



CODONICS®



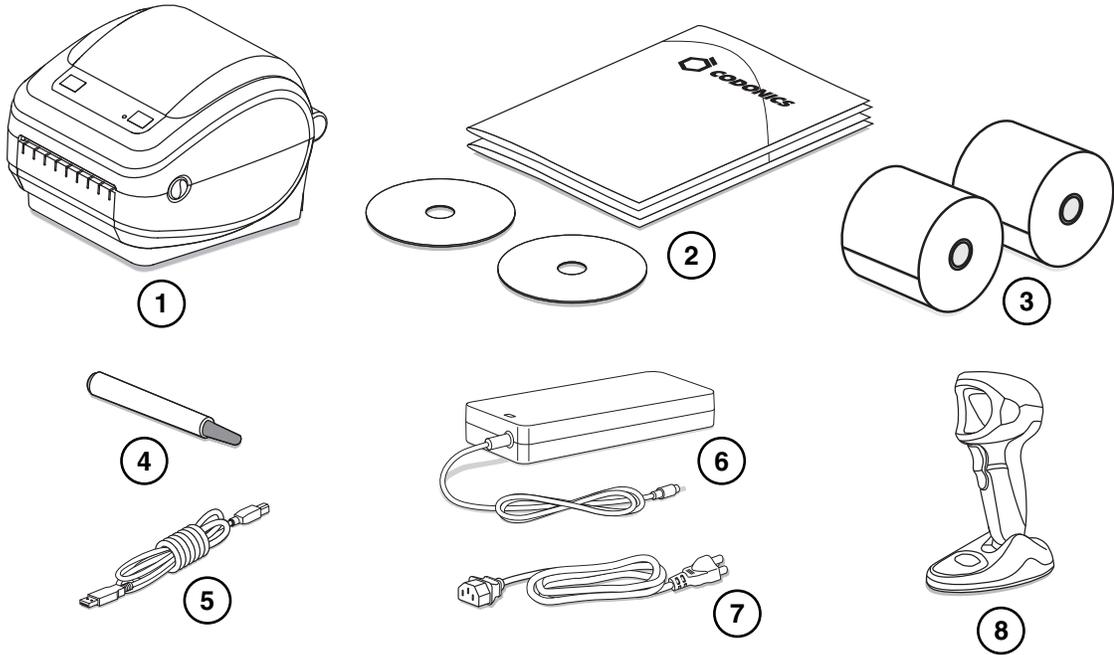
Container Labeling System™ Reference Guide

