test strip. If this problem persists, contact your Roche representative.

Related L1 message S-AB

About level 1 messages and level 2 errors (209)

MU-0952: Sample application error

Problem The instrument detected an unsteady sample application, or the test strip was moved during sample application or sample detection.

Solution Repeat the test with a new test strip.

Apply sufficient sample when requested without moving the test strip. If this problem persists, contact your Roche representative.

Related L1 message S-AB

About level 1 messages and level 2 errors (209)

MU-0960: Test strip error

Problem A test strip error occurred.

Solution Repeat the test with a new test strip. If this problem persists while testing other patients, contact your Roche representative.

Related L1 message D-AA

About level 1 messages and level 2 errors (209)

MU-0961: Test strip error

Problem A test strip error occurred.

Solution Repeat the test with a strip from another container.

If this does not solve the issue, repeat the test with another strip and another instrument.

Related L1 message D-AF

About level 1 messages and level 2 errors (209)

MU-0962: Test strip error

Problem A test strip error occurred.

Solution Repeat the test with a new test strip. If this problem persists while testing other patients, contact your Roche representative.

Related L1 message D-AF

About level 1 messages and level 2 errors (209)

MU-0963: Test strip error

Problem A test strip error occurred.

Solution Repeat the test with a strip from another container.

If this does not solve the issue, repeat the test with another strip and another instrument.

Related L1 message D-AF

About level 1 messages and level 2 errors (209)

MU-0971: Signal range violation

Problem The measuring unit detected a signal range violation.

Solution Repeat the test with a new test strip.

If this problem persists while testing other patients, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0972: Signal range violation

Problem The measuring unit detected a signal range violation.

Solution Repeat the test with a new test strip.

If this problem persists while testing other patients, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0973: Signal range violation

Problem The measuring unit detected a signal range violation.

Solution Repeat the test with a new test strip.

If this problem persists while testing other patients, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0974: Signal range violation

Problem The measuring unit detected a signal range violation.

Solution Repeat the test with a new test strip.

If this problem persists while testing other patients, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0975: Signal range violation

Problem The measuring unit detected a signal range violation.

Solution Repeat the test with a new test strip.

If this problem persists while testing other patients, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0976: Signal range violation

Problem The measuring unit detected a signal range violation.

Solution Repeat the test with a new test strip.

If this problem persists while testing other patients, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0978: Signal range violation

Problem The measuring unit detected a signal range violation.

Solution Repeat the test with a new test strip.

If this problem persists while testing other patients, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0979: Removal of test strip during test

Problem The measuring unit detected a signal range violation.

Solution The test strip was removed during the test.

Repeat the test with a new test strip. Do not remove test strip during processing.

Related L1 message D-AL

About level 1 messages and level 2 errors (209)

MU-0980: Signal range violation

Problem The measuring unit detected a signal range violation.

Solution Repeat the test with a new test strip.

If this problem persists while testing other patients, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0981: Signal range violation

Problem The measuring unit detected a signal range violation.

Solution Repeat the test with a new test strip.

If this problem persists while testing other patients, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0982: Signal range violation

Problem The measuring unit detected a signal range violation.

Solution Repeat the test with a new test strip.

If this problem persists while testing other patients, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0983: Signal range violation

Problem The measuring unit detected a signal range violation.

Solution Repeat the test with a new test strip.

If this problem persists while testing other patients, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0984: Signal range violation

Problem The measuring unit detected a signal range violation.

Solution Repeat the test with a new test strip.

If this problem persists while testing other patients, contact your Roche representative.

Related L1 message G-AC

About level 1 messages and level 2 errors (209)

MU-0987: Test strip insertion error

Problem The test strip was inserted too early.

Solution Eject the test strip and insert it again when requested.

Related L1 message D-AK

About level 1 messages and level 2 errors (209)

US

In this section

US-0001: Unknown error

Problem An unknown error occurred.

Solution Restart the instrument and try again.

If the problem persists, contact your Roche representative.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

US-0002: Software update package retrieval failed

Problem One or multiple parts of the software update package could not be retrieved because the connection to **cobas® infinity** edge was interrupted.

Solution Ensure that the instrument is connected to the Wi-Fi.

Check the connection between the instrument and **cobas® infinity** edge using the **Network status test** option.

Related L1 message I-AH

About level 1 messages and level 2 errors (209)

US-0003: Invalid software update package

Problem The meta-data of the software update package is invalid (e.g., malformed or incomplete).

Solution Contact your Roche representative.

Related L1 message I-AF

About level 1 messages and level 2 errors (209)

US-0004: Measuring unit firmware update error

Problem The measuring unit firmware update could not be started.

Solution Restart the instrument.

Ensure that the instrument is connected to the network using the **Network status test** option, and that the connection is stable.

Restart the firmware update via **cobas® infinity** edge.

Related L1 message I-AC

About level 1 messages and level 2 errors (209)

US-0005: Measuring unit firmware update error

Problem The measuring unit firmware update could not be started.

Solution Restart the instrument.

Ensure that the instrument is connected to the network using the **Network status test** option, and that the connection is stable.

Restart the firmware update via **cobas® infinity** edge.

Related L1 message I-AC

About level 1 messages and level 2 errors (209)

US-0007: SW update error

Problem A software update error occurred.

Solution Contact your Roche representative.

Related L1 message I-AC

About level 1 messages and level 2 errors (209)

US-0008: Error during shutdown

Problem The instrument could not shut down the operating system as part of the software update process.

Solution Restart the instrument and check the instrument software configuration in the GUI.

Related L1 message I-AC

About level 1 messages and level 2 errors (209)

US-0009: SW update error

Problem A software update error occurred. Instrument cannot be used.

Solution Contact your Roche representative.

Related L1 message I-AC

About level 1 messages and level 2 errors (209)

US-0010: Measuring unit error

Problem A measuring unit software update error occurred.

Solution Restart the instrument.

Ensure that the instrument is connected to the network using the **Network status test** option, and that the connection is stable.

Restart the software update via **cobas® infinity** edge.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

US-0011: Measuring unit error

Problem A measuring unit software update error occurred.

Solution Restart the instrument.

Ensure that the instrument is connected to the network using the **Network status test** option, and that the connection is stable.

Restart the software update via **cobas® infinity** edge.

Related L1 message G-AA

About level 1 messages and level 2 errors (209)

US-0012: High-level measuring unit firmware update failed

Problem The measuring unit firmware update could not be completed via the intended high-level software interface.

Solution No further action required since the update was performed using a low-level software interface.

Related L1 message I-AC

About level 1 messages and level 2 errors (209)

US-0013: Software update failed

Problem

An error occurred during a planned restart of the instrument during a software update. The software update failed.

Solution

Restart the instrument.

Ensure that the instrument is connected to the network using the **Network status test** option, and that the connection is stable.

Restart the software update via **cobas® infinity** edge.

Related L1 message

I-AC

About level 1 messages and level 2 errors (209)

US-0014: App update failed

Problem

An app update failed.

Solution

Restart the instrument.

Ensure that the instrument is connected to the network using the **Network status test** option, and that the connection is stable.

Restart the software update via **cobas® infinity** edge.

If the problem persists, contact your Roche representative.

Related L1 message

I-AC

About level 1 messages and level 2 errors (209)

US-0016: Measuring unit software update error

Problem

A measuring unit software update error occurred.

Solution	Ensure that the instrument is connected to the network using the **Network status test** option, and that the connection is stable. Restart the software update via **cobas® infinity** edge.
Related L1 message	I-AC

About level 1 messages and level 2 errors (209)

US-0017: Measuring unit software update error

Problem	The low-level measuring unit firmware update failed.
Solution	Contact your Roche representative.
Related L1 message	I-AC

About level 1 messages and level 2 errors (209)

US-0018: Software update failed

Problem	The software update package was rejected by the instrument due to a signature verification error.
Solution	Contact your Roche representative.
Related L1 message	I-AC

About level 1 messages and level 2 errors (209)

US-0019: Operating system update failed

Problem	An operating system software update failed.
Solution	Ensure that the instrument is connected to the network using the **Network status test** option, and that the connection is stable. Restart the software update via **cobas® infinity** edge.

Related L1 message	I-AC

About level 1 messages and level 2 errors (209)

US-0020: Component compatibility check failed

Problem	The software update package was rejected by the instrument because the compatibility check failed.
Solution	Check the available software update packages and ensure that a compatible software update package is available.
Related L1 message	I-AC

About level 1 messages and level 2 errors (209)

US-0021: App uninstall failed

Problem	The instrument was not able to uninstall an app.
Solution	Contact your Roche representative.
Related L1 message	I-AC

About level 1 messages and level 2 errors (209)

US-0022: Software update already in process

Problem	The software update package was rejected by the instrument because another software update is already in process.
Solution	Wait until the current software update is finished and try again.
Related L1 message	I-AF

About level 1 messages and level 2 errors (209)

US-0023: Software update package download failed

Problem One or multiple parts of the software update package could not be retrieved. The connection to **cobas® infinity** edge was interrupted.

Solution Ensure that the instrument is connected to the network. Check the connection between the instrument and **cobas® infinity** edge using the Network status test option.

Related L1 message I-AF

About level 1 messages and level 2 errors (209)

US-0024: Software update error

Problem The software update package was rejected by the instrument.

Solution Check the available software update packages and ensure that compatible software update package is available.

Related L1 message I-AC

About level 1 messages and level 2 errors (209)

US-0025: Software update error

Problem The software update package was rejected by the instrument.

Solution Check the available software update packages and ensure that compatible software update package is available.

Related L1 message I-AC

About level 1 messages and level 2 errors (209)

US-0026: Software update error

Problem

The uninstall of an essential instrument app was prevented.

Solution

Check the available software update packages and ensure that a compatible instrument software update package is available.Turn off and restart the instrument.

Ensure that the instrument is connected to the network using the **Network status test** option and that the connection is stable.

Restart the software update via **cobas® infinity** edge.

Related L1 message

I-AF

About level 1 messages and level 2 errors (209)

US-0027: Software update error

Problem

The instrument received a software update container with a 3rd-party app although it was expecting an instrument software update container.

You are not allowed to execute anything other than instrument update containers.

Solution

Check the available software update packages and ensure that a compatible instrument software update package is available.Turn off and restart the instrument.

Ensure that the instrument is connected to the network using the **Network status test** option and that the connection is stable.

Restart the software update via **cobas® infinity** edge.

Related L1 message

I-AF

About level 1 messages and level 2 errors (209)

US-0028: Incompatible software update container

Problem	The instrument detected an incompatible software update container and consequently did not start the software update process.
Solution	Check the available software update packages and ensure that a compatible software update package is available.
Related L1 message	I-AF

About level 1 messages and level 2 errors (209)

Configuration

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Initial configuration

In this chapter 10

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About instrument configuration

You can perform a basic initial installation on the instrument manually, or by using a barcode.

For more detailed information, refer to the cobas pulse Connectivity guide.

Depending on the systems to which the instrument is connected (DMS, **cobas® infinity** edge), further configuration will be made by the corresponding systems.

When you turn on the instrument for the first time you are prompted to select the language you require for the user interface.

After selecting the language, you choose the appropriate installation option.

Installation by barcode

An installation by barcode configures an instrument to be able to connect with the intended system with which the instrument will connect (DMS, **cobas® infinity** edge). If the instrument is connected to a DMS, it receives all additional configuration information from the DMS.

This method is best suited when a large number of instruments must be configured.

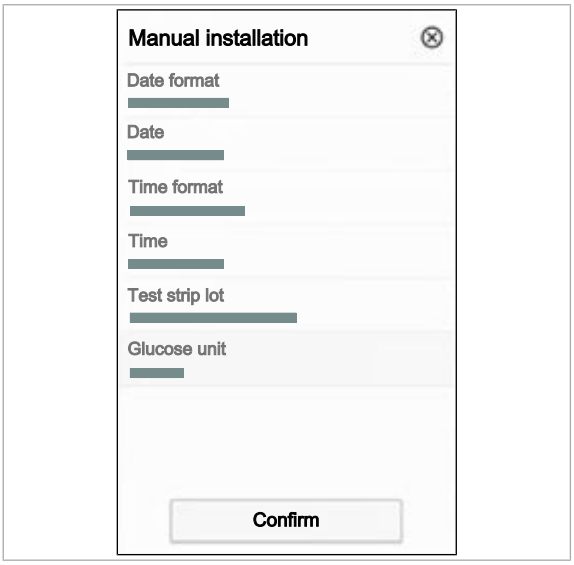
The configuration information must first be set using the configuration tool (**cobas® infinity** edge).

Tapping the **Installation by barcode** button displays the **Scan barcode** screen with which you scan the barcode containing the configuration information which enables the instrument to connect to the intended systems (DMS, **cobas® infinity** edge).

After scanning the barcode successfully, the instrument connects to the intended systems for further instrument configuration.

Manual installation

On the **Manual installation** screen you are prompted to do the following:



- Choose the date format using the **Date format** option (for example, dd-MMM-yyyy), and enter the current date.
- Choose the time format using the **Time format** option (for example, 12 hour (am/pm)), and enter the current time.
- Choose the **Test strip lot** option, scan a barcode containing the test strip lot data.
  The barcode is generated in **cobas® infinity** edge. It is not the barcode on the test strip container.
- The **Glucose unit** option displays the configured glucose unit (for example, mmol/L).
  Changing the glucose unit is only possible using a configuration barcode (generated in **cobas® infinity** edge).
  Choose the glucose unit (for example, mmol/L) using the **Glucose unit** option.

After you have made the appropriate settings, the **Tests** screen is displayed.

About the Settings menu access restrictions

The instrument can be configured to restrict access to certain options in the **Settings** menu.

The following options enable restricted access configuration:

- **Date and time**
- **Configuration by barcode**
- **Lot management**
- **Administrator**

The instrument can be configured to access the options by one of the following methods.

- No restrictions
- Setup password required
- Point of Care Coordinator privilege required
- Access only via the DMS
- No access

For security reasons, the setup password is set up in the barcode used in the initial instrument configuration (**cobas® infinity** edge).

The table illustrates the different types of access that can apply to each option.

	No restriction	Setup password	POCC privilege	Via DMS only	No access
Setting the date and time	x	x	x	x	
Instrument configuration by barcode	x	x	x		x
Lot management	x	x	x		x
Administrator activities	x	x	x		x
Setup password	Set by the initial barcode / DMS				

Access restrictions

Setting the instrument date and time

You use the date and time screens to set the instrument date and time.

The date and time formats used by an instrument are determined by its configuration.

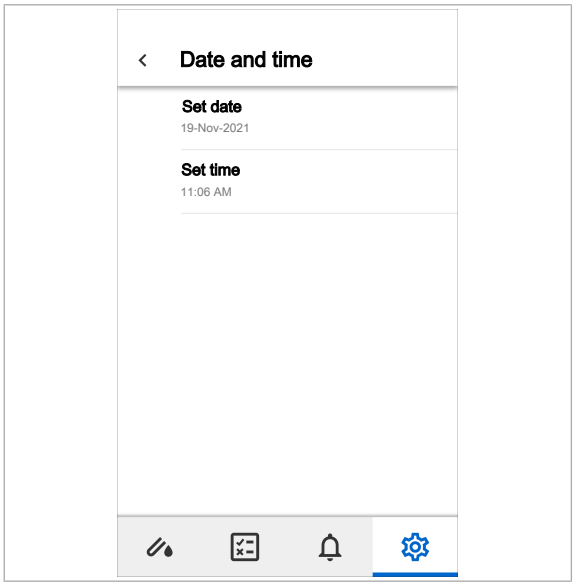
☐ You are logged onto the instrument

Logging on to the Glucose app (99)

To set the instrument date and time

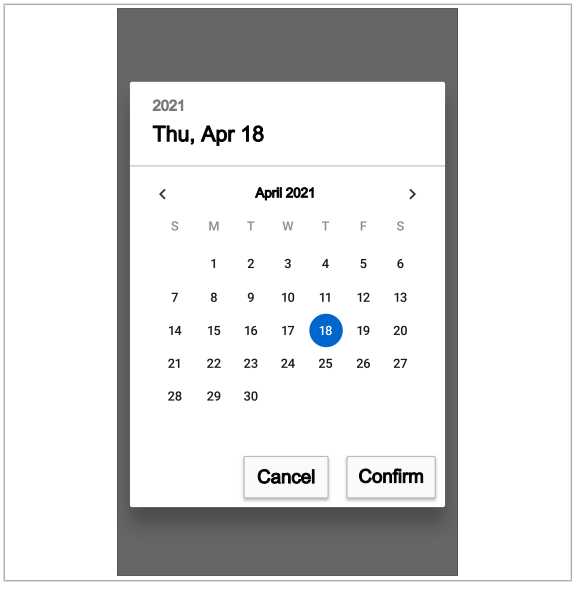
1 Choose ⚙ > **Date and time**.

