Codonics Safe Label System Administration Tool Software

Release Notes

Version 1.3.0 Safe Label System Administration Tool Release Notes

Summary

Version 1.3.0 software is a software release for the Codonics Safe Label System™ SLS 500i Administration Tool (AT). The software is compatible with SLS 500i systems installed with SLS 1.3.0 software.

This document provides information about new product features, improvements and defects corrected in 1.3.0 SLS AT software. The SLS AT User's Manual version 1.3.0 provides further information about the AT.

New Features

◆ **The AT now has the ability to send formulary and configuration packages to SLSs using wired (i.e., Ethernet) and wireless (i.e., Wi-Fi) networks.** Refer to the AT User's Manual version 1.3.0 for further setup, configuration, and usage information.

◆ **The AT now has the ability to receive status feedback from networked SLSs.** The AT Device Manager will monitor the status of SLSs that are on the network. Refer to the AT User's Manual version 1.3.0 for further information.

◆ **An Email Notifier (EN) application is available with the AT.** When configured as part of the network setup, you will receive email notifications of networked SLS events. Refer to the AT User's Manual version 1.3.0 and the Read Me file included with the EN for setup instructions.

◆ **An automatic installation and automatic migration utility is included with the AT.** It is provided to install the 1.3.0 AT and migrate formularies created with 1.2.0, 1.2.1 or 1.2.2 software to 1.3.0 software. It is included on the AT disc and operational instructions are included in the AT User's Manual version 1.3.0.

> **WARNING:** Before migrating data, make sure to document settings that will not be migrated (currently custom WAV files). Further migration instructions are provided in Codonics Administration Tool Migration Utility Technical Brief 901-253-001.

Product Improvements

◆ **The AT and SLS support new drug name WAV files.** The new drug name WAV files included are acetazolamide, albumin, albumin human, ampicillin and sulbactam, azithromycin, bacteriostatic solution, bivalirudin, bumetanide, bupivacaine in dextrose, bupivacaine with epinephrine, cilastatin, clavulanate, coagulation factor, conjugated estrogens, doxapram, fluorescein, fosphenytoin, ibuprofen, imipenem, imipenem and cilastatin, insulin aspart, insulin detemir, insulin glargine, insulin glulisine, insulin lispro, iopromide, isosulfan blue, kanamycin, lidocaine with epinephrine, lincomycin, linezolid, methotrexate sodium, pantoprazole, phenobarbital, piperacillin with tazobactam, potassium, ticarcillin, torsemide, trimethobenzamide, tromethamine.

◆ **The AT and SLS support new concentration numbers.** The new numbers included are 0.00667, 0.00833, 0.025, 0.027, 0.0625, 0.125, 0.21, 0.333, 0.41666, 0.825, 1.25, 1.3333, 1.36, 1.4, 1.5625, 1.65, 2.4, 2.6667, 4.5, 5.3333, 8.25, 8.4, 12.5, 19.1, 33.333, 82.5, 164, 278, 334, 540, 556, 800, 1680, 12500, 1:50000.

◆ **The AT and SLS support new concentration units.** The new concentration units included are kallikrein inhibitor unit, kallikrein inhibitor units, thousand kallikrein inhibitor units, million kallikrein inhibitor units, millimole per milliliter, phenytoin equivalent, phenytoin equivalents, and milligrams per inhale.

◆ **Support for non-standard GS1-128 barcodes in US Mode.** There is now support for GS1-128 barcodes that only encode the 10 digit NDC. Previously, only GS1-128 barcodes with an AI (Application Identifier) of 01 and an NDC within a 14 digit GTIN were supported.

◆ **There is now support for Code 128 barcodes with GS1-128 structure in US Mode.** Code 128 barcodes with a 16 digit structure (typically a GS1-128 structure) in addition to a 10 digit structure are now supported in the AT and SLS.

◆ **When scanning a container's barcode with the AT (e.g., Learning), the AT will now notify you if there is an invalid barcode.** For the following US barcode symbologies: GS1 Databar, UPC, GS1-128 and Code 128 when it has a GS1 structure, if any one of these barcodes has an invalid check digit when it is scanned, the AT notifies you it is invalid.