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Components

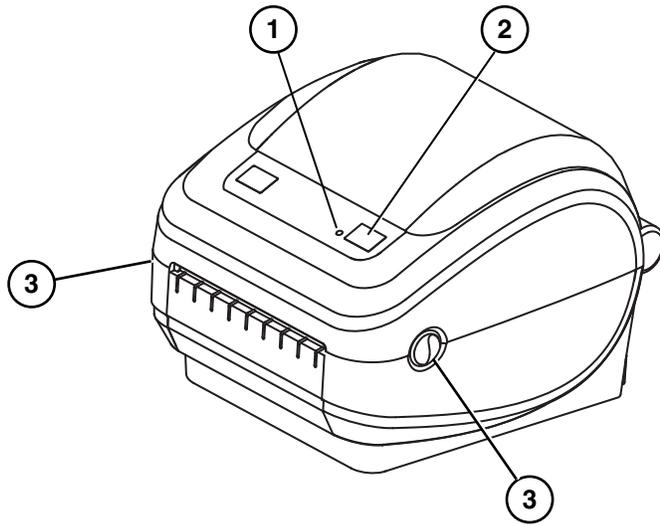
Unpacked Components



1. Container Labeling System (CLS) printer
2. Documentation and printer software discs
3. Label media

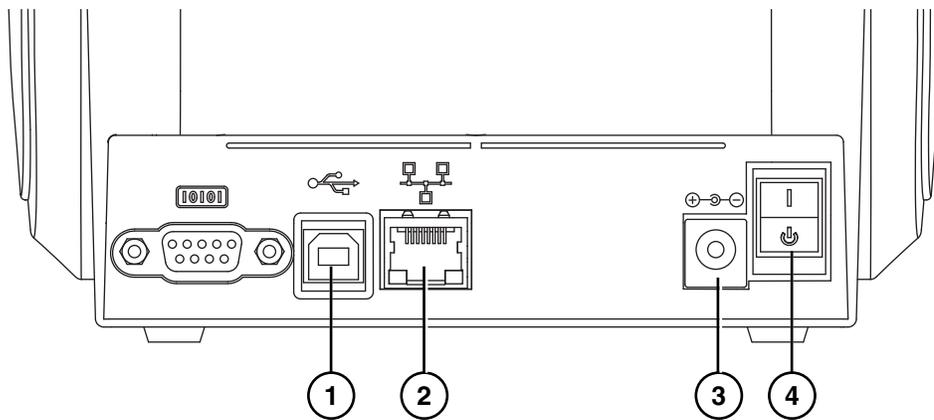
4. Printer cleaning pen
5. Printer USB cable
6. External power supply and cord
7. Power cable
8. Scanner

Printer Front Components



1. Status light
2. Feed button
3. Release latch (both sides)

Printer Rear Components



1. USB port
2. Ethernet port
3. Power input port
4. Power switch

Minimum System Requirements

The following minimum system specifications are required for the computer on which the CLS application will run:

- Windows XP Professional SP3 or Windows 7 Professional SP1 (32-bit)
- .Net Framework 3.5
- 500 MB available disk space
- 2 GB RAM
- Intel Core 2 Processor or AMD Athlon64 X2

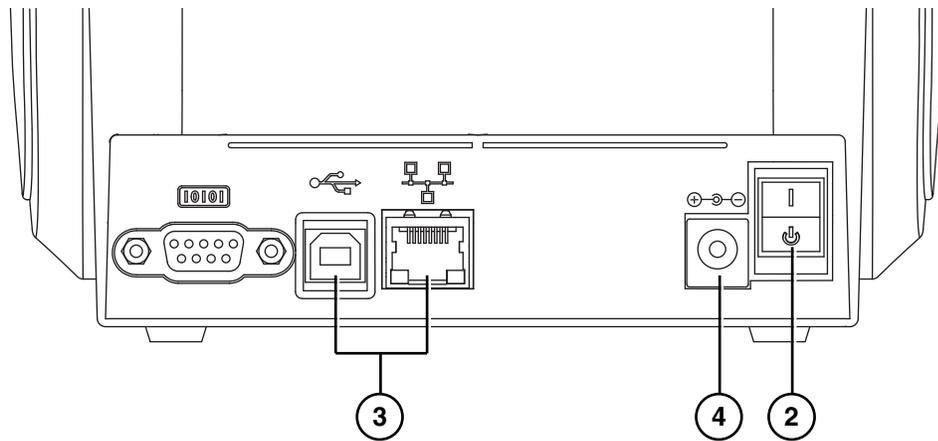
Setting Up the Printer

CAUTION: Only trained users should install and configure the system.

NOTE: For detailed instructions about setting up the printer, refer to the User Guide that was provided with the printer.

Setting Up the Printer Hardware

1. Place the printer on a solid level surface.



2. Turn the Power switch to off (⏻).
3. Connect the printer to the computer using either the printer's USB or Ethernet connection.
4. Connect the external power supply to the power input port and to an electrical outlet.

Loading the Label Media

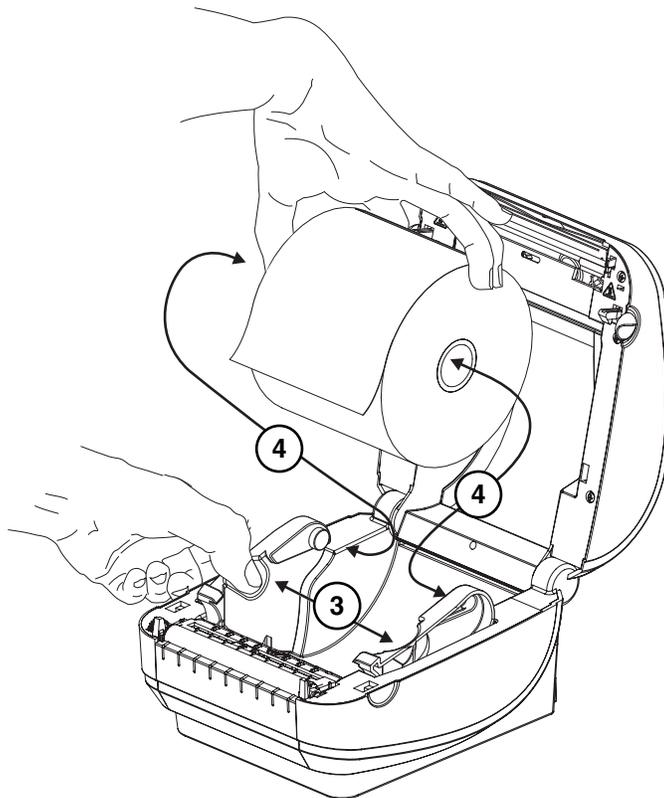
NOTE: Use only Codonics-supplied media.