ⓘ Depending on your instrument configuration, this option may be password protected.



2 To set the instrument date, on the **Date and time** screen tap the **Set date** option.

➔ The date picker is displayed



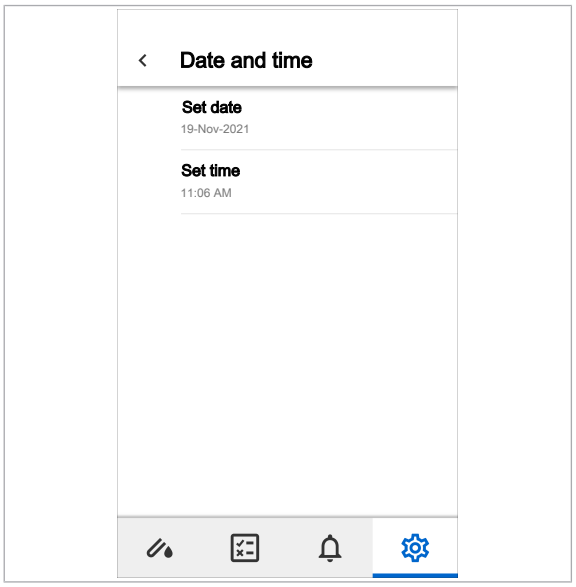
3 To change the year, in the date picker do the following:

- Tap the current year.
- Use the year picker to select a year.
- Tap the **Confirm** button.

4 To change the month and day, in the date picker do the following:

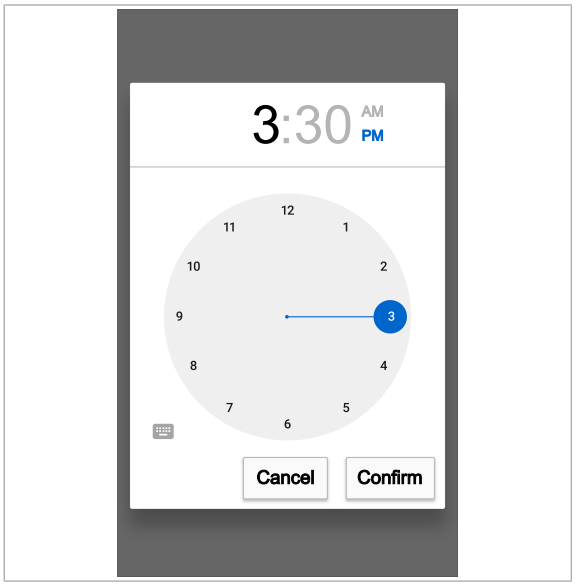
- Tap the › button or the ‹ button to select a month.
- For the selected month, tap the desired day.
- Tap the **Confirm** button.

➔ The instrument date is set, and the **Date and time** screen is displayed.



5 To set the instrument time, on the **Date and time** screen tap the **Set time** option.

6 To set the time use one of the following methods:
- Time picker
- Type in time



7 To use the time picker, do the following:
- Drag the clock hand to the desired hour.
- Drag the clock hand to the desired minutes.
- If the instrument uses the 12 hour clock format, tap **AM** or **PM**.
- Tap the **Confirm** button.

➔ The new time is set.

8 To use type in time, do the following:
- On the time picker screen tap the button.
- Use the keyboard to enter the new time.
- Tap the **Confirm** button.

➔ The new time is set.

Configuring by barcode

You can configure an instrument by scanning a barcode.

The **Configuration by barcode** option can be used to do the following:

- Initial instrument configuration
- Subsequent instrument configuration

After a subsequent configuration, the change takes effect the next time that you log onto the **Glucose** app

As required

To configure by barcode

1 Tap > **Configuration by barcode**.

2 If prompted, enter the setup password to change the settings by barcode and tap the **Confirm** button.

3 Scan the barcode which can be generated in **cobas® infinity** edge.

➔ When the barcode has been scanned successfully the instrument emits a beep and a confirmation dialog box is displayed.

4 In the **Configuration change** dialog box, tap the **Confirm** button.

➔ The **Configuration changed** dialog box confirms that the configuration has been made.

Formats and language configuration

In this section

Date format

This configuration item specifies the date format that is used on the instrument.

When an instrument is started for the first time and a manual installation is performed, you are prompted to select the date format using the user interface.

Thereafter you cannot change the date format using the user interface.

The format of the date on the status bar is determined by the **Language and region** configuration, not the **Date format** configuration.

Item ID

DATE_FORMAT

Available values/format

- dd-MMM-yyyy (default) [DATE_FORMAT_0]
- MMM dd, yyyy [DATE_FORMAT_1]
- MM/dd/yyyy [DATE_FORMAT_2]
- dd.MM.yyyy [DATE_FORMAT_3]

Configuration

You configure the **Date format** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)
- User interface (only during initial configuration)

Related topics

- About instrument configuration (365)

Time format

This configuration item specifies the time format that is used on the instrument.

When an instrument is started for the first time and a manual installation is performed, you are prompted to select the time format using the user interface.

Thereafter you cannot change of the time format using the user interface.

The format of the time on the status bar is determined by the **Language and region** configuration, not the **Time format** configuration.

Item ID

TIME_FORMAT

Available values/format

- **12 hours** (default)
  [HOURS_12]
- **24 hours**
  [HOURS_24]

Configuration

You configure the **Time format** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)
- User interface (only during initial configuration)

Related topics

- About instrument configuration (365)

Language and region

This configuration item determines the language and region combination used on the instrument.

It consists of a language tag and a region tag:
<language tag>-<region tag>

The language tag must be set according to the permitted values[(2)] listed in the table (e.g., en for English). The region tag must be set according to the list of permitted values.

The Chinese language and region are handled as follows:

[(2)] ISO 639-1

- zh-CN corresponds to simplified Chinese.
- zh-TW corresponds to traditional Chinese

Item ID INSTRUMENT_LOCALE

Available values/format

The table contains valid combinations[3] of a *language tag* and *region/country tag* for the **Language and region** configuration item.

Only one of the listed region/country tags can be combined with a given language tag (e.g., a valid configuration is "en-US")

Language tag	Region/country tag
de	AT, BE, CH, DE, IT, LI, LU
fr	BE, BF, BI, BJ, BL, CA, CD, CF, CG, CH, CI, CM, DJ, DZ, FR, GA, GF, GN, GP, GQ, HT, KM, LU, MA, MC, MF, MG, ML, MQ, MR, MU, NC, NE, PF, PM, RE, RW, SC, SN, SY, TD, TG, TN, VU, WF, YT
es	419, AR, BO, BR, BZ, CL, CO, CR, CU, DO, EA, EC, ES, GQ, GT, HN, IC, MX, NI, PA, PE, PH, PR, PY, SV, US, UY, VE
it	CH, IT, SM, VA
nl	AW, BE, BQ, CW, NL, SR, SX
da	DA, GL
sv	AX, FI, SE
en	001, 150, AG, AI, AS, AT, AU, BB, BE, BI, BM, BS, BW, BZ, CA, CC, CH, CK, CM, CX, CY, DE, DG, DK, DM, ER, FI, FJ, FK, FM, GB, GD, GG, GH, GI, GM, GU, GY, HK, IE, IL, IM, IN, IO, JE, JM, KE, KI, KN, KY, LC, LR, LS, MG, MH, MO, MP, MS, MT, MU, MW, MY, NA, NF, NG, NL, NR, NU, NZ, PG, PH, PK, PN, PR, PW, RW, SB, SC, SD, SE, SG, SH, SI, SL, SS, SX, SZ, TC, TK, TO, TT, TV, TZ, UG, UM, US, US, VC, VG, VI, VU, WS, XA, ZA, ZM, ZW
no	NO
pt	AO, BR, CH, CV, GQ, GW, LU, MO, MZ, PT, ST, TL
fi	FI
pl	PL
cs	CZ
hu	HU
ja	JP
ko	KP, KR

Valid <language tag> and <region/country tag> combinations

[3] ISO3166-1 alpha-2

Language tag	Region/country tag
th	TH
ru	BY, KG, KZ, MD, RU, UA
he	IL
el	CY, GR
tr	CY, TR
zh	CN (for simplified Chinese), TW (for traditional Chinese)

Valid <language tag> and <region/country tag> combinations

Default value: en-US

Configuration

You configure the **Language and region** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)
- User interface (during the initial configuration only the language is set)

Regulatory region

This configuration item determines the country in which an instrument is used. The instrument adjusts the WLAN parameters used according to the country configured and applies additional dependencies.

Item ID

REGULATORY_REGION

Available values/format

(ISO 3166-1 codes alpha-2)

Dependencies

When the **Regulatory region** value is set to **Canada**, the **Result unit (glucose tests)** value can only be set to **mmol/L**. It is not possible to change it to **mg/dL**.

When the **Regulatory region** value is set to **United States of America**, the following actions are applied:

- The **User authentication required** configuration item value is set to **Enabled** and cannot be changed.
- A user ID which does not contain a value in the **Show user lockout warning prior to user certificate expiration** configuration item is invalid and rejected by the instrument.

- The **QC algorithm** configuration item value is set to **Time interval** and changing it to **Disabled** is prevented.
  It is possible to change the **QC algorithm** configuration item to any other value than **Disabled**.
- The **Allow QC / synchronization lockout overrides** configuration item value is set to **Disabled** and cannot be changed.

Configuration

You configure the **Regulatory region** configuration item using the following:

- Barcode (generated via **cobas® infinity** edge)

Related topics

- Result unit (glucose tests) (460)

QC configuration

In this section

QC algorithm

In this section

QC algorithm

This configuration item specifies how QC lockout is enabled on the instrument.

Item ID QC_ALGORITHM

Available values/format

- **Disabled**
  [ALWAYS_OK]
  QC lockout is disabled.
- **Time interval**
  [HOURS]
  QC lockout is enabled after a specified number of hours since the last successful QC test. was performed. It works in conjunction with the **QC interval (in hours)** configuration item.
- **Time interval (alternating QC level)**
  [HOURS_ROTATE]
  The same as **Time interval**, but the QC test uses the level 1 and the level 2 QC materials alternately rather than both levels.
- **Until failed QC** (Default)
  [LAST_QC_OK]

QC lockout is enabled when the last QC test performed is out of range. Consequently if no successful QC test has been performed, the instrument will be in QC lockout.

- **Shift**
  [SHIFT]
  A QC lockout is activated with each change of shift. It works in conjunction with the **Shift length (in hours)** and **Shift start** configuration items.
- **Shift (alternating QC level)**
  [SHIFT_ROTATE]
  The same as **Shift**, but the QC test uses the level 1 and the level 2 QC materials alternately rather than both levels.
- **Test strip count**
  [STRIP_COUNT]
  QC lockout is enabled after a predetermined number of successful tests have been performed (excluding QC tests). It works in conjunction with the **Test strip count** configuration item.
- **Test strip count (alternating QC level)**
  [STRIP_COUNT_ROTATE]
  The same as **Test strip count**, but the QC test uses level 1 and level 2 QC materials alternately rather than both levels.
- **Time of day**
  [TIME_OF_DAY]
  QC lockouts are enabled at specified times of day (up to 6). It works in conjunction with the **Time of day** configuration item.
- **Time of day (alternating QC level)**
  [TIME_OF_DAY_ROTATE]
  The same as **Time of day**, but the QC uses L1 and L2 controls alternately rather than both controls.

Dependencies

If **Country** = "US", the value of **QC algorithm** cannot be set to **Disabled**.

Configuration

You configure the **QC algorithm** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- QC interval (in hours) (378)
- Shift length (in hours) (378)
- Shift start (379)
- Test strip count (380)

- Time of day (380)

QC interval (in hours)

This configuration item specifies the time period (hours) for which a positive QC result is valid. A QC lockout is enabled after this period is exceeded.

QC interval (in hours) works in conjunction with the **QC algorithm** configuration item.

Item ID

QC_HOURS

Available values/format

1-9999 hours (default: 1000 hours).
Values must be integers.

Dependencies

Configuring **QC interval (in hours)** is only necessary when the **QC algorithm** configuration item value is **Time interval** or **Time interval (alternating QC level)**.

Configuration

You configure **QC interval (in hours)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- QC algorithm (376)

Shift length (in hours)

This configuration item specifies the length of a working shift in hours. This is required when a QC lockout is based on the changeover of a working shift.

Shift length (in hours) works in conjunction with the **Shift start** configuration item.

Item ID

QC_SHIFT_LENGTH

Available values/format

The value must be an even divisor of 24:
1, 2, 3, 4, 6, 8 (default), 12, 24 hours.
Values must be integers.

Dependencies

Configuring **Shift length (in hours)** is only necessary when the **QC algorithm** configuration item value is **Shift** or **Shift (alternating QC level)**.

Configuration

You configure the **Shift length (in hours)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- QC algorithm (376)
- Shift start (379)

Shift start

This configuration item specifies the start time of a shift. This is required when a QC lockout is based on the changeover of a working shift.

Shift start works in conjunction with the **Shift length (in hours)** configuration item.

Item ID

QC_SHIFT_START

Available values/format

0 - 23 hours (default: 6 hours)
Values must be integers.

Dependencies

Configuring **Shift start** is only relevant when the **QC algorithm** configuration item value is **Shift** or **Shift (alternating QC level)**.

Configuration

You configure the **Shift start** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- QC algorithm (376)
- Shift length (in hours) (378)

Test strip count

This configuration item specifies the number of successful tests that are performed after which a QC lockout is enabled. QC tests and unsuccessful tests are not included in the calculation.

Test strip count works in conjunction with the **QC algorithm** configuration item.

Item ID

QC_STRIP_COUNT

Available values/format

1 - 999 (default: 50)
Values must be integers.

Dependencies

Configuring **Test strip count** is only relevant when the **QC algorithm** configuration item value is **Test strip count** or **Test strip count (alternating QC level)**.

Configuration

You configure the **Test strip count** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- QC algorithm (376)

Time of day

This configuration item determines the times of day at which QC lockouts are activated.

A maximum of 6 lockouts can be scheduled. The lockouts occur each day.

Time of day works in conjunction with the **QC algorithm** configuration item.

Item ID

QC_TIME_OF_DAY

Available values/format

A time must be entered as "HH:MM" and separated by commas. The times must be inside quotation marks (" ")

Examples:

- "00:00"

- "06:00,12:00,18:00"
- "02:00,06:00,10:00,14:00,18:00,22:00"

"06:00" (default)

Dependencies

Configuring **Time of day** is only relevant when the **QC algorithm** configuration item value is **Time of day** or **Time of day (alternating QC level)**.

Configuration

You configure the **Time of day** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- QC algorithm (376)

QC tests required for new test strip lots

This configuration item specifies if a new test strip lot can be used directly for patient testing, or whether a new test strip lot must first pass QC tests successfully.

QC tests required for new test strip lots works in conjunction with the **QC algorithm** configuration item.

Item ID

QC_NEEDED_FOR_NEW_STRIP_LOTS

Available values/format

- **Disabled** (default)
  [false]
  A test strip lot can be used without passing a QC test.
- **Enabled**
  [true]
  A test strip lot cannot be used without passing a QC test.

Dependencies

Configuring **QC tests required for new test strip lots** is only relevant when the **QC algorithm** configuration item value is not **Disabled**.

Configuration

You configure the **QC tests required for new test strip lots** configuration item using the following methods:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Show numeric QC result value

This configuration item specifies how a QC test result is displayed.

Item ID QC_RESULT_DISPLAY

Available values/format

- **Enabled** (default)
  [true]
  The result is displayed as a "Pass" or "Fail" together with a numeric value.
- **Disabled**
  [false]
  The result is displayed as a "Pass" or a "Fail" only.

Configuration You configure the **Show numeric QC result value** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

QC range handling

In this section

Allowed deviation for QC level 1 result

This configuration item specifies the permissible deviation from the level 1 QC material target value for which a QC result is valid.

The custom deviation configuration depends upon the QC version. The QC version defines the target values (level 1 and level 2) of a QC kit provided by Roche. The QC version ranges from 0 to 9.

The QC version of a QC kit is located in **Settings > Lot management > Lot management > QC lots**. The initial QC version at product launch is 0.