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- **Additional capability for custom colors in drug classification templates.** Further support was added for border and background changes in all label templates. There was also support provided for changing the text color on Template 3.

- **The word Warning was changed to Message in the Editing Formulary Drug screen.**

Defects Corrected

- **Capability to rename SLS Packages so that they propagate to UI.** You can now name a formulary or configuration package a unique name and it will be displayed on the SLS user interface. When saving the package, a Package Profile field will display and you can include that name in the overall package name. For example, if you name the Package Profile: PEDS013012, a formulary package will be saved as SLS-FORMULARY-PEDS013012-001.pkg and be displayed on the SLS the same way during install. The name that will be displayed on the information screen of the SLS will be PEDS013012-1 and on the AT-Device Manager screen will be SLS-FORMULARY-PEDS013012-001.

- **Tab names can now be translated in Excel report files.** The worksheet tab names at the bottom of the Excel report for the pre-import, post-import, and formulary can now be translated.

- **Code 39 and Code 32 symbology options displayed in the Administration Tool are now supported on the SLS.**

- **Tallman lettering no longer removes a space between two lower case letters**. For example, previously if tallman lettering was entered as lidocaine epinephrine, it would be displayed as lidocaineepinephrine. Now it is displayed as lidocaine epinephrine.

- **Searching for diluents (e.g., D5W) and drug classification templates (e.g., Induction Agent) now works.**

- **Drug classification templates are now sorted alphabetically when selected in the formulary.** The templates are grouped together (e.g. all the Induction Agents, all the Narcotics) and alphabetized.

- **The Logoff Timeout maximum is now supported up to 9999 seconds.**

- **Programming the Symbol hand scanner and other scanners is now complete in the AT User's Manual.** Refer to Codonics Scanner Configuration Technical Brief (901-249-002) to program various brands of hand scanners.

- **The formulary report now shows Other in the list of available dilutions when Other is selected as a dilution.**

- **Checking or unchecking the box in the Custom Label tab (i.e. Lines, IV, Patient) of the Configuration tab now has an effect on what appears on the SLS user interface.** Now, if the box is unchecked and a configuration package is deployed to an SLS, the tab is not included on the SLS user interface.

- **Navigating away from the MDD no longer cancels the deletion process.** Previously, if you selected a large number of drugs in the MDD for deletion and then navigated to a different part of the AT, only some or none of the drugs would be deleted.

- **The pre-import report now indicates The drug name cannot be blank when a drug was not imported from a CSV file because it was missing its drug name.**

- **Adding a drug to the Master Drug Database (MDD) now clears Undo, if a drug had been previously added to the formulary.** Previously, when a drug was added to the formulary and then immediately a new drug was added to the MDD, Undo was still enabled. If you pressed the Undo button, the drug that was added to the formulary in the previous step would be removed from the formulary.

- **Now, when there are no drugs viewable in the formulary (e.g. when a search returns no results), the Promote To Test/Review button is enabled.**

- **Container barcodes with the same container ID length (e.g., 10) as the defined ID length (e.g., 10) are now supported.** When the Database Mode is set to Other, if the actual container barcode length is the same as the ID length, the AT will accept the barcode.
- **Importing large CSV files (e.g., >4000 drugs) while a large number of drugs are selected (e.g., >4000) no longer causes error contacting server.**

Known Common Issues

This section details common issues with 1.3.0 SLS AT software that are likely to be experienced by most users.

