ABACUS Order Entry & Calculation Software

Release Notes

Software Version 3.3

This document describes software changes made in the ABACUS Software v3.3, as well as known issues.

Software Changes from v3.2 to v3.3

The following changes have been implemented in ABACUS Software v3.3.

About Screen

■ Unique Identification Number (UDI) for ABACUS has been added to the About screen.

Orders

■ Resolved the rare occurrence of incomplete PAT file generation.

■ Order administration values can now be calculated with a Duration value of 0.

■ New feature has been added which allows the generation of a Formula file in a new format (.FRM). The content inside the .FRM file is encrypted.

■ Updated the % Chloride Control in the Order's Ion tab which allows entry of values more easily.

■ A new feature was implemented to print the compounding order details as a 2D barcode which allows the compounder to load the formula directly from the barcode.

Archiving/Restore

■ Resolved archiving issue with 64-bit versions of SQL Server to an external archive database.

■ Archived data is now encrypted and password protected.

Operating Systems

■ ABACUS can now be installed and operated in Microsoft Windows 10 environments without compatibility mode.

SQL Server

■ ABACUS is now compatible with Microsoft SQL Server 2014, 2016 and 2017.

Event Server

- ABACUS is compatible with
  - Microsoft Windows Server 2008 SP2 32 / 64-Bit
  - Microsoft Windows Server 2008 R2 SP1 64-Bit
  - Microsoft Windows Server 2012 64-Bit
  - Microsoft Windows Server 2012 R2 64-Bit
  - Microsoft Windows Server 2016 64-Bit
  - Microsoft Windows 7 32 / 64-Bit
  - Microsoft Windows 10 32 / 64-Bit

Security

- Password strength criteria for the application has been increased for improved security.

CaPO$_4$ Curve

- The default units for the Ca/PO$_4$ Graph screen are now mEq/liter for Calcium (Ca) and mMol/liter for Phosphate (PO$_4$).

Formulary

- Warning message has been added whenever the NDC number for an ingredient is duplicated.

Warning Limit

- Resolved the calculation of a lipid warning for a 2-in-1 order.

General

- Updated the label of Sex to Gender in all the screens and reports.

Self Test

- Self-Test validates the Formula File drive minimum free space of local & network paths.

Event Viewer

- The Event log viewer displays the computer name and time to milliseconds.

Known Issues

Auto Logout: Formulary Editor

(83) If ABACUS Software auto-logs out while the user is making changes to an ingredient in the Formulary Editor, the changes to the ingredient will be automatically saved, without giving the user the opportunity to cancel the changes.

Dosing Rule Display

(91) ABACUS Software may truncate the displayed text of a dosing rule-based ingredient when prompting the user to confirm to include the ingredient in the order.

Ion Balancing

(130) When entering an order that uses ion balancing, if an amount of phosphate is entered before either sodium or potassium, ABACUS may display a message stating, "Cannot Balance Ions." Based upon the amount of the ion that is the preferred source of phosphate (in this case zero), the remainder of the message indicates that some amount of the ion that is not preferred source of phosphate is needed. Entry of the remaining ions from the order will provide additional messages that can assist in balancing the remaining ions.

(196) When ion balancing on a pre-mix template, ingredients used within the ion balancing methods, when marked as do not scale (not recommended practice), may result in unexpected ion balancing values.

(236) In an ion-balanced order, when calcium and phosphate are ordered in terms of volume (denominator units are /mL, /dL, or /L) and/or the order becomes diluted, the quantities of calcium and phosphate displayed on the Ca/PO4 graph may not match the ordered quantities on the order grid. This issue may occur when the calcium phosphate intercept point on the Ca/PO4 graph is dragged to adjust the ordered quantities of calcium and phosphate.

Labels/Reports

(82) ABACUS Software may display a system error message when closed and the Windows user does not have permission to write to the file, RBuilder. ini. This indicates that the latest print settings for reports will not be saved until the user is granted write permissions to this file.

(123) When creating or printing a label containing order comparison information, the first order comparison item (alphabetically) may not display on the label. This could lead to an item that differs from a previous order not being printed on the label.

(220) Typing an invalid file location into the Where: field of the Print to File section on the Print dialog may result in a popup message stating "Received unhandled exception".

(264) When attempting to print preview the Order Comparison report, the report may be displayed blank. This issue may occur if the user enters today's date in both "Administration Date is on or after" and "Administration Date is on or before" fields.

Limit Violation Override Rationale

(99) When the Warning Level for a specific warning limit is configured to "Allow Any user to Override," (not requiring rationale), the user is required to enter rationale on the Limit Violations screen to override the limit violation.

Main Screen

(136) When selecting "Finish Incomplete...", "Approve Pending...", or "Repeat Selected..." ABACUS may display a message indicating that editing the order is not allowed followed by two messages stating, "Receive unhandled exception: type=EAccessViolation." This issue occurs when the Patient's type is not one of the patient types associated with the order's template.

(336) When selecting "Repeat Selected...", in an environment consisting of multiple workstations, ABACUS may allow the repetition of an order even after that order's template has been modified. This issue can occur when the workstations' system clocks are not synchronized to display the same time.

Order Comparison

(84) The energy information value for Kcal/day that displays on the Order Entry screen may be different than the Kcal/day value that displays on the Order Comparison Summary screen because of a difference in the way this value is calculated based on the context.

(124) When comparing orders, if the difference of an order comparison item is 0.01 or less, no indication (icon or highlight) will be provided regardless of the Display Comparison Threshold setting.

Order Entry

(92, 94) When editing a pre-mix template in the Template Editor to change the selected premix ingredient from one that contains electrolytes to one without electrolytes, ABACUS Software will set the phosphate ion unit of measure to mEq instead of mMol. This results in an error message stating, "Valence for this element not available," when entering an order containing a pre-mix ingredient and a phosphate-providing salt ingredient.

(98) There may be a noticeable delay when completing orders in ABACUS due to the addition of the Order Comparison functionality.

(122) Upon completing an order, a window may pop up (for less than a second) to generate the Ca/PO4 Solubility Graph and then immediately disappear.

(323) An ion balancing message may be displayed which proposes the adjustment of an ion to an amount that appears to be less than currently ordered. This issue may occur if the volume in an order containing a pre-mix ingredient is reduced.

Patient Information

(88) Depending on the preference setting that determines the units displayed for the patient's age, the Main Screen and Edit Patient screen may display the patient age correctly, but in different units (e.g., 8 weeks vs 2 months).

(90) After setting a gestational age at DOB for a patient, an open order will display the CURRENT Gestational Age. After the order is completed, the Gestational Age field will display the Gestational Age at DOB. When you create an order for comparison for the same patient and template, the Gestational Age as CURRENT will be displayed again with an Up arrow showing increase. Mousing over the arrow will display the change in Gestational Age at DOB.

(205) When reviewing completed orders, the patient's weight may be displayed inaccurately. This issue may occur when displaying patient weight in any unit other than kilograms.

Rounding Issues

(79) A warning limit violation may be displayed during the order process even though the substance value does not appear to exceed the limit. This may occur due to rounding when the actual value is close to but appears not to exceed the warning limit by a clinically insignificant amount.

(81) The Total Volume value listed on the Formula Tab of the Order Outputs screen is not always exactly equal to the sum of the ingredient volumes listed. This may occur due to rounding of individual ingredient quantities and is not clinically significant.

Baxter