Item ID GLU_QC_CUSTOM_DEVIATION_L1

Available values/format SET of value pairs (comma separated)

- The accepted maximum deviation values (for result unit mg/dL or mmol/L) are defined by Roche (see package insert of **cobas**® GLU QC kit). Custom deviation values which exceed the permitted deviation defined by Roche will be rejected by the instrument.
- If the configuration item is empty (default) or the QC version is set to "0:0", no custom deviation is used.
- If a QC version is listed twice (misconfiguration), the value of the last entry in the list is used as the custom deviation.

Example 1:
"0:6" = using a custom deviation of 6 mg/dL for QC version 0.

Example 2:
"0:0.3" = using a custom deviation of 0.3 mmol/L for QC version 0.

Example3:
"0:6,1:7" = using a custom deviation of 6 mg/dL for QC version 0 and 7mg/dL for QC version 1.

Example4:
"0:0" = no custom deviation is used.

Dependencies

The allowed deviation is dependent on the **Result unit (glucose tests)** configuration item, i.e. mmol/L or mg/dL.

The instrument rejects custom deviation values which exceed the allowed deviation defined by Roche. See the package insert of **cobas**® GLU QC kit for the deviations defined by Roche.

Configuration

You configure the **Allowed deviation for QC level 1 result** configuration item using the following methods:

- Data management system (e.g., **cobas**® **infinity** POC)
- Barcode (generated via **cobas**® **infinity** edge)

Allowed deviation for QC level 2 result

This configuration item specifies the permissible deviation from the level 2 target value for which a QC result is valid.

The custom deviation configuration depends upon the QC version. The QC version defines the target values (level 1 and level 2) of a QC kit provided by Roche. The QC version ranges from 0 to 9.

The QC version of a QC kit is located in **Settings > Lot management > Lot management > QC lots**. The initial QC version at product launch is 0.

Item ID

GLU_QC_CUSTOM_DEVIATION_L2

Available values/format

SET of value pairs (comma separated):

- The accepted maximum deviation values (for result unit mg/dL or mmol/L) are defined by Roche (see package insert of **cobas**® GLU QC kit). Custom deviation values which exceed the permitted deviation defined by Roche will be rejected by the instrument.
- If the configuration item is empty (default) or the QC version is set to "0:0", no custom deviation is used.
- If a QC version is listed twice (misconfiguration), the value of the last entry in the list is used as the custom deviation.

Example 1:
"0:35" = using a custom deviation of 35 mg/dL for QC version 0.

Example 2:
"0:1.9" = using a custom deviation of 1.9 mmol/L for QC version 0.

Example3:
"0:35,1:37" = using a custom deviation of 35 mg/dL for QC version 0 and 37 mg/dL for QC version 1.

Example4:
"0:0" = no custom deviation is used.

Dependencies

The allowed deviation is dependent on the **Result unit (glucose tests)** configuration item, i.e. mmol/L or mg/dL.

Configuration

You configure the **Allowed deviation for QC level 2 result** configuration item using the following methods:

- Data management system (e.g., **cobas**® **infinity** POC)
- Barcode (generated via **cobas**® **infinity** edge)

Data deletion

In this section

Result deletion

In this section

Result deletion algorithm

This configuration item specifies how test results are deleted from the instrument.

Item ID

RESULT_DELETION_ALGO

Available values/format

- **First-in first-out** (default)
  [FIFO]
  Deletion is based on the FIFO (first in, first out) algorithm.
- **Based on configured result retention period**
  [AUTOMATIC]
  Deletion is based on retention time and successful transmission to the DMS (see the **Result upload required before result deletion** configuration item).

Dependencies

- **Result retention period (in days)** if value is based on configured result retention period
- **Result upload required before result deletion**

Configuration

You configure the **Result deletion algorithm** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Result upload required before result deletion (386)
- Result retention period (in days) (386)

Result retention period (in days)

This configuration item specifies the length of time that test results are retained on the instrument.

It determines the number of days since a result was measured before it can be automatically deleted. Deletion is triggered after the first DMS synchronization of each day.

The value "0 days" means that the result is deleted when the next deletion is triggered.

Item ID

RESULT_RETENTION_TIME_IN_DAYS

Available values/format

0–1000 days (default: 30 days)

Dependencies

It is only enabled when the **Result deletion algorithm** configuration item has the value **Based on configured result retention period**.

Configuration

You configure the **Result retention period (in days)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Result deletion algorithm (385)

Result upload required before result deletion

This configuration item specifies if a result must have been uploaded to the DMS before it can be deleted.

Item ID

RESULT_UPLOAD_REQUIRED

Available values/format

- **Disabled** (default)
  [false]
  A result does not need to be uploaded to the DMS before it can be deleted.
- **Enabled**
  [true]
  A result must have been uploaded to the DMS before it can be deleted.

Dependencies If there is no DMS a value of **Disabled** must be set.

Configuration You configure the **Result upload required before result deletion** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Result deletion algorithm (385)

Audit trail retention period (in days)

This configuration item specifies when audit trail entries are deleted. It works in conjunction with test result deletion.

Audit trail entries are deleted after the sum of the **Result retention period (in days)** and **Audit trail retention period (in days)** configuration items has elapsed.

Item ID AUDIT_TRAIL_RETENTION_TIME_IN_DAYS

Available values/format 0–1000 days (default: 30 days)

Dependencies The **Audit trail retention period (in days)** is only enabled when the **Result deletion algorithm** configuration item has a value of **Based on configured result retention period**.

Configuration You configure the **Audit trail retention period (in days)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Result deletion algorithm (385)

Barcode camera configuration

In this section

Minimum barcode scanning time

This configuration item specifies the minimum amount of time in milliseconds (ms), that the barcode camera preview window must focus on a barcode to ensure that it is read.

Item ID BCS_BARCODE_FOCUS_TIMESPAN

Available values/format

- 0 ms (default)
  (deactivates the focus scanning time)
- 700 - 9999 ms
  (1 - 699 ms are invalid)

Format:
[0]|[789][0-9]{2}|[123456789][0-9]{3}

Dependencies

- The **Patient entry type** configuration item has a value of **Barcode**.
- **User authentication required** has a value of **Barcode**.

Configuration

You configure the **Minimum barcode scanning time** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Checksum validation of barcode type "Interleaved 2 of 5"

This configuration item validates scanned patient ID and user ID barcodes when they are of the "Interleaved 2 of 5" barcode type.

Item ID BCS_CODE_I2OF5_CHECKSUM

Available values/format

- **Enabled** (default)
  [true]
- **Disabled**
  [false]

Dependencies

The configuration items **Allowed barcode types for patient ID** or **Allowed barcode types for user ID** have a value of **Interleaved 2 of 5**.

Configuration

You configure the **Checksum validation of barcode type "Interleaved 2 of 5"** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Connectivity

In this section

Synchronization warning / lockout

In this section

Show synchronization lockout warning prior to actual lockout (in hours)

This configuration item specifies the time in hours between the last data synchronization and displaying a warning. The warning indicates that there will be a lockout if a data synchronization does not take place.

It works in conjunction with the **Synchronization lockout (in hours)** configuration item.

If a value of "0" is selected no warning is given.

Item ID DMS_SYNCHRONIZATION_LOCKOUT_HOURS

Available values/format 0-999 hours

Default = "0"

Configuration You configure the **Show synchronization lockout warning prior to actual lockout (in hours)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Synchronization lockout (in hours) (391)

Synchronization lockout (in hours)

This configuration item specifies the time in hours between a data synchronization warning and a synchronization lockout if no synchronization takes place.

It works in conjunction with the **Show synchronization lockout warning prior to actual lockout (in hours)** configuration item.

If a value of "0" is selected synchronization lockout is disabled.

Item ID DMS_SYNCHRONIZATION_LOCKOUT_HOURS

Available values/format 0-999 hours

Default = "0"

Configuration You configure the **Synchronization lockout (in hours)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Show synchronization lockout warning prior to actual lockout (in hours) (390)

DMS/cobas infinity edge connection retry timeout (in seconds)

This configuration item specifies the time, in seconds, that the instrument will try to establish a connection to the intended systems (DMS or **cobas**® **infinity** edge).

Item ID

CONNECTION_TIMEOUT_IN_SECONDS

Available values/format

10-180 seconds

(default=60)

Configuration

You configure the **DMS/cobas infinity edge connection retry timeout (in seconds)** configuration item using the following:

- Data management system (e.g., **cobas**® **infinity** POC)
- Barcode (generated via **cobas**® **infinity** edge)

DMS session timeout (in seconds)

This configuration item specifies the application-level timeout the instrument uses for communication with the DMS.

It is the amount of time, in seconds, that the instrument will wait for the next message from the DMS before terminating the connection.

Item ID

CONVERSATION_TIMEOUT_IN_SECONDS

Available values/format

30-3600 seconds

(default=60)

Dependencies

The **Data management system IP address / host name** configuration item is not empty.

Configuration

You configure the **DMS session timeout (in seconds)** configuration item using the following:

- Data management system (e.g., **cobas**® **infinity** POC)
- Barcode (generated via **cobas**® **infinity** edge)

DNS IPv4 address

This configuration item specifies the DNS IPv4 address.

Item ID

DNS_IP4_ADDRESS

Available values/format

0.0.0.0 – 255.255.255.255

Dependencies

- If the **Use DHCP** configuration item has a value of **Yes**, the instrument will normally receive this value automatically (depending on the DHCP server configuration) and this configuration item can remain empty.
- If the **Use DHCP** configuration item has a value of **No**, and the instrument uses host names, this configuration item must be set.

Configuration

You configure the **DNS IPv4 address** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

DNS IPv6 address

This configuration item specifies the DNS IPv6 address.

Item ID

DNS_IP6_ADDRESS

Available values/format

Only the “preferred form"[(4)] is supported. Compressing zeros, mixed IPv6/IPv4 representations or scoped addresses are not supported.

Examples:

fd00:0:0:0:4533:4431:55b5:b46 is supported.

fd00:0000:0000:0000:4533:4431:55b5:b46 is supported.

fd00::4533:4431:55b5:b46 is not supported due to compressed zeros.

fd00:0000:0000:0000:4533:4431:85.181.11.70 is not supported due to mixed IPv6/IPv4 notation.

[(4)] RFC 2373 (paragraph 2.2 1.)

Adherence to the supported form can be checked using the following regular expression:
(([?:[A-Fa-f0-9]{1,4}:){7}[A-Fa-f0-9]{1,4})?

Dependencies

- If the **Use DHCP** configuration item has a value of **Yes**, the instrument will normally receive this value automatically (depending on the DHCP server configuration) and this configuration item can remain empty.
- If the **Use DHCP** configuration item has a value of **No**, and the instrument uses host names, this configuration item must be set.

Configuration

You configure the **DNS IPv6 address** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Gateway IPv4 address

This configuration item specifies the gateway IPv4 address.

Item ID

GATE_IP4_ADDRESS

Available values/format

0.0.0.0 – 255.255.255.255

Dependencies

- If the **Use DHCP** configuration item has a value of **Yes**, the instrument will normally receive this value automatically (depending on the DHCP server configuration) and this configuration item can remain empty.
- If the **Use DHCP** configuration item has a value of **No**, this configuration item must be set.

Configuration

You configure the **Gateway IPv4 address** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Gateway IPv6 address

This configuration item specifies the gateway IPv6 address.

Item ID

GATE_IP6_ADDRESS

Available values/format

Only the “preferred form"[5] is supported. Compressing zeros, mixed IPv6/IPv4 representations or scoped addresses are not supported.

Examples:

fd00:0:0:0:4533:4431:55b5:b46 is supported.

fd00:0000:0000:0000:4533:4431:55b5:b46 is supported.fd00::4533:4431:55b5:b46 is not supported due to compressed zeros.

fd00:0000:0000:0000:4533:4431:85.181.11.70 is not supported due to mixed IPv6/IPv4 notation.

Adherence to the supported form can be checked using the following regular expression:
((?:[A-Fa-f0-9]{1,4}:){7}[A-Fa-f0-9]{1,4})?

Dependencies

- If the **Use DHCP** configuration item has a value of **Yes**, the instrument will normally receive this value automatically (depending on the DHCP server configuration) and this configuration item can remain empty.
- If the **Use DHCP** configuration item has a value of **No**, this configuration item must be set.

Configuration

You configure the **Gateway IPv6 address** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Instrument IPv4 address

This configuration item specifies the instrument IPv4 address.

[5] RFC 2373 (paragraph 2.2 1.)

Item ID	INSTRUMENT_IP4_ADDRESS
Available values/format	0.0.0.0 – 255.255.255.255
Dependencies	▪ If the **Use DHCP** configuration item has a value of **Yes**, the instrument will normally receive this value automatically (depending on the DHCP server configuration) and this configuration item can remain empty. ▪ If the **Use DHCP** configuration item has a value of **No**, this configuration item must be set. ▪ If this configuration item is set, the instrument will ignore the value set in the **Instrument IPv6 address DNS IPv6 address** configuration item as the operating system only allows one static IP address to be set.
Configuration	You configure the **Instrument IPv4 address** configuration item using the following: ▪ Data management system (e.g., **cobas® infinity** POC) ▪ Barcode (generated via **cobas® infinity** edge)

Instrument IPv6 address

This configuration item specifies the instrument IPv6 address with IPv6 prefix.

Item ID	INSTRUMENT_IP6_ADDRESS
Available values/format	Only the “preferred form”[6] is supported. Compressing zeros, mixed IPv6/IPv4 representations or scoped addresses are not supported. Examples: fd00:0:0:0:4533:4431:55b5:b46 is supported. fd00:0000:0000:0000:4533:4431:55b5:b46 is supported. fd00::4533:4431:55b5:b46 is not supported due to compressed zeros. fd00:0000:0000:0000:4533:4431:85.181.11.70 is not supported due to mixed IPv6/IPv4 notation.

[6] RFC 2373 (paragraph 2.2 1.)

Adherence to the supported form can be checked using the following regular expression:
(([?:[A-Fa-f0-9]{1,4}:){7}[A-Fa-f0-9]{1,4})?

Dependencies

If this configuration item is set, the **Instrument IPv4 address** configuration item must not be used.

If the **Instrument IPv4 address** configuration item is set, the instrument will ignore the value set in this configuration item as the operating system only allows one static IP address to be set.

Configuration

You configure the **Instrument IPv6 address** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

IPv4 subnet mask

This configuration item specifies the IPv4 subnet mask.

Item ID

IP4_SUBNET_MASK

Available values/format

0.0.0.0 – 255.255.255.255

Dependencies

- If the **Use DHCP** configuration item has a value of **Yes**, the instrument will normally receive this value automatically (depending on the DHCP server configuration) and this configuration item can remain empty.
- If the **Use DHCP** configuration item has a value of **No**, this configuration item must be set.

Configuration

You configure the **IPv4 subnet mask** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Network Time Protocol (NTP)

This configuration item specifies if the instrument uses the Network Time Protocol (NTP).

NTP servers can either be provided as part of the DHCP protocol, or specified via the **NTP server address** configuration item.

Item ID

NTP_ENABLED

Available values/format

- **Enabled** (default)
  [true]
  The instrument enables the NTP and prevents the time from being set by POCT1-A.
- **Disabled**
  [false]
  The instrument deactivates the NTP.

Dependencies

- If the **Network Time Protocol (NTP)** configuration is enabled, the **NTP server address** is required.
- The time zone must be configured in the **Instrument time zone** configuration item.

Configuration

You configure the **Network Time Protocol (NTP)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

NTP server address

This configuration item specifies the address of the NTP server.

The NTP server can either have a 'machine name', such as "ntp.hospital.com", or a "textual representation" of its IP address. If a literal IP address is supplied, only the validity of the address format is checked.

For a host specified as an IPv6 address, either the form defined in RFC 2732, or the literal IPv6 address format defined in RFC 2373 are acceptable. IPv6 scoped addresses are also supported.

Item ID

NTP_SERVER

Available values/format

0-60 characters

Dependencies

Depending on the DHCP server capabilities, the instrument automatically receives an NTP server address. If the DHCP server does not provide an NTP server address, the **NTP server address** configuration item must be set to a valid value.

Configuration

You configure the **NTP server address** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Instrument time zone

This configuration item determines the time zone of the instrument taken from a subset of the ICANN/IANA time zone database (also referred to as Olson database).

This time zone is used as the instrument time zone and will be taken into account when the instrument receives the actual time via NTP or via POCT1-A directive.

If the **Instrument time zone** configuration item is not set to a dedicated time zone (e.g., Europe/Berlin), then the daylight saving logic is not active.