- **WARNING: Replacing drug names with non-Latin characters (e.g., Kanji, Hebrew) causes duplicate drug entries in the MDD.** When the MDD screen is sorted by drug name, changing a drug name to start with a non-Latin character causes the drug to display twice. When the issue occurs, editing either duplicate drug entry on the MDD changes the other entry properly. Re-sorting the MDD list or refreshing the MDD by switching to another page in the AT and then back causes the drug name to only display once, sorted after the names that start with Latin characters. If the drug is already in the SLS formulary, then the drug name will display with the changed characters in the formulary and will be listed only once.
- **WARNING: The formulary report does not sort duplicates.** Duplicate Container IDs in the formulary are reported, but are displayed in a way that may not put the duplicate one right next to the other. You can sort the Excel spreadsheet on Container ID.
- **WARNING: The Formulary Changes worksheet in the formulary report can be incomplete.** If you demote a formulary, edit an existing drug in the formulary, and then delete the drug entry in the formulary, it will be deleted from the formulary report when promoted, but it will not show up in the Formulary Changes worksheet.
- **WARNING: The Formulary Changes worksheet in the formulary report can be incomplete.** If you demote a formulary, add a drug to the MDD, add it to the formulary, then edit the drug, promote the formulary and create a report, the changes report will only show the drug was edited, but not added. The drug entry will still be shown in the formulary report.
- **WARNING: The Formulary Changes worksheet in the formulary report can be incomplete.** If you are deleting drug(s) from the MDD and then perform an Undo, there is no net change to the formulary. However, these drug(s) are reported as deleted in the formulary report.

- **WARNING: The pre-import report does not report duplicate drug IDs when importing via a CSV.** You are required to run a formulary report before generating an approved formulary and should review the Duplicate reports in the Safety worksheet to make sure all duplicates or potential duplicates in the MDD and formulary are identified.
- **You should start your Email Notifier when installing the SLSs on your network.** If you wait weeks or months to start Email Notification, the possible size of an email could be 100MB or larger. This email size will generally fail on most networks that have a maximum email size set. See AT User's Manual for Email Notifier setup.
- **Some anti-virus software can automatically delete temp folder contents making the AT unusable.** The AT installation procedure creates folder/files in the temp folder of the PC that are required for the AT to run. It is possible for anti-virus software (e.g. AGV) to have a setting to automatically delete temp folder contents on power off thus making the AT unusable.
- **The AT Device Manager system information window does not refresh while open.** In order to have the information screen update, close and reopen the window.
- **Saving and downloading a report will default to the location from previous versions of the AT.** When running a formulary report the first time in a new version of the AT software and clicking Download to save the file to disk, the AT will open the previous folder where reports were saved. You should clearly locate and name your reports for easy identification. (put in RN)
- **The Maximum Invalid Login Attempts setting in the configuration manager has no effect when logging into the SLS.**
- **If a package transfer fails (e.g., Wi-Fi connection disconnects or Ethernet cable becomes unplugged during transfer), the AT Device Manager that sent the package will indicate Failed while any other AT Device Managers that are opened will indicate Transferring.** You can resend the same named package from the same AT Device Manager which originally sent the package only if it is the same AT session running. If you have logged out of the AT that sent the package, refreshed the AT Device Manager, or opened the Device List again, you will need to cycle the power on the SLS to transfer a package.
- **The AT will stop working if the AT Device Manager is left open for a greater than 6 hours when using Windows 7 with Internet Explorer 9 (IE9).** Using IE8 with Windows 7 is recommended.

- **If the AT is used on a PC with Internet Explorer 7 (IE7), the AT may exhibit slow performance if the AT is left open for multiple hours.** To correct the issue, close the AT application and restart it. No data should be lost because the AT updates as data is entered. For better performance results, install IE8 on the PC.

- **When using IE8, leaving the AT open and idle with the Pre-Import Results window displayed for more than 15 hours can cause the AT to lock up**. Leaving the AT open and idle for more than 15 hours in this case can lead to a blank Import Results window. The only way to exit is to click Discard and Confirm the discard.

- **Both the post-import user interface notification and the report shows the incorrect Total # of drugs with no changes that were skipped.** The number reported is actually the number of import operations being skipped. To confirm what was actually imported, you should look at the post-import report which shows exactly what was imported.

- **Searching for either the value (e.g., 0.2) or the units (mg/mL) of the concentration works as expected, but searching for both in the Formulary Manager does not return any results.**

- **EAN-13 symbology option displayed in the Administration Tool is not supported on the SLS.** If required contact Codonics Technical Support.