To order media, contact Codonics Customer Service at:

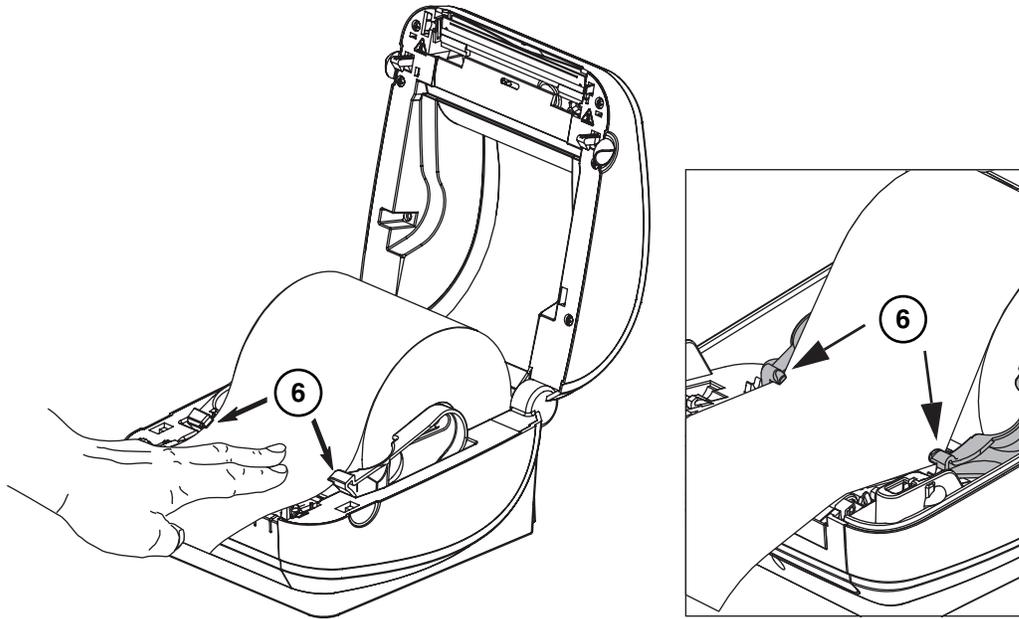
Phone: +1.440.243.1198
Fax: +1.440.243.1334
Toll Free: 800.444.1198 (USA only)
Web: www.codonics.com

NOTE: For detailed instructions about loading label media in the printer, refer to the User Guide that was provided with the printer.

1. Pull the printer release latches toward the front of the printer and then lift the cover.
2. Unpack the label media roll.