Item ID

TIME_ZONE

Available values/format

- 0-50 characters
- Etc./GMT (default)
- For a list of valid time zones refer to the appropriate subset of the ICANN/IANA time zone database.

Dependencies

The **Network Time Protocol (NTP)** configuration item is set to **Enabled**.

Configuration

You configure the **Instrument time zone** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Data management system IP address / host name

This configuration item specifies the DMS IP address / host name.

It can either be a machine name, such as "dms.hospital.com", or a textual representation of its IP address. If a literal IP address is supplied, only the validity of the address format is checked.

Item ID

DMS_Host

Available values/format

0-60 characters

For a host specified as a literal IPv6 address, only the “preferred form” according to RFC 2373 (paragraph 2.2 1.) is supported.

Compressing zeros, mixed IPv6/IPv4 representations or scoped addresses are not supported.

Examples:

- fd00:0:0:0:4533:4431:55b5:b46 is supported.
- fd00:0000:0000:0000:4533:4431:55b5:b46 is supported.
- fd00::4533:4431:55b5:b46 is not supported due to compressed zeros.
- fd00:0000:0000:0000:4533:4431:85.181.11.70 is not supported due to mixed IPv6/IPv4 notation.

Adherence to the permitted form can be checked using the following regular expression: ({?:[A-Fa-f0-9]{1,4}:){7}[A-Fa-f0-9]{1,4})?

If this configuration item remains empty, the instrument will not communicate to any DMS and therefore will not log any issues related to DMS communication in the audit trail.

Dependencies

cobas® infinity edge only:
If the instrument will only be connected to **cobas® infinity** edge, the Data management system IP address / host name configuration item must not be set.

cobas® infinity edge and DMS:
The **Data management system IP address / host name** and the Data management system port number must be set.

Configuration

You configure the **Data management system IP address / host name** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Data management system port number

This configuration item specifies the DMS port number.

Item ID

DMS_PORT

Available values/format

0 (default)-65535

Dependencies

cobas® infinity edge only:
If the instrument will only be connected to **cobas® infinity** edge, the **cobas infinity edge IP address / host name** and **cobas infinity edge port number** configuration items must be set.

cobas® infinity edge and DMS:
The **Data management system port number** and **Data management system IP address / host name** must be set.

Configuration

You configure the **Data management system port number** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

cobas infinity edge IP address / host name

This configuration item specifies the **cobas® infinity** edge IP address / host name.

It can either be a machine name, such as "rsg.hospital.com", or a textual representation of its IP address. If a literal IP address is supplied, only the validity of the address format is checked.

Item ID

RSG_HOST

Available values/format

0-60 characters

For a host specified in literal IPv6 address, only the “preferred form” according to RFC 2373 (paragraph 2.2 1.) is supported.

Compressing zeros, mixed IPv6/IPv4 representations or scoped addresses are not allowed.

Examples:

- fd00:0:0:0:4533:4431:55b5:b46 is supported.
- fd00:0000:0000:0000:4533:4431:55b5:b46 is supported.
- fd00::4533:4431:55b5:b46 is not supported due to compressed zeros.
- fd00:0000:0000:0000:4533:4431:85.181.11.70 is not supported due to mixed IPv6/IPv4 notation. Adherence to the permitted form can be checked using the following regular expression: ((?:[A-Fa-f0-9]{1,4}:){7}[A-Fa-f0-9]{1,4})?

Dependencies

cobas® infinity edge only:
If the instrument will only be connected to **cobas® infinity** edge, the **cobas infinity edge IP address / host name** and **cobas infinity edge port number** configuration items must be set.

cobas® infinity edge and DMS:
The **cobas infinity edge IP address / host name** configuration item must be set by the DMS.

Configuration

You configure the **cobas infinity edge IP address / host name** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

cobas infinity edge port number

This configuration item specifies the "cobas infinity edge port number".

Item ID

RSG_PORT

Available values/format

0 (default)-65535 characters

Dependencies

cobas® infinity edge only:
The **cobas infinity edge port number** configuration item is shown.
If the instrument will only be connected to **cobas® infinity** edge, the **cobas infinity edge port number** and **cobas infinity edge IP address / host name** configuration items must be set.

cobas® infinity edge and DMS:
The **cobas infinity edge port number** configuration item must be set by the DMS.

Configuration

You configure the **cobas infinity edge port number** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)
- User interface (only during initial configuration)
- User interface

Wi-Fi connection

In this section

Wi-Fi SSID

This configuration item specifies the Service Set Identifier (SSID) of the Wi-Fi network.

Item ID

SSID_WLAN_1

Available values/format

0-32 characters

Dependencies

Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration

You configure the **Wi-Fi SSID** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Use DHCP

This configuration item specifies if the Dynamic Host Configuration Protocol (DHCP) is used.

Item ID

USE_DHCP_BOOL_WLAN_1

Available values/format

- **Yes** (default)
  [true]
  DHCP is enabled.
- **No**
  [false]
  DHCP is disabled.

Dependencies

If the DHCP is enabled, the instrument will automatically receive the following information from the DHCP server (consequently these configuration items remain empty:

- **DNS IPv4 address**
- **Gateway IPv4 address**
- **Instrument IPv4 address**
- **IPv4 subnet mask**
- **DNS IPv6 address**
- **Gateway IPv6 address**
- **Instrument IPv6 address**

If the DHCP is disabled, the instrument either needs to have a valid static IP configuration either as IP4 (**DNS IPv4 address**, **Gateway IPv4 address**, **Instrument IPv4 address**, **IPv4 subnet mask**), or as IP6 (**DNS IPv6 address**, **Gateway IPv6 address**, **Instrument IPv6 address**).

Configuration

You configure the **Use DHCP** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Use domain name system (DNS)?

This configuration item specifies the use of the DNS (Domain Name System).

Item ID

USE_DNS_BOOL_WLAN_1

Available values/format

- **Yes** (default)
  [true]
  DNS is enabled.
- **No**
  [false]
  DNS is disabled.

Dependencies

If DNS use is enabled, configuration items defining host machines/servers (**Data management system IP address / host name**, **cobas infinity edge IP address / host name**, **NTP server address**) can be set as fully qualified domain names (FQDN).

If DNS use is disabled, configuration items defining host machines/servers (**Data management system IP address / host name**, **cobas infinity edge IP address / host name**, **NTP server address**) must be set as IP addresses.

Configuration

You configure the **Use domain name system (DNS)?** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Anonymous User

This configuration item specifies the EAP anonymous user.

Item ID EAP_ANONYMOUS_IDENTITY_WLAN_1

Available values/format 0-64 characters

Dependencies Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration You configure the **Anonymous User** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

CA Certificate

This configuration item specifies the EAP CA certificate (X.509).

Supported formats are "PEM" and "DER". The file must be stored as a Base64 encoded string.

"PEM" can contain both the certificate and private key. The PEM file must not contain the server's private key.

Item ID EAP_CA_CERT_WLAN_1

Available values/format 0-25000 characters (content must be Base64 encoded)

Dependencies Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration You configure the **CA Certificate** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

Client Certificate

This configuration item specifies the EAP client certificate.

Supported formats are "PEM" and "DER". The file must be stored as a Base64 encoded string.

"PEM" can contain both the certificate and private key. However, the private key will be ignored if stored in this configuration item.

Item ID EAP_CLIENT_CERT_WLAN_1

Available values/format 0-25000 characters (content must be Base64 encoded)

Dependencies Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration You configure the **Client Certificate** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

User Name

This configuration item specifies the EAP user name.

Item ID EAP_IDENTITY_WLAN_1

Available values/format 0-64 characters

Dependencies Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration You configure the **User Name** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

Password

This configuration item specifies the EAP password.

Item ID EAP_PASSWORD_WLAN_1

Available values/format 0-64 characters

Dependencies Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration You configure the **Password** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

Client private key password

This configuration item specifies the password for the EAP client private key.

It is necessary if the private key is stored as encrypted "PKCS#12" or encrypted "PEM".

Item ID EAP_PRIVATE_KEY_PASSWORD_WLAN_1

Available values/format 0-64 characters

Dependencies Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration You configure the **Client private key password** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

Client private key

This configuration item specifies the EAP client private key.

Supported formats are "PEM" and "PKCS#12". The file must be stored as a Base64 encoded string.

"PEM" and "PKCS#12" can contain both the certificate and private key. If the private key is protected by a password (mandatory for "PKCS#12", optional for "PEM") this password must be stored in the **Client private key password** configuration item. Bundled certificates in the "PKCS#12* or "PEM" are ignored.

Item ID EAP_PRIVATE_KEY_WLAN_1

Available values/format 0-25000 characters (content must be Base64 encoded)

Dependencies Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration You configure the **Client private key** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

EAP Type

This configuration item specifies the EAP type.

Item ID EAP_TYPE_WLAN_1

Available values/format

- **Disabled** (default) [NOT_SET]
- **TLS** [TLS]
- **TTLS** [TTLS]
- **PEAP** [PEAP]

Dependencies Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration You configure the **EAP Type** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

Wi-Fi security type

This configuration item specifies the Wi-Fi security type.

"EAP " is not supported for barcode configuration. The necessary certificates cannot be set by barcode due to size constraints.

⚠ CAUTION!

Wi-Fi security

To avoid an unsecure Wi-Fi

- Do not use open Wi-Fi.
- Follow the cybersecurity best practice of your facility

Item ID

SECURITY_TYPE_WLAN_1

Available values/format

- **Open Wi-Fi** (default)
  [OPEN]
- **WPA-PSK**
  [WPA_PSK]

Dependencies

Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration

You configure the **Wi-Fi security type** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Wi-Fi key type

This configuration item specifies the Wi-Fi key type.

Item ID

WPA_KEY_TYPE_WLAN_1

Available values/format

- **Passphrase** (default)
  [PASSPHRASE]
- **Encryption key**
  [KEY]

Dependencies

Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration

You configure the **Wi-Fi key type** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Wi-Fi encryption key

This configuration item specifies the Wi-Fi encryption key.

Item ID

WPA_KEY_WLAN_1

Available values/format

String of 64 characters (hexadecimal encoded)

Dependencies

Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration

You configure the **Wi-Fi encryption key** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Wi-Fi password

This configuration item specifies the Wi-Fi password.

Item ID

WPA_PASS_PHRASE_WLAN_1

Available values/format

0.8-63

Dependencies

Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration

You configure the **Wi-Fi password** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

- Barcode (generated via **cobas® infinity** edge)

Wi-Fi cryptographic algorithm type

This configuration item specifies the Wi-Fi cryptographic algorithm type.

Item ID

CIPHER_TYPE_WLAN_1

Available values/format

- **None** (default)
  [NONE]
- **AES**
  [AES]
- **TKIP**
  [TKIP]
- **AES+TKIP**
  [AES_TKIP]

Dependencies

Refer to the tables in "List of Wi-Fi security configurations".

List of Wi-Fi security configurations (412)

Configuration

You configure the **Wi-Fi cryptographic algorithm type** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

List of Wi-Fi security configurations

Valid Wi-Fi security configurations

	Wi-Fi SSID	Wi-Fi security type	Wi-Fi cryptographic algorithm type	Wi-Fi key type	Wi-Fi encryption key	Wi-Fi password
Open WLAN	1-32 characters	**Open Wi-Fi**	**None**	-	-	-
WPA2 Personal (passphrase)	1-32 characters	**WPA-PSK**	**AES**	**Passphrase**	-	8-63 characters
WPA2 Personal (key)	1-32 characters	**WPA-PSK**	**AES**	**Encryption key**	64 Hex characters	-
WPA Personal (passphrase)	1-32 characters	**WPA-PSK**	**TKIP**	**Passphrase**	-	8-63 characters
WPA Personal (key)	1-32 characters	**WPA-PSK**	**TKIP**	**Encryption key**	64 Hex characters	-

Valid Wi-Fi security configurations

	Wi-Fi SSID	Wi-Fi security type	Wi-Fi cryptographic algorithm type	Wi-Fi key type	Wi-Fi encryption key	Wi-Fi password
WPA/WPA2 Personal (passphrase)	1-32 characters	**WPA-PSK**	**AES+TKIP**	**Passphrase**	-	8-63 characters
WPA/WPA2 Personal (key)	1-32 characters	**WPA-PSK**	**AES+TKIP**	**Encryption key**	64 Hex characters	-
WPA2 Enterprise (EAP)	1-32 characters	**EAP**	**AES**	-	-	-
WPA Enterprise (EAP)	1-32 characters	**EAP**	**TKIP**	-	-	-

Valid Wi-Fi security configurations

Valid Wi-Fi EAP security configurations

EAP (WPA/WPA2 Enterprise) is a Wi-Fi authentication method involving three parties:

- Client cobas pulse
- Access Point (Router)
- Authentication Server (RADIUS)

Their interconnectivity is as follows:

1. The client connects to the access point.
2. The access point connects to the authentication server, and acts like a proxy between the client and authentication server.
3. The authentication server tries to authenticate the client.
4. If the authentication is successful, the access point grants the client access to the network. If authentication fails, the access point rejects the client.

Supported EAP methods are as follows:

EAP-TLS Authentication is based on digital certificates. The client and authentication server must both have valid certificates, recognized by each other.

EAP-TTLS Authentication is based on user name and password. The client must have a valid account on the authentication server.

EAP-PEAP Authentication is based on user name and password. The client must have a valid account on the authentication server.

From a configuration perspective, the EAP-TTLS and EAP-PEAP methods are identical.

EAP Type	User Name Password	Anonymous User	CA Certificate	Client Certificate Client private key Client private key password
TLS	-	Optional	Optional	Required
TTLS	Required	Optional	Optional	-
PEAP	Required	Optional	Optional	-

Valid Wi-Fi EAP security configurations

TLS security

In this section

DMS TLS certificate check

This configuration item determines the level of TLS server certificate check for connecting to DMS

The **Disabled** option also allows a TLS handshake if no certificates are stored in the related configuration items.

Item ID CERTIFICATE_CHECK_TLS_DMS

Available values/format

- **Disabled**
  [DEACTIVATED]
  No certificate check is made.
- **Warning** (default)
  [WARNING]
  The corresponding TLS server certificate is checked. In case the certificate check fails, a warning will be logged in the audit trail and the TLS connection will be established.
- **Strict**
  [STRICT]
  The corresponding TLS server certificate will be checked. In case the certificate check fails, an error will be logged in the audit trail and no connection will be established.

Dependencies

This configuration item is only relevant when the **DMS TLS level** is set to **TLS enabled** or **TLS enabled (FIPS approved mode)**.

Configuration

You configure the **DMS TLS certificate check** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

cobas infinity edge TLS certificate check

This configuration item determines the level of TLS certificate check for a connection to **cobas® infinity** edge.

Changing the **cobas® infinity** edge TLS level must only be done after contacting your Roche representative.

Item ID

CERTIFICATE_CHECK_TLS_RSG

Available values/format

- **Disabled**
  [DEACTIVATED]
  No certificate check is made.
- **Warning**
  [WARNING]
  The corresponding TLS server certificate is checked. In case the certificate check fails, a warning will be logged in the audit trail and the TLS connection will be established.
- **Strict** (default)
  [STRICT]
  The corresponding TLS server certificate will be checked. In case the certificate check fails, an error will be logged in the audit trail and no connection will be established

Dependencies

This configuration item is only relevant when the **cobas infinity edge TLS level** is set to **TLS enabled** or **TLS enabled (FIPS approved mode)**.

Configuration

You configure the **cobas infinity edge TLS certificate check** configuration item using the following:

- Barcode (generated via **cobas® infinity** edge)

DMS TLS level

This configuration item determines the TLS security level which is used for the connection to the DMS.

Depending on the capabilities of a third party DMS, this configuration item needs to be set to TLS disabled.

The instrument only accepts TLSv1.2 and the following cipher suites are supported:

- TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_ECDSA_WITH_AES_256_CBC_SHA384
- TLS_ECDHE_ECDSA_WITH_CHACHA20_POLY1305_SHA256
- TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384
- TLS_ECDHE_RSA_WITH_CHACHA20_POLY1305_SHA256
- TLS_DHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_DHE_RSA_WITH_AES_256_CBC_SHA256
- TLS_DHE_RSA_WITH_AES_256_CCM
- TLS_DHE_RSA_WITH_AES_256_CCM_8
- TLS_ECDHE_ECDSA_WITH_AES_256_CCM_8
- TLS_ECDHE_ECDSA_WITH_AES_256_CCM
- TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256
- TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SHA256
- TLS_ECDHE_ECDSA_WITH_AES_128_CCM
- TLS_ECDHE_ECDSA_WITH_AES_128_CCM_8
- TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_DHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_DHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_DHE_RSA_WITH_AES_128_CCM_8
- TLS_DHE_RSA_WITH_AES_128_CCM
- TLS_DHE_DSS_WITH_AES_256_GCM_SHA384
- TLS_DHE_DSS_WITH_AES_256_CBC_SHA256
- TLS_DHE_DSS_WITH_AES_128_GCM_SHA256
- TLS_DHE_DSS_WITH_AES_128_CBC_SHA256

Item ID

TLS_LEVEL_DMS

Available values/format

- **TLS disabled**
  [TLS_DISABLED]
  TLS not used.
- **TLS enabled** (default)
  [FIPS_NON_APPROVED_MODE]
  TLS used in FIPS non-approved mode.