- **Not all MDD fields are searchable.** Searching in the MDD on drug names (e.g., Propofol), Master IDs, Container IDs, concentration values, or tallman works as expected, but searching on status (e.g., Active), verification (e.g., Verified) and route (e.g., Intravenous) terms does not return any results.

- **Not all formulary fields are searchable.** Searching in the formulary on Master ID, Container ID, drug names (e.g., Propofol), concentration values, tallman, template name, warnings, dilutions, audio or audio2 values works as expected, but searching on dilutions (e.g., Other), expire time (e.g., hours), route (e.g., Intravenous), verification level (e.g., Verified), dilution status (e.g., Allowed), and status (e.g., Active) values does not return any results. You should select a different search parameter or sort the column first to find the information.

- **As dilutions are created in the Edit Formulary Drug user interface, they are saved to the group of available dilutions for all drugs.** All dilutions (e.g., 5 mg/mL, 1 mcg/mL, 1000 units) created in the Edit Formulary Drug in the SLS formulary remain as options to be selected for the next drug edited. You should scroll through the existing dilution options and check an existing box before creating new dilution entries.
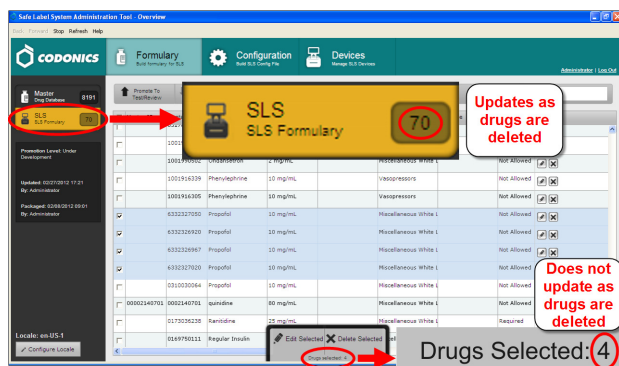
- **Saving and downloading a report will default to the location from previous versions of the AT.** When running a formulary report the first time in a new version of the AT software and clicking Download to save the file to disk, the AT will open the previous folder where reports were saved. You should clearly locate and name your reports for easy identification.

Known Uncommon Issues

This section details uncommon issues with 1.3.0 SLS AT software that are unlikely to be experienced by most users.

- **WARNING: Drug Dilution Status of Not Allowed allows dilutions (e.g., 5 mg/mL, 1 mg/mL) to be defined.** However, when trying to create a formulary package on the AT, the package will not be created and an error message will be displayed.

- **WARNING: Drug Dilution Status of Not Allowed allows dilutions of only Other to be used in creating a formulary package.** However, when the formulary is installed on the SLS, a dilution will not be allowed to occur for that drug when scanned.

- **WARNING: If a drug record is modified in the MDD after it has been added to the formulary, the AT does not automatically update the audio file association.** If the drug name is changed in the MDD, the associated audio file will not change, resulting in a possible incorrect assocation. As a work around to this scenario, you can either remove and then add the drug to the formulary to trigger a new audio file association, or manually select the correct audio file from the formulary edit dialog box.

- **WARNING: A concentration length of greater than 15 characters is converted to an incorrect value in the MDD when imported.** For example, a number such as 12345678901234567890 is converted to 92,233,720,368,547.77.

- **If the computer that the AT is running on has its Windows temporary folder fill up, the AT will not start.** An error will occur when starting the AT. You should contact your system administrator, and have them open the temp folder and determine which, if any, files can be deleted.

- **Entering a Master ID without any zero is accepted in the MDD.** When the database mode is US NDC, an 11-digit Master ID without any zero is accepted, but cannot be mapped to a scanned 10-digit Container ID on the SLS (or the AT). Thus, you can define an invalid drug that will never be used and still successfully generate a formulary.

- **A valid formulary report will not be created if you don't select Open, Save or Cancel within 3 minutes after selecting Download.** If a corrupt Excel file is generated (indicated by an Excel error message) then create a new formulary report in a timely manner.

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- **The AT may experience errors or stop functioning if you perform consecutive imports without restarting the AT.** If a file or filter is between 10,000 and 50,000 entries, you need to restart the AT before importing the file or filter the second time. Contact Codonics Technical Support if there are questions.