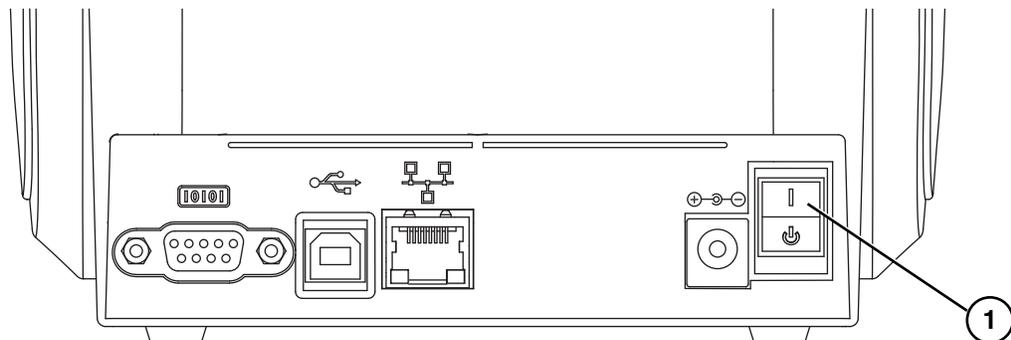


3. Pull the media guides open.
4. Place the media roll on the roll holders.
5. Release the media guides.



6. Pull the label media through the media guides.
7. Close the top cover until it snaps closed.

Installing the Printer Software



1. Turn the printer power switch to on (I).
2. Load the printer software disc into the computer.
3. Run the printer setup software: ZebraSetupUtilities and ZebraDesigner.

Setting Up the Scanner

Connecting the Scanner to the Computer

1. Connect the scanner USB cable to the computer.
2. Install the scanner software on the computer.

For more information about connecting the scanner to the computer, refer to the Quick Start Guide that was provided with the scanner.

Configuring the Scanner

For instructions about how to configure the scanner, refer to the Codonics Container Labeling System Barcode Scanner Configuration Technical Brief that is provided with the scanner.

Installing CLS Software

To install the CLS software on the computer, download the CLS install software onto the computer and run the CLS setup application.

Running CLS for the First Time

When running the CLS application for the first time, a license key is required to activate the application.

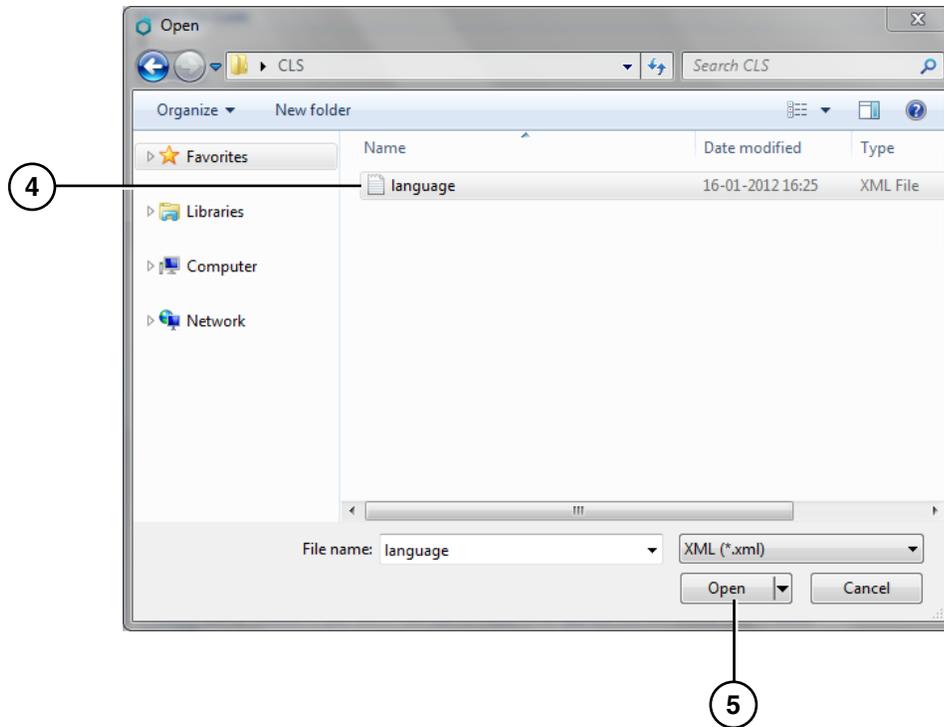
NOTE: Once installed on a computer, the license key cannot be transferred to another computer.