- **TLS enabled (FIPS approved mode)**
  [FIPS_APPROVED_MODE]
  TLS used in FIPS approved mode.

The cobas pulse instrument uses a cryptographic library which offers a "FIPS approved" mode.
For more information about the FIPS140-2 status of cobas pulse, contact you Roche representative.

Dependencies

If the **DMS TLS level** configuration item is set to **TLS disabled** or to TLS enabled (FIPS approved mode), the **DMS TLS certificate check** configuration item must be set accordingly.

Configuration

You configure the **DMS TLS level** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

DMS TLS certificate

This configuration item specifies the certificate chain that allows the validation of the DMS server certificate.

Allowed formats: PEM, PKCS#12. The file must be stored as a Base64 encoded string.

The **DMS TLS certificate** configuration item may be provided in pfx file format which can contain a set of certificates.

If the KeyUsage extension is defined in the certificate and security services other than certificate signing or certificate revocation list signing are supported (e.g., encipher data), the instrument TLS library validates that the digitalSignature bit is set in KeyUsage, otherwise the certificate is not accepted (even if **DMS TLS certificate check** is deactivated).

Item ID

DMS_TLS_CERTIFICATE

Available values/format

0-50000 characters (content must be Base64 encoded)

The cobas pulse instrument contains a pre-installed Roche certificate chain.For further information about certificate usage refer to the cobas pulse connectivity guide.

Dependencies

If the **DMS TLS level** configuration item is set to **TLS enabled** or to **TLS enabled (FIPS approved mode)**, there must be a valid certificate stored in the **DMS TLS certificate** configuration item.

Configuration

You configure the **DMS TLS certificate** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

DMS TLS certificate password

This configuration item specifies the password which is necessary if the DMS TLS certificate is stored as PFX.

Item ID

DMS_TLS_CERTIFICATE_PASSWORD

Available values/format

- The initial certificate is stored during production (default).
- 0-64

Dependencies

This configuration item is required when the DMS_TLS_CERTIFICATE_FORMAT is PKCS#12.

Configuration

You configure the **DMS TLS certificate password** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

cobas infinity edge TLS level

This configuration item determines the TLS security level which is used for the connection to the **cobas® infinity** edge.

Changing the cobas infinity edge TLS level must only be done after contacting your Roche representative.

The instrument only accepts TLSv1.2 and the following cipher suites are supported:

- TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_ECDSA_WITH_AES_256_CBC_SHA384
- TLS_ECDHE_ECDSA_WITH_CHACHA20_POLY1305_SHA256
- TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384

- TLS_ECDHE_RSA_WITH_CHACHA20_POLY1305_SHA256
- TLS_DHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_DHE_RSA_WITH_AES_256_CBC_SHA256
- TLS_DHE_RSA_WITH_AES_256_CCM
- TLS_DHE_RSA_WITH_AES_256_CCM_8
- TLS_ECDHE_ECDSA_WITH_AES_256_CCM_8
- TLS_ECDHE_ECDSA_WITH_AES_256_CCM
- TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256
- TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SHA256
- TLS_ECDHE_ECDSA_WITH_AES_128_CCM
- TLS_ECDHE_ECDSA_WITH_AES_128_CCM_8
- TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_DHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_DHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_DHE_RSA_WITH_AES_128_CCM_8
- TLS_DHE_RSA_WITH_AES_128_CCM
- TLS_DHE_DSS_WITH_AES_256_GCM_SHA384
- TLS_DHE_DSS_WITH_AES_256_CBC_SHA256
- TLS_DHE_DSS_WITH_AES_128_GCM_SHA256
- TLS_DHE_DSS_WITH_AES_128_CBC_SHA256

Item ID

TLS_LEVEL_RSG

Available values/format

- **TLS enabled**
  [FIPS_NON_APPROVED_MODE]
  TLS used in FIPS non approved mode.
- **TLS enabled (FIPS approved mode)** (default)
  [FIPS_APPROVED_MODE]
  TLS usage in FIPS approved mode.

The cobas pulse uses a cryptographic library which offers a "FIPS approved" mode.
For more information about the FIPS140-2 status of cobas pulse, contact you Roche representative.

Dependencies

If **cobas infinity edge TLS level** is set to **TLS enabled** or **TLS enabled (FIPS approved mode)**, the **cobas infinity edge TLS certificate check** configuration item must be set accordingly.

Configuration

You configure the **cobas infinity edge TLS level** configuration item using the following:

- Barcode (generated via **cobas® infinity** edge)

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General configuration

In this chapter 11

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List of power management options

In this section

Standby timeout

This configuration item specifies the time in seconds that an instrument is idle before switching to standby mode.

Item ID

ACTIVITY_TURN_OFF_IN_SECONDS

Available values/format

30-3600 seconds

(default=300)

Configuration

You configure the **Standby timeout** configuration item using the following methods:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Lift to wake

This configuration item specifies whether or not the instrument wakes from standby when lifted from rest (movement is detected).

Item ID

LIFT_TO_WAKE

Available values/format

- **Disabled** (default)
  [false]
  Movement detection is disabled.
- **Enabled**
  [true]
  Movement detection is enabled and the instrument wakes up when lifted.

Configuration

You configure the **Lift to wake** configuration item using the following methods:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Patient ID handling

In this section

Patient ID entry interfaces

In this section

Patient entry type

This configuration item specifies the available interfaces with which a patient ID is entered. Combinations of interfaces can be configured (e.g., **Barcode** and **Keyboard**, or **Keyboard** and **RFID**).

When the **Patient entry type** configuration item has no value the configuration is rejected.

Item ID

PATIENT_ID_ENTRY_TYPE

Available values/format

- **Barcode** (default)
  [BARCODE]
  Patient ID is entered using a barcode scan.
- **Keyboard** (default)
  [KEYBOARD]
  Patient ID is entered using the virtual keyboard.
- **RFID**
  [RFID]
  Patient ID is entered using an RFID tag.

Dependencies

Barcode

- **Patient ID pattern validation (barcode)**
- **Allowed barcode types for patient ID**
- **Checksum validation of barcode type "Interleaved 2 of 5"**

- **Minimum barcode scanning time**

Keyboard:

- **Patient entry keyboard type**
- **Patient ID pattern validation (keyboard)**

RFID

- **Patient ID pattern validation (RFID)**
- **Patient RFID tag record configuration**

Configuration

You configure the **Patient entry type** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Patient entry keyboard type (428)
- Patient RFID tag record configuration (475)

Patient entry keyboard type

This configuration item specifies if an alphanumeric or a numeric keyboard is used to enter a patient ID.

Item ID

PATIENT_ID_ENTRY_KB

Available values/format

- **Alphanumeric keyboard** (default)
  [ALPHANUMERIC]
- **Numeric keyboard**
  [NUMERIC]

Dependencies

The **Patient entry type** configuration item has a value of **Keyboard**.

Configuration

You configure the **Patient entry keyboard type** configuration item using the following methods:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Patient entry type (427)

Patient ID validation

In this section

Patient ID validation

This configuration item specifies how a patient ID is validated when entered.

Item ID

PATIENT_ID_VALIDATION

Available values/format

- **Pattern-based** (default)
  [PATTERN_BASED_ONLY]
  The patient ID entered is validated against the pattern defined by the corresponding configuration item.
  - **Patient ID pattern validation (keyboard)**
  - **Patient ID pattern validation (barcode)**
  - **Patient ID pattern validation (RFID)**
- **List-based**
  [LIST_BASED]
  The patient ID entered is validated in the same way as with the Pattern-based value. It is also validated against a patient list which has been provided by the DMS.
- **List-based (allow unknown patient IDs)**
  [LIST_BASED_ALLOW_NEW_ENTRIES_IF_NOT_IN_LIST]
  The patient ID entered is validated in the same way as with the Pattern-based value. It is also validated against a patient list which has been provided by the DMS.However, if the patient ID is not found in the instrument's patient list, and it is successfully validated against the pattern defined by the corresponding configuration item, the user may still run the test for the patient and record the result.

Dependencies

For **cobas® infinity** edge only, **Pattern-based** is the is the only valid value.

For **cobas® infinity** edge and a DMS, if the DMS supports patient lists, **List-based** and **List-based (allow unknown patient IDs)** are valid values.

The **Patient ID validation** configuration works in conjunction with the following configuration items:

- **Patient ID pattern validation (keyboard)**
- **Patient ID pattern validation (barcode)**
- **Patient ID pattern validation (RFID)**

These configuration items specify the pattern used to validate a patient ID entered by the corresponding methods (keyboard, barcode scan, RFID tag).

Configuration

You configure the **Patient ID validation** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Patient ID pattern validation (keyboard) (430)
- Patient ID pattern validation (barcode) (431)
- Patient ID pattern validation (RFID) (433)

Patient ID pattern validation (keyboard)

This configuration item specifies the expression used to validate a patient ID entered using the keyboard.

A regular expression is used to validate character/ number patterns, minimum length, and maximum length with the following:

- Validate the input and use it completely as an ID.

This configuration item can contain Unicode characters.

Item ID

PATIENT_ID_PATTERN_KB

Available values/format

ST:0-500 (regular expression)

No default value set.

Example:
Input checked for pattern and completely used as ID
Regular expression: PA\d{1,5}
Input: "PA123"
Extracted ID: "PA123"

The input PA123456789 violates the given regular expression and will not be accepted as a valid patient ID.

Dependencies

The **Patient entry type** configuration item must have a value of **Keyboard**.

Configuration

You configure the **Patient ID pattern validation (keyboard)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Patient ID validation (429)
- Patient entry type (427)

Patient ID pattern validation (barcode)

This configuration item specifies the expression used to validate a patient ID entered using a barcode scan.

A regular expression is used to validate character/ number patterns, minimum length, and maximum length with the following options:

- Validate the input and use it completely as an ID.
- Validate the input, extract and use one substring of the input as the ID.
- Validate the input, extract and use multiple substrings of the input as the ID in a concatenated manner.

The following logic is applied during the processing of patterns:

- If the pattern does not contain a group, the complete content of the barcode needs to match and is used as the corresponding ID.
- In order to validate an incoming string and use multiple parts of it concatenated as the ID, the regular expression must use named groups surrounding the parts that should be concatenated as the ID.
- The name of the groups must have the format "<id<index>>" with the index being a digit 0-9 (e.g., <id1>).

  The extracted content of the groups will be concatenated in the order sorted by the index. In this case, the regular expression is used for validating the format of the entire input as well as extracting multiple parts of it.

  Based on the group name with the index, the extracted substrings are concatenated in the business logic of the Glucose app.

- Regular expressions are checked by the Glucose app for correct regex syntax only. If the stated (project specific) format "id<index>" is not correctly used, the regex will be saved in the database, but will not result in the intended behavior.
  Example of regex with two groups:
  (?<id1>[A-Z]{3}).(?<id2>[A-Z]{3})\$

This configuration item can contain wide characters.

Item ID PATIENT_ID_PATTERN_BCS

Available values/format ST:0-500 (regular expression)

No default value set.

Examples:

- Example 1:
  Input checked for pattern and completely used as ID
  Regular expression: PA\d{1,5}
  Input: "PA123"
  Extracted ID: "PA123"
- Example 2:
  Part of input used as ID
  Regular expression: (PA\d{1,5}).*
  Input: "PA321;Max Mustermann;1970-01-01"
  Extracted ID: "PA321"
- Example 3:
  Multiple parts of input used as ID
  Regular expression: (?<id0>[A-Z]{3})x(?<id1>[A-Z]{3})\$
  Input: "ABCxDEF$"
  Extracted ID: "ABCDEF"
- Example 4:
  Multiple parts of input used as ID in a different order
  Regular expression: (?<id1>[A-Z]{3})x(?<id0>[A-Z]{3})\$
  Input: "ABCxDEF$"
  Extracted ID: "DEFABC"
- Example 5:
  Extract the ID between first occurrence of “$” and first occurrence of “+”. The ID must start with one alpha character (A-Z/a-z), followed by seven numbers (0-9).
  Regex with one group: .*\$([a-zA-Z]\d{7})\+.*
  Input: ~Jane Doe%$X1234567+5715486266Z?01-09-1979
  Extracted ID: "X1234567"
- Example 6:
  Extract the ID between 3rd and 4th semicolon (; = 0x3b).

Input: ;Mary
Miller;;X1234321;5715486266Z;01-09-1982
Regex with one group: [^\;]*\;[^\;]*\;[^\;]*\;([^\;]*)\;[^\;]*\;[^\;]*
Extracted ID: "X1234321"

Dependencies

The **Patient entry type** configuration item must have a value of **Barcode**.

Configuration

You configure the **Patient ID pattern validation (barcode)** configuration item item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Patient ID validation (429)
- Patient entry type (427)

Patient ID pattern validation (RFID)

This configuration item specifies the expression used to validate a patient ID entered using an RFID tag.

A regular expression is used to validate character/number patterns, minimum length, and maximum length with the following options:

- Validate the input and use it completely as an ID.
- Validate the input, extract and use one substring of the input as the ID.
- Validate the input, extract and use multiple substrings of the input as the ID in a concatenated manner.

The following logic is applied during the processing of patterns:

- If the pattern does not contain a group, the complete content of the barcode needs to match and is used as the corresponding ID.
- In order to validate an incoming string and use multiple parts of it concatenated as the ID, the regular expression must use named groups surrounding the parts that should be concatenated as the ID.
- The name of the groups must have the format "<id<index>>" with the index being a digit 0-9 (e.g., <id1>).

  The extracted content of the groups will be concatenated in the order sorted by the index. In this case, the regular expression is used for validating the format of the entire input as well as extracting multiple parts of it.

Based on the group name with the index, the extracted substrings are concatenated in the business logic of the Glucose app.

- Regular expressions are checked by the Glucose app for correct regex syntax only. If the stated (project specific) format "id<index>" is not correctly used, the regex will be saved in the database, but will not result in the intended behavior.

  Example of regex with two groups:
  (?<id1>[A-Z]{3}).(?<id2>[A-Z]{3})\$

This configuration item can contain Unicode characters.

Item ID

PATIENT_ID_PATTERN_RFID

Available values/format

ST:0-500 (regular expression)

No default value set.

Dependencies

The **Patient entry type** configuration item must have a value of **RFID**.

Configuration

You configure the **Patient ID pattern validation (RFID)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Patient ID validation (429)
- Patient entry type (427)

Patient ID confirmation dialog

This configuration item specifies whether or not the user must confirm that the correct patient ID has been entered when performing a patient test.

Confirmation is made using the **Confirm patient** dialog box which contains the patient details which are present in the patient list received from the DMS.

The patient details can contain:

- Patient name
- Patient ID
- Gender

- Age
- Date of birth

Depending on the capabilities of the DMS and the available data, only a subset of the listed patient details might be available and displayed.

Item ID PATIENT_ID_CONFIRMATION

Available values/format

- **Enabled** (default)
  [true]
  The **Confirm patient** dialog box is displayed.
- **Disabled**
  [false]
  The **Confirm patient** dialog box is not displayed.

Configuration You configure the **Patient ID confirmation dialog** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Patient ID autocomplete

This configuration item specifies whether or not the patient ID autocomplete function is enabled for patient ID entry by keyboard.

When patient ID autocomplete is enabled, after entering 2 alphanumeric characters, all patient names or IDs containing the same 2 alphanumeric character sequence are displayed in a drop-down list. The patient is selected from the drop-down list.

Item ID PATIENT_ID_AUTO_COMPLETE

Available values/format

- **Disabled** (default)
  [false]
  Patient ID autocomplete is not enabled.
- **Enabled**
  [true]
  Patient ID autocomplete is enabled.

Dependencies The **Patient ID validation** configuration item must have either the following values:

- **List-based**
- **List-based (allow unknown patient IDs)**

Configuration

You configure the **Patient ID autocomplete** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Allowed barcode types for patient ID

This configuration item specifies the barcode symbologies that are valid for reading patient IDs.