- **The ALL and ORAL filters are not available in the AT.** Due to issues with large imports, these filters are now disabled.

- **The AT doesn't support consecutive imports of large files (i.e. > 50,000 entries) even when restarting the AT.** If you try consecutive imports of files or filters > 50,000 entries (i.e., Lexicomp ORAL or ALL filter), the AT will not work the second time you try to import a file even if you restart the AT. It will display an error. Do not use these filters or import a file this large. Contact Codonics Technical Support if there are questions.

- **Entering only a space in the Tallman field will cause a critical application error when the label is printed on the SLS.** This error occurs when you edit an existing drug and change its Tallman to a space.

- **An invalid barcode scan in Learn Mode does not provide information.** Occasionally, when an invalid barcode is scanned (e.g. one without an AIM code) in Learn mode, the window is simply dismissed, and the focus is on the main screen again. There is no indication that the barcode is invalid or that the scanner needs to be configured properly.

- **The drug selected counter in both the MDD and formulary does not update when a selected group of drugs are individually deleted.** The count will remain the same as the number of drugs originally selected. The counter on the left hand side of the AT does update as each individual drug is deleted.

- **Undo re-sorts MDD and Formulary entries when the drugs are filtered or sorted on drug name.** For example, filtering on a list of fentanyls, deleting one of the entries, then undoing it does not place the drug in the same location in the list as it was prior to being deleted.

- **In Japanese, group editing drugs in the Formulary Manager has some fields in English.** After selecting multiple drugs, the fields that are different will show on the label template as "{CONCENTRATION}" and "{NAME}" instead of a translated version of these fields.

- **Deleting drugs one at a time can cause an error contacting server message.** This occurs with large (35K +) MDDs and a message Confirm: Delete this drug from the Master Drug Database "undefined (undefined)" is also present. If you want to delete multiple drugs from the MDD, select all the drugs and then group delete them.

- **Group editing large numbers (e.g., 35K+) of drugs at once causes Error Contacting Server error.** Clear the error by clicking the X and then select a smaller number of drugs to group edit.

- **Unable to edit drugs in a formulary if there are > 100K drugs in a formulary.** If you try to edit a drug, an Error Contacting Server message appears.

- **Unable to create a formulary report in a formulary if there are > 64K drugs in formulary.** Excel does not support greater than 65,536 entries. The formulary report creation status bar will complete. However, the download button will be greyed out and a message Writing report data will appear in red in the formulary report creation dialog.

- **Not all drugs appear selected even though you selected a large group of drug entries and then scrolled through them.** After a large number of drugs in the AT are checked and highlighted, sometimes drugs load in a manner where every other drug is highlighted and a group of contiguous drugs is not checked if you scroll through the list. Scrolling up or down so that the list loads again resolves the issue.

- **Custom labels in the BLANK tab of the configuration manager can be deleted.** Deleting any of the default Custom labels is not recommended. If you accidentally delete all the Custom Blank Labels, contact Codonics Technical Support.

- **After shift clicking large amounts of drug entries (e.g., 25,000) in the MDD, when scrolling through the list some may look like they are unchecked.** If you select the first drug in the MDD and then scroll down and shift click at the bottom, selecting in total 25,000 drugs, when scrolling up through the list you may find some that appear not to be selected. Although it appears that they are not selected, if you chose to Add to Formulary all of them (e.g., 25,000), all of them would be added to the formulary.

- **Search for Other will not find drugs with Other as a valid dilution.** You should select a different search parameter in this case or sort the dilutions column and scroll to find Other.

◆ **An error message can be caused by moving a custom label from one section (e.g., Lines) to another section (e.g., IV).** Close the error by selecting the X in the banner and then retry.

◆ **Custom labels in the BLANK tab of the configuration manager can be deleted.** Deleting any of the default Custom labels is not recommended. If you accidentally delete all the Custom Blank Labels, contact Codonics Technical Support.

Technical Support

If problems occur during software installation or operation, contact Codonics Technical Support at any time.

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