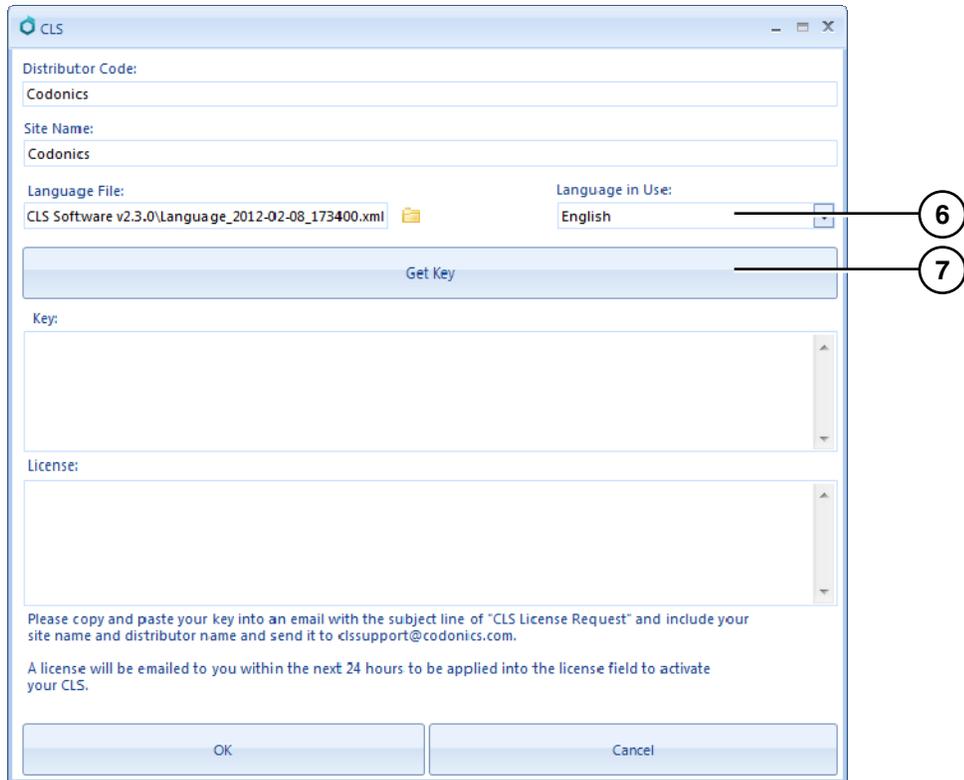
1. Double-click the CLS icon or select the CLS application from the Start menu.

A screenshot of the CLS application window. The window title is "CLS". It contains several input fields: "Distributor Code:", "Site Name:", "Language File:" (with a folder icon), and "Language in Use:" (a dropdown menu). Below these is a "Get Key" button. There are also "Key:" and "License:" text areas. At the bottom, there are "OK" and "Cancel" buttons. Two callouts are present: callout "2" points to the "Distributor Code:" and "Site Name:" fields, and callout "3" points to the "Language File:" folder icon. Below the input fields, there is a paragraph of text: "Please copy and paste your key into an email with the subject line of 'CLS License Request' and include your site name and distributor name and send it to clsupport@codonics.com. A license will be emailed to you within the next 24 hours to be applied into the license field to activate your CLS."

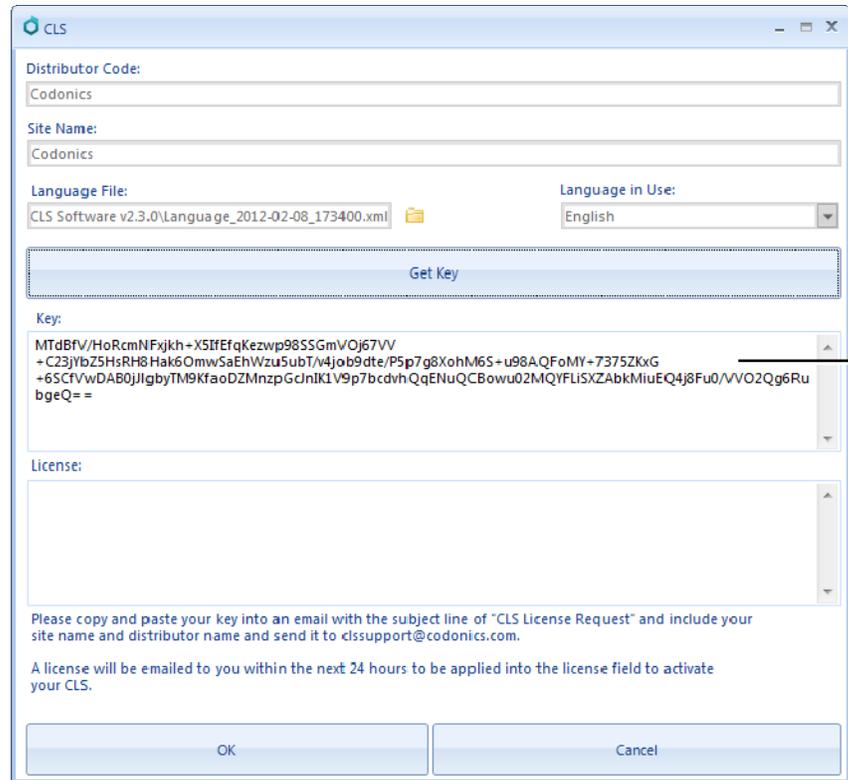
2. Enter the distributor code and site name.
3. Click the Language File folder icon.