All barcodes with a different symbology to the ones listed below are invalid and not processed.

Item ID

BCS_PATIENT_ID

Available values/format

- **Aztec code**
  [AZTEC]
- **Codabar**
  [CODABAR]
- **Code 128** (default)
  [CODE128]
- **Code 39**
  [CODE39]
- **Code 93**
  [CODE93]
- **Data matrix** (default)
  [DATA_MATRIX]
- **EAN-13**
  [EAN13]
- **GS1 DataBar**
  [GS1_DATABAR_LIMITED]
- **Interleaved 2 of 5**
  [INTERLEAVED_2_OF_5]
- **PDF417**
  [PDF417]
- **QR code**
  [QR]

Configuration

You configure the **Allowed barcode types for patient ID** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

User ID handling

In this section

User ID entry interfaces

In this section

User authentication required

This configuration item specifies when a user must enter their user ID and, depending on the configuration, their password to use the Glucose app.

Item ID

OPERATOR_ID_ENTRY

Available values/format

- **Disabled** (default)
  [NONE]
  No user ID and password is required to use the Glucose app.
- **Enabled for QC test only**
  [QC_ONLY]
  A user must enter their ID and password to be able to perform a QC test.
- **Enabled**
  [ALWAYS]
  A user ID and password is required to use the Glucose app.

Dependencies

- **User authentication type** configuration item.
- **Regulatory region** configuration item.

Configuration

You configure the **User authentication required** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

User authentication type

This configuration item specifies the available interfaces with which a user ID is entered. Combinations of interfaces can be configured (e.g., "barcode and keyboard" or "keyboard and RFID").

When the **User authentication required** configuration item has no value the configuration is rejected.

Item ID

OPERATOR_ID_ENTRY_TYPE

Available values/format

- **Barcode** (default)
  [BARCODE]
  The user ID is entered using the barcode scan.
- **Keyboard** (default)
  [KEYBOARD]
  The user ID is entered using the virtual keyboard.
- **RFID**
  [RFID]
  The user ID entered using an RFID tag.

Dependencies

For **Keyboard**:

- **User authentication keyboard type**
- **User ID pattern validation (keyboard)**

For **Barcode**:

- **User ID pattern validation (barcode)**
- **Allowed barcode types for user ID**
- **Checksum validation of barcode type "Interleaved 2 of 5"**
- **Minimum barcode scanning time**

For **RFID**:

- **User ID pattern validation (RFID)**
- **User RFID tag record configuration**

Configuration

You configure the **User authentication type** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- User authentication keyboard type (439)

User authentication keyboard type

This configuration item specifies if an alphanumeric or a numeric keyboard is used to enter the user ID.

Item ID

OPERATOR_ID_ENTRY_KB

Available values/format

- **Alphanumeric keyboard** (default)
  [ALPHANUMERIC]
- **User authentication keyboard type**
  [NUMERIC]

Dependencies

The **User authentication required** configuration item has a value of **Keyboard.**

Configuration

You configure the **User authentication keyboard type** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- User authentication type (438)

User ID validation

In this section

User ID validation

This configuration item specifies how a user ID is validated when entered.

Item ID

OPERATOR_ID_VALIDATION

Available values/format

- **Pattern-based** (default)
  [PATTERN_BASED_ONLY]
  The user ID entered is validated against the pattern defined by the corresponding configuration item:
  - **User ID pattern validation (keyboard)**

- **User ID pattern validation (barcode)**
- **User ID pattern validation (RFID)**

- **List-based**
  [LIST_BASED]
  The user ID entered is validated in the same way as with the **Pattern-based** value. It is also validated against a user list that is stored on the instrument.
- **List-based with password**
  [LIST_BASED_WITH_PASSWORD]
  The user ID entered is validated in the same way as with the **Pattern-based** value. It is also validated against a user and password list that is stored on the instrument.

Dependencies

For **cobas® infinity** edge only, **Pattern-based** is the only valid value.

For **cobas® infinity** edge and a DMS, if the DMS supports patient lists, **List-based** and **List-based with password** are valid values.

User ID validation works in conjunction with the following configuration items:

- **User ID pattern validation (keyboard)**
- **User ID pattern validation (barcode)**
- **User ID pattern validation (RFID)**

These configuration items specify the pattern used to validate a user ID entered by the corresponding methods (keyboard, barcode scan, RFID tag).

Configuration

You configure the **User ID validation** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- User ID pattern validation (keyboard) (440)
- User ID pattern validation (barcode) (441)
- User ID pattern validation (RFID) (443)

User ID pattern validation (keyboard)

This configuration item specifies the expression used to validate a user ID entered using the keyboard.

A regular expression is used to validate character/ number patterns, minimum length, and maximum length with the following:

- Validate the input and use it completely as an ID.

This configuration item can contain Unicode characters.

Item ID

OPERATOR_ID_PATTERN_KB

Available values/format

ST:0-500 (regular expression)

No default value set.

Example:
Input checked for pattern and completely used as ID
Regular expression: OP\d{1,5}
Input: "OP123"
Extracted ID: "OP123"

The input PA123456789 violates the given regular expression and will not be accepted as a valid patient ID.

Dependencies

The **User authentication required** configuration item must have a value of **Keyboard**.

Configuration

You configure the **User ID pattern validation (keyboard)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- User ID validation (439)
- User authentication type (438)

User ID pattern validation (barcode)

This configuration item specifies the expression used to validate an user ID entered using barcode scan.

A regular expression is used to validate character/ number patterns, minimum length, and maximum length with the following options:

- Validate the input and use it completely as an ID.
- Validate the input, extract and use one substring of the input as the ID.

- Validate the input, extract and use multiple substrings of the input as the ID in a concatenated manner.

The following logic is applied during the processing of patterns:

- If the pattern does not contain a group, the complete content of the barcode needs to match and is used as the corresponding ID.
- In order to validate an incoming string and use multiple parts of it concatenated as the ID, the regular expression must use named groups surrounding the parts that should be concatenated as the ID.
- The name of the groups must have the format "<id<index>>" with the index being a digit 0-9 (e.g., <id1>).

  The extracted content of the groups will be concatenated in the order sorted by the index. In this case, the regular expression is used for validating the format of the entire input as well as extracting multiple parts of it.

  Based on the group name with the index, the extracted substrings are concatenated in the business logic of the Glucose app.
- Regular expressions are checked by the Glucose app for correct regex syntax only. If the stated (project specific) format "id<index>" is not correctly used, the regex will be saved in the database, but will not result in the intended behavior.

  Example of regex with two groups:
  (?<id1>[A-Z]{3}).(?<id2>[A-Z]{3})\$

This configuration item can contain Unicode characters.

Item ID

OPERATOR_ID_PATTERN_BCS

Available values/format

ST:0-500 (regular expression)

No default value set.

Dependencies

The **User authentication required** configuration item must have a value of **Barcode**.

Configuration

You configure the **User ID pattern validation (barcode)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- User ID validation (439)
- User authentication type (438)

User ID pattern validation (RFID)

This configuration item specifies the expression used to validate an user ID entered using an RFID tag.

A regular expression is used to validate character/ number patterns, minimum length, and maximum length with the following options:

- Validate the input and use it completely as an ID.
- Validate the input, extract and use one substring of the input as the ID.
- Validate the input, extract and use multiple substrings of the input as the ID in a concatenated manner.

The following logic is applied during the processing of patterns:

- If the pattern does not contain a group, the complete content of the barcode needs to match and is used as the corresponding ID.
- In order to validate an incoming string and use multiple parts of it concatenated as the ID, the regular expression must use named groups surrounding the parts that should be concatenated as the ID.
- The name of the groups must have the format "<id<index>>" with the index being a digit 0-9 (e.g., <id1>).

  The extracted content of the groups will be concatenated in the order sorted by the index. In this case, the regular expression is used for validating the format of the entire input as well as extracting multiple parts of it.

  Based on the group name with the index, the extracted substrings are concatenated in the business logic of the Glucose app.
- Regular expressions are checked by the Glucose app for correct regex syntax only. If the stated (project specific) format "id<index>" is not correctly used, the regex will be saved in the database, but will not result in the intended behavior.

  Example of regex with two groups:
  (?<id1>[A-Z]{3}).(?<id2>[A-Z]{3})\$

This configuration item can contain Unicode characters.

The **User authentication type** configuration item must have a value of **RFID**.

Item ID OPERATOR_ID_PATTERN_RFID

Available values/format ST:0-500 (regular expression)

No default value set.

Configuration You configure the **User ID pattern validation (RFID)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- User ID validation (439)
- User authentication type (438)

User ID handling

In this section

Minimum password length

This configuration item specifies the minimum length (characters) of a new password which is validated by the instrument when entered by a user.

Item ID MINIMAL_PASSWORD_LENGTH

Available values/format 4 - 20 characters

Default = 4 characters

Dependencies The **Minimum password length** configuration item is only relevant when the following 2 conditions are true:

- The **User authentication required** configuration item has a value of **Enabled** or **Enabled for QC test only**.

- The **User ID validation** configuration item has a value of **List-based with password**.

Configuration

You configure the **Minimum password length** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Logon session timeout

This configuration item specifies the length of time (seconds) that a user ID remains logged on after the instrument has gone into standby mode.

A user ID and password must be entered after this period of time has elapsed.

Item ID

OPERATOR_INACTIVITY_TIMEOUT

Available values/format

0 - 3600 seconds

Default = 0 seconds

Dependencies

The **Logon session timeout** configuration item is only relevant when user lists are used (**User authentication required** has a value of **Enabled for QC test only** or **Enabled**.

Configuration

You configure the **Logon session timeout** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Show user lockout warning prior to user certificate expiration

This configuration item specifies the time in days before an expired user certificate warning is displayed.

Item ID

CERTIFICATION_EXPIRATION_WARNING_IN_DAYS

Available values/format

0 - 90 days

Default = 0 days

Dependencies

The **Show user lockout warning prior to user certificate expiration** configuration item is only relevant when user lists are used (**User authentication required** has a value of **Enabled for QC test only** or **Enabled**).

Configuration

You configure the **Show user lockout warning prior to user certificate expiration** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

User ID autocomplete

This configuration item specifies whether or not user ID autocomplete is enabled for user ID entry by keyboard.

When user ID autocomplete is enabled, after entering 2 alphanumeric characters, all user names or IDs containing the same 2 alphanumeric character sequence are displayed in a drop-down list.

Item ID

OPERATOR_ID_AUTO_COMPLETE

Available values/format

- **Disabled** (default)
  [false]
  User ID autocomplete is disabled.
- **Enabled**
  [true]
  User ID autocomplete is enabled.

Dependencies

The **User ID autocomplete** configuration item is only relevant when user lists are used (**User authentication required** has a value of **Enabled for QC test only** or **Enabled**).

Configuration

You configure the **User ID autocomplete** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Allowed barcode types for user ID

This configuration item specifies the barcode symbologies that are valid for entering user IDs.

If a symbology used is not listed below, the code scanned is invalid and will not be processed.

Item ID

BCS_OPERATOR_ID

Available values/format

- **Aztec code**
  [AZTEC]
- **Codabar**
  [CODABAR]
- **Code 128** (default)
  [CODE128]
- **Code 39**
  [CODE39]
- **Code 93**
  [CODE93]
- **Data matrix** (default)
  [DATA_MATRIX]
- **EAN-13**
  [EAN13]
- **GS1 DataBar**
  [GS1_DATABAR_LIMITED]
- **Interleaved 2 of 5**
  [INTERLEAVED_2_OF_5]
- **PDF417**
  [PDF417]
- **QR code**
  [QR]

Configuration

You configure the **Allowed barcode types for user ID** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Result range handling

In this section

Normal range lower limit

This configuration item specifies the value of the lower limit of the normal range for glucose test results. It is expressed in mg/dL or mmol/L.

The default value is set by the Glucose app based on the **Result unit (glucose tests)** configuration item.

Item ID NORMAL_RANGE_LO_LIMIT

Available values/format

Default values:

- 10 mg/dL
- 0.6 mmol/L

Dependencies

The following dependencies must be true:

- The **Normal range lower limit** value must be less than the **Normal range upper limit** value.

- The **Normal range lower limit** value must be greater than or equal to the **Critical range lower limit** value.

Configuration

You configure the **Normal range lower limit** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Normal range upper limit

This configuration item specifies the value of the upper limit of the normal range for glucose test results. It is expressed in mg/dL or mmol/L.

The default value is set by the Glucose app based on the **Result unit (glucose tests)** configuration item.

Item ID

NORMAL_RANGE_HI_LIMIT

Available values/format

Default values:

- 600 mg/dL
- 33.3 mmol/L

Dependencies

The following dependencies must be true:

- The **Normal range upper limit** value must be greater than the **Normal range lower limit** value.
- The **Normal range upper limit** value must be less than or equal to the **Critical range upper limit** value.

Configuration

You configure the **Normal range upper limit** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Critical range lower limit

This configuration item specifies the value of the lower limit of the critical range for glucose test results. It is expressed in mg/dL or mmol/L.

The default value is set by the Glucose app based on the **Result unit (glucose tests)** configuration item.

Item ID CRITICAL_RANGE_LO_LIMIT

Available values/format

Default values:

- 10 mg/dL
- 0.6 mmol/L

Dependencies

The following dependencies must be true:

- The **Critical range lower limit** value must be greater than or equal to the **Reportable range lower limit** value.
- The **Critical range lower limit** value must be less than or equal to the **Normal range lower limit** value.

Configuration

You configure the **Critical range lower limit** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Message displayed if the result is below the critical range (457)

Critical range upper limit

This configuration item specifies the value of the upper limit of the critical range for glucose test results. It is expressed in mg/dL or mmol/L.

The default value is set by the Glucose app based on the **Result unit (glucose tests)** configuration item.

Item ID CRITICAL_RANGE_HI_LIMIT

Available values/format

Default values:

- 600 mg/dL
- 33.3 mmol/L

Dependencies

The following dependencies must be true:

- The **Critical range upper limit** value must be greater than or equal to the **Normal range upper limit** value.
- The **Critical range upper limit** value must be less than or equal to the **Reportable range upper limit** value.

Configuration

You configure the **Critical range upper limit** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Message displayed if the result is above the critical range (456)

Reportable range lower limit

This configuration item specifies the value of the lower limit of the reportable range for glucose test results. It is expressed in mg/dL or mmol/L.

The default value is set by the Glucose app based on the **Result unit (glucose tests)** configuration item.

Item ID

REPORTABLE_RANGE_LO_LIMIT

Available values/format

Default values:

- 10 mg/dL
- 0.6 mmol/L

Dependencies

The **Reportable range lower limit** value must be less than or equal to the **Critical range lower limit** value.

Configuration

You configure the **Reportable range lower limit** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Message displayed if the result is below the reportable range (452)

Reportable range upper limit

This configuration item specifies the value of the upper limit of the reportable range for glucose test results. It is expressed in mg/dL or mmol/L.

The default value is set by the Glucose app based on the **Result unit (glucose tests)** configuration item.

Item ID

REPORTABLE_RANGE_HI_LIMIT

Available values/format

Default values:

- 600 mg/dL
- 33.3 mmol/L

Dependencies

The **Reportable range upper limit** value must be greater than or equal to the **Critical range upper limit** value.

Configuration

You configure the **Reportable range upper limit** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Message displayed if the result is above the reportable range (454)

Message displayed if the result is below the reportable range

This configuration item determines if the "below reportable range message" is displayed when a glucose test result value is below the reportable range.

The content of the custom message is entered using the **Custom message (below reportable range)** configuration item.

If a custom message has not been configured, a built-in message is displayed when the value for this configuration item is **Enabled**.

Item ID

DISPLAY_REPORTABLE_RANGE_LO_MESSAGE

Available values/format

- **Disabled** (default)
  [false]
  The message is not displayed.
- **Enabled**
  [true]

The message is displayed.

Configuration

You configure the **Message displayed if the result is below the reportable range** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Custom message (below reportable range) (453)
- Reportable range lower limit (451)

Custom message (below reportable range)

You use this configuration item to create the content of the below reportable range message.

The message is displayed when the following conditions are true:

- The glucose test result is less than the value set in the **Reportable range lower limit** configuration item.
- The **Message displayed if the result is below the reportable range** configuration item has a value of **Enabled**.

Item ID

BELOW_REPORTABLE_RANGE_LO_MESSAGE

Available values/format

- The message can contain a maximum of 100 alphanumeric characters.
- If this configuration item is left empty a built-in message is displayed.