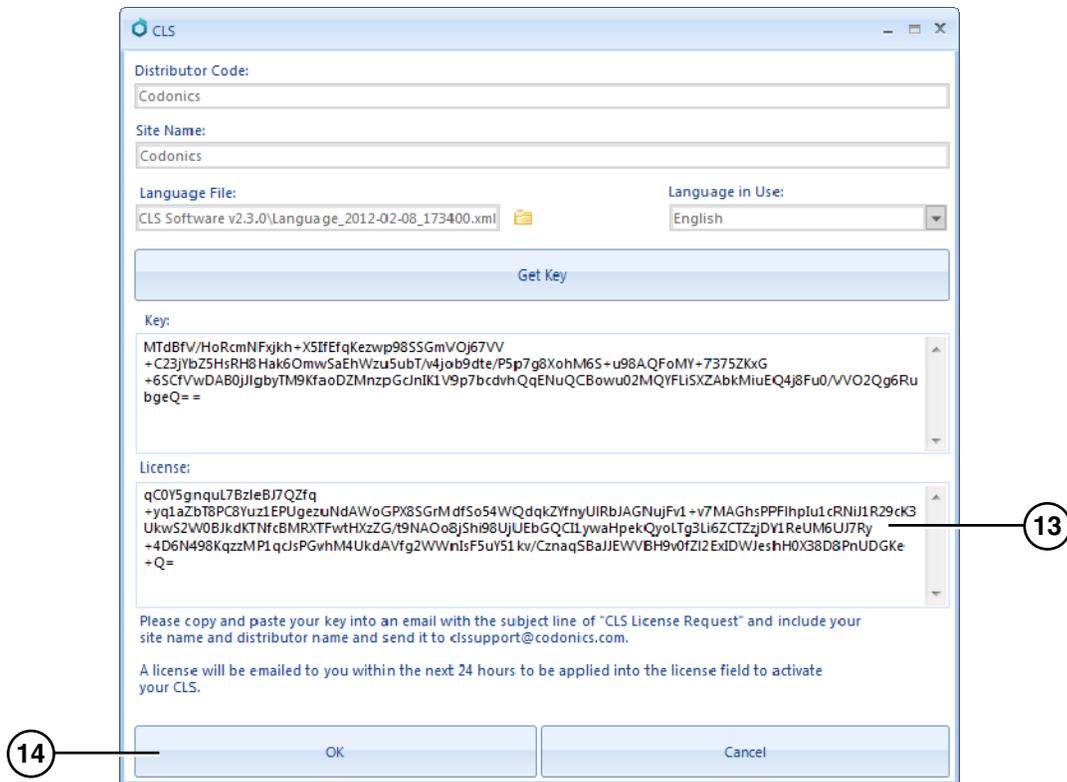
4. Find the Language.xml file, which is located with the CLS setup executable file.
5. Click the Open button.



6. Select the language to be used.
7. Click the Get Key button. The key string is inserted into the Key field.



8. Open an email.
9. Address the email to clssupport@codonics.com.
10. Enter "CLS License Request" in the email Subject field.
11. Include your distributor's code and the site name in the email body.
12. Copy and paste the key string in the Key field of the CLS window into the email body and send the email.



13. When you receive the reply email, cut and paste the license number into the License field of the CLS window.

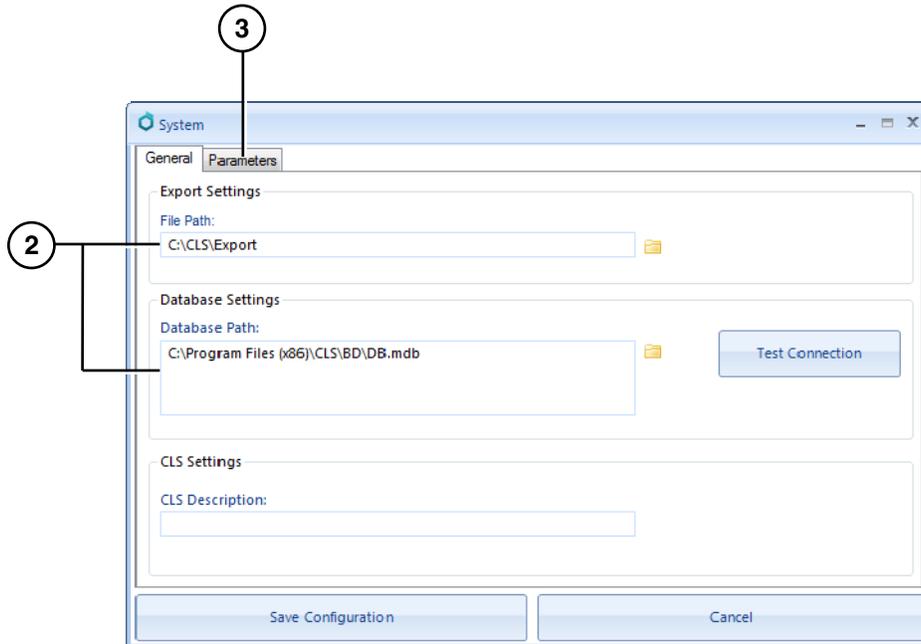
14. Click the OK button to activate the CLS application.



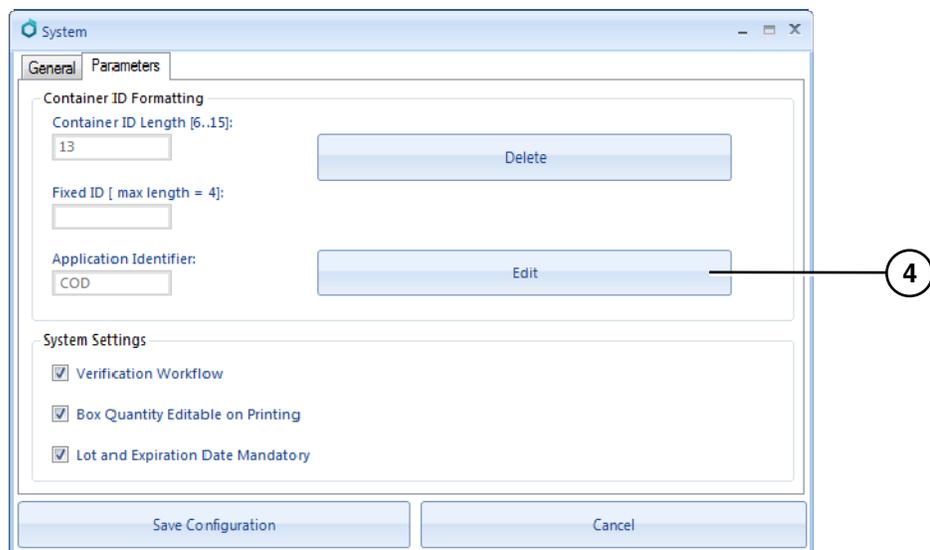
15. Click the OK button to close the confirmation message dialog box. The CLS application opens and the System window displays.