Configuration

You configure the **Custom message (below reportable range)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

Related topics

- Reportable range lower limit (451)
- Message displayed if the result is below the reportable range (452)

Message displayed if the result is above the reportable range

This configuration item determines if the "above reportable range message" is displayed when a glucose test result value is above the reportable range.

The content of the custom message is entered using the **Custom message (above reportable range)** configuration item.

If a custom message has not been configured, a built-in message is displayed when the value for this configuration item is **Enabled**.

Item ID DISPLAY_REPORTABLE_RANGE_HI_MESSAGE

Available values/format

- **Disabled** (default)
  [false]
  The message is not displayed.
- **Enabled**
  [true]
  The message is displayed.

Configuration

You configure the **Message displayed if the result is above the reportable range** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Custom message (above reportable range) (454)
- Reportable range upper limit (451)

Custom message (above reportable range)

You use this configuration item to create the content of the above reportable range message.

The message is displayed when the following conditions are true:

- The glucose test result is greater than the value set in the **Reportable range upper limit** configuration item.

- The **Message displayed if the result is above the reportable range** configuration item has a value of **Enabled**.

Item ID ABOVE_REPORTABLE_RANGE_HI_MESSAGE

Available values/format

- The message can contain a maximum of 100 alphanumeric characters.
- If this configuration item is left empty a built-in message is displayed.

Configuration

You configure the **Custom message (above reportable range)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

Related topics

- Message displayed if the result is above the reportable range (454)
- Reportable range upper limit (451)

Custom message (above critical range)

You use this configuration item to create the content of the above critical range message.

The message is displayed when the following conditions are true:

- The glucose test result is greater than the value set in the **Critical range upper limit** configuration item.
- The **Message displayed if the result is above the critical range** configuration item has a value of **Enabled**.

Item ID ABOVE_CRITICAL_RANGE_HI_MESSAGE

Available values/format

- The message can contain a maximum of 100 alphanumeric characters.
- If this configuration item is left empty a built-in message is displayed.

Configuration

You configure the **Custom message (above critical range)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

Custom message (below critical range)

You use this configuration item to create the content of the below critical range message.

The message is displayed when the following conditions are true:

- The glucose test result is less than the value set in the **Critical range lower limit** configuration item.
- The **Message displayed if the result is below the critical range** configuration item has a value of **Enabled**.

Item ID

BELOW_CRITICAL_RANGE_LO_MESSAGE

Available values/format

- The message can contain a maximum of 100 alphanumeric characters.
- If this configuration item is left empty a built-in message is displayed.

Configuration

You configure the **Custom message (below critical range)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

Message displayed if the result is above the critical range

This configuration item determines if the "above critical range message" is displayed when a glucose test result value is above the critical range.

The content of the custom message is entered using the **Custom message (above critical range)** configuration item.

If a custom message has not been configured, a built-in message is displayed when the value for this configuration item is **Enabled**.

Item ID

DISPLAY_CRITICAL_RANGE_HI_MESSAGE

Available values/format

- **Disabled** (default)
  [false]
  The message is not displayed.
- **Enabled**
  [true]
  The message is displayed.

Configuration

You configure the **Message displayed if the result is above the critical range** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Critical range upper limit (450)
- Custom message (above critical range) (455)

Message displayed if the result is below the critical range

This configuration item determines if the "below critical range message" is displayed when a glucose test result value is below the critical range.

The content of the custom message is entered using the **Custom message (below critical range)** configuration item.

If a custom message has not been configured, a built-in message is displayed when the value for this configuration item is **Enabled**.

Item ID

DISPLAY_CRITICAL_RANGE_LO_MESSAGE

Available values/format

- **Disabled** (default)
  [false]
  The message is not displayed.
- **Enabled**
  [true]
  The message is displayed.

Configuration

You configure the **Message displayed if the result is below the critical range** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Custom message (below critical range) (456)
- Critical range lower limit (449)

Measurement workflow

In this section

Emergency workflow

In this section

Allow emergency tests

This configuration item enables or disables the emergency workflow. When enabled, the **Emergency** button is accessible on the **Tests** screen.

The emergency workflow allows a glucose test to be performed without patient identification.

Item ID

EMERGENCY_WORKFLOW

Available values/format

- **Disabled** (default)
  [false]
  Emergency workflow is disabled.
- **Enabled**
  [true]
  Emergency workflow is enabled.

Dependencies

The **Allow emergency tests** configuration item works in conjunction with the **Default patient ID for emergency tests** configuration item which provides the patient ID used in an emergency workflow.

Configuration

You configure the **Allow emergency tests** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

- Barcode (generated via **cobas® infinity** edge)

Related topics

- Default patient ID for emergency tests (459)

Default patient ID for emergency tests

This configuration item specifies the ID that is used as the patient ID for emergency glucose tests.

Item ID

EMERGENCY_ID

Available values/format

- 1-20 alphanumeric characters
- "99999999" (default)

Dependencies

The **Allow emergency tests** configuration item has the value **Enabled**.

Configuration

You configure the **Default patient ID for emergency tests** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Allow emergency tests (458)

Test strip ejection

This configuration item specifies at which point in the glucose test workflow the user ejects a used test strip.

Item ID

STRIP_EJECT_CONFIGURATION

Available values/format

- **After test result confirmation** (default)
  [AFTER_RESULT_CONFIRMATION]
  Test strip is ejected after the test result confirmation.
- **Before test result confirmation**
  [BEFORE_RESULT_CONFIRMATION]
  Test strip is ejected before the test result confirmation.

Configuration

You configure the **Test strip ejection** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

- Barcode (generated via **cobas® infinity** edge)

Sample type

This configuration item specifies the available sample types that can be displayed to the user when performing a glucose test.

The **Sample type** configuration item is used to indicate the source of the blood sample. If it has no value (default), the sample type selection screen is not displayed.

When the configuration item contains values, the sample type selection screen is displayed listing the corresponding sample types.

Item ID

SAMPLE_TYPE_SELECTION

Available values/format

- **Capillary blood**
  [CAPILLARY]
- **Venous blood**
  [VENOUS]
- **Arterial blood**
  [ARTERIAL]
- **Heel-stick blood**
  [HEEL_STICK]
- "No value" (default)

Configuration

You configure the **Sample type** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Result unit (glucose tests)

This configuration item specifies measurement unit used in glucose test results.

If the result unit is changed, the instrument deletes all stored results and resets all configured measurement range values to their default values.

You must ensure that all unsent results are retrieved from the instrument before changing the value of this configuration item.

Item ID RESULT_UNIT_GLUCOSE

Available values/format

- **mmol/L** (default)
  [MMOL_PER_LITER]
- **mg/dL**
  [MG_PER_DECILITER]

Dependencies If the result unit has been automatically set as a result of a change of the **Regulatory region** configuration item, this configuration item cannot be changed.

Configuration You configure the **Result unit (glucose tests)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Regulatory region (374)

Configure override QC

In this section

Allow QC / synchronization lockout overrides

This configuration item enables or disables the override QC / synchronization lockout function.

Item ID STAT_TESTS

Available values/format

- **Disabled** (default)
  [false]
  Override function is disabled.
- **Enabled**
  [true]
  Override function is enabled.

Dependencies

- The **Number of lockout overrides allowed** configuration item specifies the maximum number of tests that can be overridden.
- When the **Regulatory region** configuration item has a value of **US**, **Allow QC / synchronization lockout overrides** is disabled and cannot be enabled.

Configuration

You configure the **Allow QC / synchronization lockout overrides** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Number of lockout overrides allowed (462)

Number of lockout overrides allowed

This configuration item specifies the number of lockout overrides that are permitted before a QC test or synchronization must be performed.

Item ID

STAT_TESTS_NUMBER

Available values/format

1-9 overrides

Default = 9 overrides

Dependencies

The **Allow QC / synchronization lockout overrides** configuration item must have a value of **Enabled**.

Configuration

You configure the **Number of lockout overrides allowed** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Allow QC / synchronization lockout overrides (461)

Comment management

In this section

Allow user-defined comments

This configuration item specifies whether or not custom comments can be made.

Custom comments enable free-text comments to be added on the **Comments** screen.

Item ID

CUSTOM_COMMENTS

Available values/format

- **Enabled** (default)
  [true]
  Custom comments is enabled.
- **Disabled**
  [false]
  Custom comments is disabled.

Dependencies

The **Allow user-defined comments** configuration item is only relevant when comments are enabled for patient and QC tests as follows:

- If the **Allow comments on patient results** configuration item has one of the following values:
  - **Optional**
  - **Required when below or above selected range**
  - **Always required**
- If the **Allow comments on QC results** configuration item has one of the following values:
  - **Optional**
  - **Required when QC fails**
  - **Always required**

Configuration

You configure the **Allow user-defined comments** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Allow comments on patient results (464)
- Allow comments on QC results (465)

Condition for required comments on patient results

This configuration item specifies when comments must be added to a patient result, based on the result range into which a patient test result falls.

Item ID

COMMENTS_REQUIRED_LEVEL_PATIENT_TESTING

Available values/format

- **Below/above normal range** (default)
  [REQUIRED_IF_OUT_OF_NORMAL_RANGE]
  A comment is required when the patient result is above or below the normal range.
- **Below/above critical range**
  [REQUIRED_IF_OUT_OF_CRITICAL_RANGE]
  A comment is required when the patient result is below critical range lower limit, or above critical range upper limit.
- **Below/above reportable range**
  [REQUIRED_IF_OUT_OF_REPORTABLE_RANGE]
  A comment is required when the patient result is below reportable range lower limit or above reportable range upper limit.
- **Below/above measuring range**
  [REQUIRED_IF_OUT_OF_SYSTEM_MEASUREMENT_RANGE]
  A comment is required when the patient result is outside the measuring range.

Dependencies

The **Condition for required comments on patient results** configuration item is only relevant when the **Allow comments on patient results** configuration item has a value of **Required when below or above selected range**.

Configuration

You configure the **Condition for required comments on patient results** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Allow comments on patient results (464)

Allow comments on patient results

This configuration item determines comment handling for patient tests.

Item ID COMMENTS_REQUIRED_PATIENT_TESTING

Available values/format

- **Optional** (default)
  [OPTIONAL]
  Comment entry is optional for patient tests.
- **Required when below or above selected range**
  [OUT_OF_RANGE]
  Comment entry is mandatory when a patient test result falls outside a specified range.
- **Always required**
  [REQUIRED]
  Comment entry is mandatory for all patient tests.
- **Disabled**
  [DISABLED]
  Comment entry is disabled for patient tests.

Dependencies

The **Allow comments on patient results** configuration item works in conjunction with the following configuration items:

- **Allow user-defined comments**
- **Condition for required comments on patient results**

Configuration

You configure the **Allow comments on patient results** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Allow user-defined comments (463)
- Condition for required comments on patient results (464)

Allow comments on QC results

This configuration item determines comment handling for QC tests.

Item ID COMMENTS_REQUIRED_QC_TESTING

Available values/format

- **Optional** (default)
  [OPTIONAL]
  Comment entry is optional for QC tests.
- **Required when QC fails**
  [FAILED_QC]

Comment entry is mandatory when a QC test fails.

- **Always required**
  [REQUIRED]
  Comment entry is mandatory for all QC tests.
- **Disabled**
  [DISABLED]
  Comment entry is disabled for QC tests.

Dependencies

The **Allow comments on patient results** configuration item works in conjunction with the **Allow user-defined comments** configuration item.

Configuration

You configure the **Allow comments on QC results** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Allow user-defined comments (463)

Generic instrument functionality

In this section

Access restrictions

In this section

Instrument settings password

Depending on the configuration options outlined in the "About the Settings menu access restrictions" section, you can use the setup password to protect access to the following options in the **Settings** menu:

- **Date and time**
- **Configuration by barcode**
- **Lot management**
- **Administrator**

The **Configuration by barcode** option is used to scan configuration barcodes. The **Date and time** option enables the instrument date and time to be set.

For security reasons, the instrument settings password is part of the initial configuration barcode. An **Instrument settings password** with no value is valid.

If some instrument settings shall be protected with the setup password, it must be ensured that the setup password is set to a password that follows cybersecurity guidelines.

⚠ CAUTION!

Password protection

Protecting instrument settings using the setup password.

- Ensure that the password chosen adheres to your facility's cybersecurity guidelines,

Strong password management (22)

About the Settings menu access restrictions (367)

Item ID SETUP_PASSWORD

Available options/values

- ST:0-20
- No default value set

Configuration

You configure the **Instrument settings password** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Allow configuration by barcode on the instrument (468)
- Access restrictions to date and time (469)

Allow configuration by barcode on the instrument

This configuration item determines access to the **Settings > Configuration by barcode** option in which you scan QR configuration barcodes.

Item ID CONFIGURATION_QR_CODE_ACCESS

Available values/format

- **Disabled**
  [DISABLED]
  Access to the **Settings > Configuration by barcode** option is deactivated.
- **Enabled (no restrictions)**
  [UNLIMITED_ACCESS]
  Anyone can access the **Settings > Configuration by barcode** option.
- **Enabled (setup password required)** (default)
  [VIA_SETUP_PASSWORD]

The instrument settings password must be entered in order to access the **Settings > Configuration by barcode** option.

- **Enabled (corresponding user rights required)**
  [VIA_OPERATOR_PRIVILEGE]
  Access to the **Settings > Configuration by barcode** option is only available to users with the required ("POCC") privilege.

Configuration

You configure the **Allow configuration by barcode on the instrument** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Instrument settings password (467)

Access restrictions to date and time

This configuration item determines access to the **Settings > Date and time** option in which you set the instrument date and time.

Item ID

DATE_TIME_EDITING_ACCESS

Available options/values

- **Only via DMS**
  [VIA_DMS]
  Setting the instrument date and time is only possible via DMS/POCT1-A.
- **No restrictions** (default)
  [UNLIMITED_ACCESS]
  The instrument date and time can be set by anyone.
- **Setup password required**
  VIA_SETUP_PASSWORD
  The **Instrument settings password** is required for setting the instrument date and time.
- **Corresponding user rights required**
  [VIA_OPERATOR_PRIVILEGE]
  The instrument date and time can only be set by a user with the required ("POCC") privilege.

Dependencies

The **Access restrictions to date and time** configuration item is only active when the **Network Time Protocol (NTP)** configuration item has a value of **Disabled**.

If the **Network Time Protocol (NTP)** configuration item has a value of **Enabled**, the **Access restrictions to date and time** configuration item is automatically disabled on the instrument user interface.

Configuration

You configure the **Access restrictions to date and time** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Instrument settings password (467)

Allow access to administrator features

This configuration item determines access to the **Settings > Administrator** option.

Item ID

ADMIN_ACCESS

Available options/values

- **Disabled**
  [DISABLED]
  Access to **Settings > Administrator** option is disabled.
- **Enabled (no restrictions)**
  [UNLIMITED_ACCESS]
  Anyone can access the **Settings > Administrator** option.
- **Enabled (corresponding user rights required)**
  [VIA_OPERATOR_PRIVILEGE]
  Access to the **Settings > Administrator** option is only available to users with the required ("POCC") privilege.
- **Enabled (setup password required)** (default)
  [VIA_SETUP_PASSWORD]
  The **Instrument settings password** is required to access the **Settings > Administrator** option.

Configuration

You configure the **Allow access to administrator features** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Allow access to lot management on the instrument

This configuration item determines access to the **Settings > Lot management** option.

Item ID LOT_MANAGEMENT_ACCESS

Available options/values

- **Disabled**
  [DISABLED]
  Access to **Settings > Lot management** option is disabled.
  Lot management is only possible using **cobas® infinity** edge and/or the DMS.
- **Enabled (no restrictions)**
  [UNLIMITED_ACCESS]
  Anyone can access the **Settings > Lot management** option.
- **Enabled (setup password required)** (default)
  [VIA_SETUP_PASSWORD]
  The **Instrument settings password** is required to access the **Settings > Lot management** option.
- **Enabled (corresponding user rights required)**
  [VIA_OPERATOR_PRIVILEGE]
  Access to the **Settings > Lot management** option is only available to users with the "POCC" privilege.

Configuration

You configure the **Allow access to lot management on the instrument** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Lot management

In this section

Allow linearity lot selection from list

This configuration item determines how a user selects a linearity lot number. Either from a list or by barcode scan, or by barcode scan only.

Item ID LINEARITY_LOT_SELECTION_BY_LIST

Available options/values

- **Enabled** (default)
  [true]
  List selection activated.
  A linearity lot number can be selected from a list or by barcode scan.
- **Disabled**
  [false]
  List selection deactivated.
  A linearity lot number can be selected by barcode scan only.

Dependencies

The **Allow linearity lot selection from list** configuration item is only relevant when the **Allow linearity tests** configuration item has a value of **Enabled**.

Configuration

You configure the **Allow linearity lot selection from list** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Allow QC lot selection from list

This configuration item determines how a user selects a QC lot number. Either from a list or by barcode scan, or by barcode only.

The list can be activated and deactivated.

Item ID

QC_LOT_SELECTION_BY_LIST

Available options/values

- **Enabled** (default)
  [true]
  List selection activated.
  A QC lot number can be selected from a list or by barcode scan.
- **Disabled**
  [false]
  List selection deactivated.
  A QC lot number can be selected by barcode scan only.

Configuration

You configure the **Allow QC lot selection from list** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Instrument site, location, and name

In this section

Site

This configuration item assigns the name of the site at which the instrument is used. It is assigned by DMS or barcode.

The site name is visible at the bottom of the **Glucose** screen and the charging screen, above the instrument location if set.

It can contain wide characters.

About the charging screen (45)

Item ID

SITE

Available options/values

- ST: 0-20
- No default value set.

Configuration

You configure the **Site** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Location (473)

Location

This configuration item assigns the name of the location at which the instrument is used. It is assigned by DMS or barcode.

The location name is visible at the bottom of the **Glucose** screen and the charging screen, below the instrument site if set.

It can contain wide characters.

About the charging screen (45)

Item ID LOCATION

Available options/values

- ST: 0-20
- No default value set.

Configuration

You configure the **Location** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Site (473)

Device name

This configuration item assigns the name of the instrument. It is assigned by DMS or barcode.

The name is visible at the top of the **Glucose** screen and the charging screen.

It can contain wide characters.

About the charging screen (45)

Item ID NAME

Available options/values

- ST: 0-20
- No default value set.

Configuration

You configure the **Device name** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

RFID tag

In this section

Patient RFID tag record configuration

This configuration item specifies the NDEF record number stored on the patient RFID tag.

Item ID

PATIENT_RFID_TAG_RECORD

Available options/values

- INT: 0-99
- A value of "0" indicates that the content of the first NDEF record is used for identification.

Dependencies

The **Patient RFID tag record configuration** configuration item is only relevant when the **Patient entry type** configuration item has a value of **RFID**.

Configuration

You configure the **Patient RFID tag record configuration** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Patient entry type (427)

User RFID tag record configuration

This configuration item specifies the NDEF record number stored on the user RFID tag.

Item ID

OPERATOR_RFID_TAG_RECORD

Available options/values

- INT: 0-99
- A value of "0" indicates that the content of the first NDEF record is used for identification.

Dependencies

The **User RFID tag record configuration** configuration item is only relevant when the **RFID tag configuration** configuration item has a value of **Stored NDEF record**.

Configuration

You configure the **User RFID tag record configuration** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- Patient entry type (427)

RFID tag configuration

This configuration item specifies what is used for identification when using a RFID tag.

Item ID RFID_TAG_CONFIGURATION

Available options/values

- **Unique RFID tag ID** (default)
  [UNIQUE_ID]
  The unique ID of the tag is used (between 4 bytes to up to 11 bytes).
- **Stored NDEF record**
  [NDEF_RECORD]
  An NDEF record stored on the tag is used (the record number is configured using the **User RFID tag record configuration** configuration item).

Dependencies The **User authentication required** configuration item has a value of **RFID**.

Configuration You configure the **RFID tag configuration** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Tests menu

In this section

Patient test series

This configuration item specifies if a patient test series can be performed (i.e., performing successive tests on the same patient).

Item ID PATIENT_TEST_SERIES

Available values/format

- **Disabled** (default)
  [false]
  Patient test series disabled.
- **Enabled**
  [true]
  Patient test series enabled.

Configuration

You configure the **Patient test series** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Allow linearity tests

This configuration item specifies if linearity tests can be performed on the instrument.

When the configuration item is enabled the **Linearity** button is available on the **Tests** screen. When it is disabled the button is excluded.

Item ID

LINEARITY_ENABLED

Available values/format

- **Enabled** (default)
  [true]
  Linearity tests can be performed.
- **Disabled**
  [false]
  Linearity tests cannot be performed.

Configuration

You configure the **Allow linearity tests** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Allow proficiency tests

This configuration item specifies if proficiency tests can be performed on the instrument.

When the configuration item is enabled the **Proficiency** button is available on the **Tests** screen. When it is disabled the button is excluded.

Item ID

PROFICIENCY_ENABLED

Available values/format

- **Enabled** (default)
  [true]
  Proficiency tests can be performed.
- **Disabled**
  [false]
  Proficiency tests cannot be performed.

Configuration

You configure **Allow proficiency tests** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Insulin dose entry

This configuration item specifies whether or not insulin dose entries can be made on the instrument.

Item ID

LOG_INSULIN

Available values/format

- **Disabled**
  [DISABLED]
  Insulin dose entries cannot be made.
- **Enabled** (default)
  [VIA_TESTS_SCREEN_ONLY]
  Insulin dose entries can only made using the **Insulin** button on the **Tests** screen.
- **Enabled (via additional dialog after patient testing)**
  [VIA_TESTS_SCREEN_AND_AFTER_GLUCOSE_TEST]
  Insulin dose entries can made:
  - Using the **Insulin** button on the **Tests** screen.
  - After a glucose test has been performed.

Configuration

You configure the **Insulin dose entry** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Startup behavior of the instrument

This configuration item determines the behavior of the instrument when it starts up.

Depending on the configuration of the configuration item, either the **Glucose** app or the app library is displayed at startup.

Item ID

LAUNCH_APP_LIBRARY_ON_TURN_ON

Available values/format

- **Automatically start the Glucose app** (default)
  [false]
  The Glucose app starts up when the instrument starts up.
- **Remain in app library**
  [true]
  The app library is displayed when the instrument starts up.

Configuration

You configure the **Startup behavior of the instrument** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)
- User interface (only during initial configuration)

Message of the day

This configuration item enables you to create a message which can be uploaded to specific or all instruments.

The message is displayed in the **Settings > Notifications** option in the **Glucose** app. The user receives notification when the message is available.

Item ID

MESSAGE_OF_THE_DAY

Available options/values

- ST: 0-120
  This configuration item can contain Unicode characters.
- No default value set.

Configuration

You configure the **Message of the day** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)

Cleaning

In this section

Cleaning notification after each patient test (480)

Time interval for cleaning notification (in hours)

This configuration item specifies the time in hours since instrument cleaning was last performed and when a cleaning notification is displayed.

The notification is displayed on the **Settings > Notifications** screen. You confirm that the instrument has been cleaned by choosing the **Confirm** button on the **Instrument cleaning** dialog box.

The time interval to the next cleaning alert commences with the confirmation.

Item ID

CLEANING_ALERT_HOURS

Available values/format

- INT:0-999 hours
- Default value = "0" hours

Configuration

You configure the **Time interval for cleaning notification (in hours)** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- List of notifications (72)

Cleaning notification after each patient test

This configuration item determines if the user is notified to clean the instrument after a patient test has been made.

The notification is displayed on the **Settings > Notifications** screen.

Item ID

CLEANING_REQUIRED

Available values/format

- **Disabled** (default)
  [false]
  A cleaning notification is not displayed after a patient test has been made.
- **Enabled**
  [true]

A cleaning notification is displayed after a patient test has been made.

Configuration

You configure the **Cleaning notification after each patient test** configuration item using the following:

- Data management system (e.g., **cobas® infinity** POC)
- Barcode (generated via **cobas® infinity** edge)

Related topics

- List of notifications (72)

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Glossary

age

Length of time a person has lived or a thing has existed.

ambient temperature

Temperature of the immediate surroundings where the equipment is kept.

app library

Screen where a collection of available apps is displayed.

arterial whole blood

Whole blood that is oxygenated in the lungs and that is found in the left chambers of the heart and in the arteries.

association

Process of connecting a device to the access point of a wireless network and granting access.

attack

Malicious activity that attempts to or succeeds in collecting, disrupting, denying, degrading, or destroying information system resources or the information itself.

audit trail

Log file with events that are relevant for an audit. It cannot be manipulated by a user.

authentication

Process of verifying the identity of a user, computer, device, process, or other entity by validating the credentials provided by the entity.

autocomplete

Software feature that attempts to predict and automatically complete the current string as it is being entered by the user.

barcode

Optical machine-readable representation of data.

barcode type

Class of barcodes sharing the same characteristics.

battery

Electrochemical device consisting of a series of cells that produce electrical energy.

battery compartment

Compartment that holds the battery.

battery compartment cover

Cover for the battery compartment.

battery level

Amount of battery power left on the instrument.

bleach

Corrosive oxidizing disinfectant and bleaching agent.

blood-borne pathogen

Infectious microorganism in human blood that can cause disease in humans.

brightness

Amount of light that is emitted by a screen.

built-in flashlight

Component that is used to illuminate the barcode so that the barcode reader can read the barcode.

capillary whole blood

Whole blood that is obtained from capillary beds by puncturing the skin.

carry case

Hard-shell case for storing and carrying the instrument and its accessories.

certification status

Status that indicates whether a certification is valid, expired, or upcoming.

charge indicator

Status indicator that shows the status of the charging process.

charging station

Device that connects portable devices to a power source and to other peripherals.

cleaning solution

Solution that is used for cleaning of surfaces and parts of a system.

cobas® pulse charging station

Product name for the charging station used for the cobas® pulse system.

comment

Written remark about something that is relevant for the user.

configuration

Arrangement of a system that is defined by the nature, the number, the interconnection, and chief characteristics of its functional units.

critical range

Range of test results that indicates that a patient's life is in danger or that the patient will suffer some form of harm.

data management system

System that facilitates the creation, organization, retrieval, maintenance, and use of an electronic database.

date of birth

Data type included in patient demographics.

date picker

Picker that allows a user to select a date.

detergent

Cleaning solution that is used for removing dirt and grease from a variety of surfaces and materials.

direct sunlight

Light that comes from the sun and shines directly onto something, without being reflected off something else first.

disinfection

Process to eliminate most pathogenic microorganisms without neccesarily killing or removing all organisms (e.g., bacterial spores).

disposable gloves

Protective and disposable gloves used in hospitals and other healthcare facilities.

electromagnetic compatibility

Ability of signals and interference to coexist without loss of the information contained in the wanted signal.

emergency glucose test

Glucose test that is performed without patient identification through the system and with or without user authentication.

emergency test

Test that is performed without patient identification through the system in order to get a patient tested as fast as possible.

environmental conditions

Set of conditions for operating a particular system or process.

frame

Rectangular frame that delimits the capture area for scanning.

gauze

Thin translucent fabric of silk, linen, or cotton.

gender

Data type included in patient demographics.

glucose

Parameter that provides information about the presence of glucose in a sample.

glucose test

In vitro diagnostic test for the quantitative determination of glucose in a patient's sample.

hand-held instrument

Instrument that is small enough to be hand-held.

healthcare facility

Any location where healthcare is provided.

heel-stick whole blood

Capillary whole blood that is collected through a heel stick.

infection

Invasion of an organism by infectious agents, their multiplication, and the reaction to the toxins they produce.

insulin

Hormone that is essential for the metabolism of carbohydrates and the regulation of glucose levels in the blood and that when insufficiently produced results in diabetes mellitus.

insulin type

Class of insulin sharing the same characteristics.

lancet

Small double-edged blade that is held by a lancing device.

lancing device

Device that holds a lancet and is used for obtaining small capillary blood samples.

linearity kit

Kit that consists of a predefined number of different linearity materials necessary to perform a linearity test.

linearity material

QC material used for linearity tests.

linearity test

Measuring procedure that tests the linearity of the system over the full range of analyzed values.

lint-free cloth

Type of cloth that does not leave any lint/fabric fiber behind when used.

local result

Test result that is stored locally on a device.

malicious software

Software that fulfills the deliberately harmful intent of an attacker when run.

measuring range

Range of test results within which a test fulfills the specifications.

memory

Storage space available within a computer or mobile device.

normal range

Defined range of test results that indicates a healthy medical condition of a patient.

notification badge

Color-filled circle on a user interface element that notifies the users of recent events they have not yet acted upon.

observed test sequence

Workflow where a sequence of testing done by an operator is performed under supervision of an observer.

on/off button

Button that is used to turn the instrument on and off.

override

To neutralize an action.

package insert

Information regarding the usage of a product that is inserted into the package alongside the product itself.

patient ID

Unique and permanent identification of a patient throughout the system.

patient result

Result of a patient test.

power supply

Electrical device that is used to convert electric current from a source to the correct voltage, current, and frequency to power the load.

proficiency material

Material that is used for a proficiency test.

proficiency test

Method that is used to analyze the reproducibility of test results by comparing them among independent organizations in order to validate a measurement process.

puncture site

Area on the skin where a needle is inserted to draw blood.

QC interval

Number of patient tests or the amount of time between 2 QC tests.

QC kit

Kit that consists of a predefined number of different QC materials necessary to perform QC tests.

QC level

Concentration of a QC material.

QC lockout

Lockout that occurs in case of a QC error or a due QC test.

QC lot

Lot of a QC material.

QC material

Substance, material, or article intended by its manufacturer to be used to verify the performance characteristics of an in vitro diagnostic medical device.

QC result

Result of a QC test.

QC test

Test that is run with QC material.

qualitative result

Result type that provides information about the presence of an analyte or target in the sample.

quality assurance

Program for the systematic monitoring and evaluation of the various aspects of a project, service, or facility to ensure that standards of quality are being met.

quantitative result

Result type that provides information about the amount of the analyte in a sample. It can be evaluated against the expected values.

radio frequency

Any of the electromagnetic wave frequencies that lie in the range extending from below 3 kilohertz to about 300 gigahertz and that include the frequencies used for communications signals.

reportable range

Range of test results that indicates that the concentrations of an analyte can be measured with acceptable accuracy and precision.

RFID reader

Component that interprets the data stored in the RFID tag and read by the RFID antenna.

RFID tag

Component that stores the data that can be read by the RFID antenna and interpreted by an RFID reader.

Roche Service representative

Roche representative who may install instruments and/or perform preventive maintenance and/or service activities.

sample type

Kind of substance or material that is tested.

self-check

Process carried out by the analyzer during startup and assay runs that checks if the analyzer is working correctly and monitors its performance.

settings

Options that allow users to customize their applications or operating system.

setup password

Password that allows the user to change the settings on an instrument.

shift

Each of two or more recurring periods in which different groups of workers do the same jobs in relay.

software update

Process of changing a software in order to improve it, fix it, or make it more current.

splash screen

Initial screen displayed by interactive software, usually containing a logo, version information, author credits, or a copyright notice.

standby mode

Operating mode that is activated when the system is not performing any processing or measurement. The system is ready to exit this operating mode and return to the normal mode with a short delay.

status indicator

Device indicating the status of a component.

synchronization lockout

Lockout that occurs when the instrument could not synchronize with the DMS for a defined period of time.

system

Set of interconnected elements in a complex whole designed to fulfill its own regulatory relevant intended use.

temperature lockout

Lockout that is due to a temperature excess of the instrument.

test

Measuring procedure that requires laboratory equipment and reagents in a specific clinical context and for a specific clinical purpose, in a specific population.

test result

Result of a test.

test strip

Chemical reagent strip that is used to test a parameter of a sample or QC material.

test strip container

Container for test strips.

test strip ID

ID to identify a test strip.

test strip lot

Lot of test strips.

test strip port

Port that is used to insert a test strip into an instrument or meter.

test strip port light

Light that illuminates the test strip port and gives information about the quality of the test strip and the status of the measurement workflow.

test type

Classification of tests based on how and with what a test measures something.

time picker

Picker that allows a user to select a time.

toggle button

Interactive user interface element that allows a user to change a setting between two statuses.

touch screen

Screen that allows the user to give input by touching it.

user

Person who interacts with all or certain systems or software solutions.

user ID

Unique identifier of a user.

user interface

Means by which the user and the medical device interact.

user lockout

Lockout that occurs when a user certificate expires.

user rights

Tasks that a user is permitted to perform on a computer system or domain.

venous whole blood

Whole blood that has passed through the capillaries of various tissues, except the lungs, and is found in the veins, the right chambers of the heart, and the pulmonary arteries.

virtual keyboard

Keyboard displayed and used on a touch screen.

volume

Loudness of an audio signal.

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