Configuring CLS

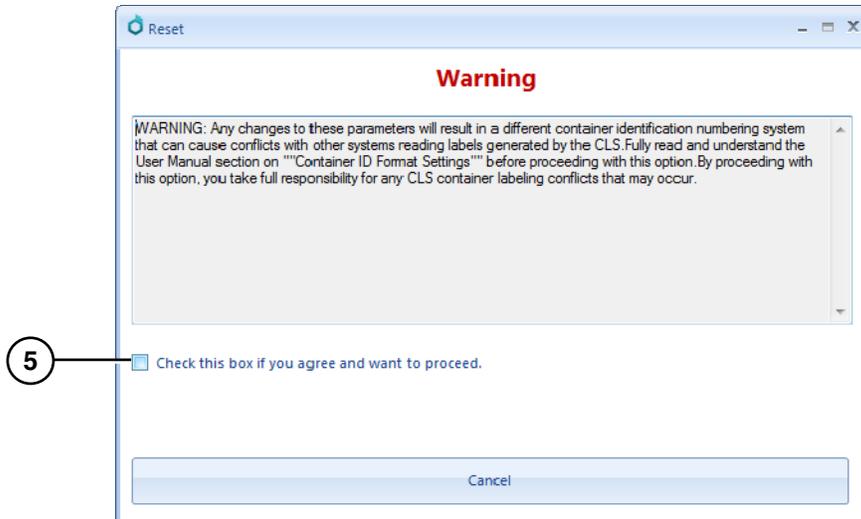
1. If the System window is not already displayed, on the Settings menu, click System.



2. On the General tab, leave the default settings.
3. Go to the Parameters tab.

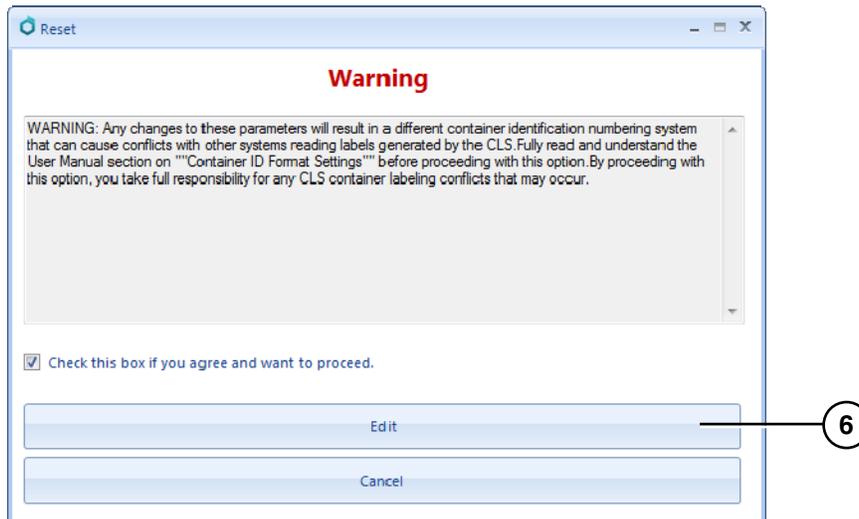


4. If the default Container ID settings must be changed, click the Edit button. A warning message about changing the Container ID format displays.

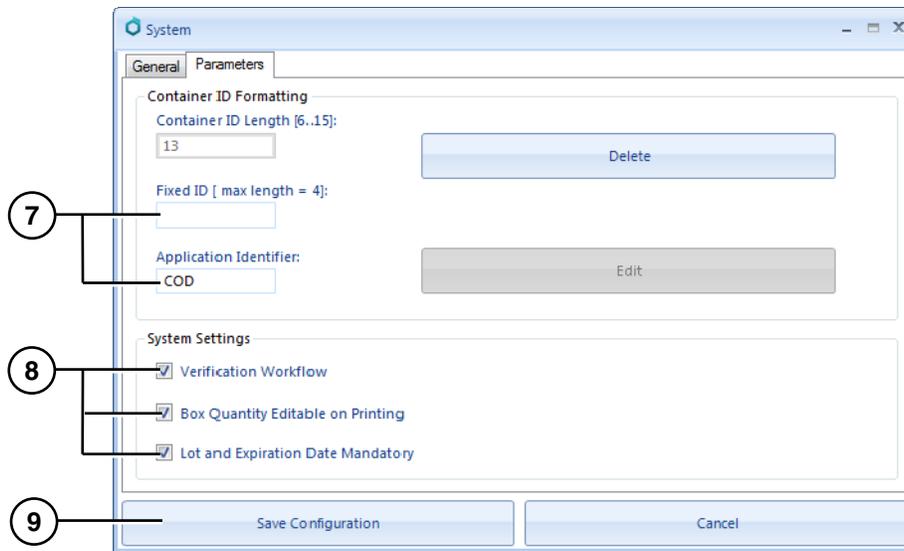


WARNING: It is critical that the Container ID (CID) format settings are correct for your locale. Refer to “Overview of Container ID Formatting for Drug Containers” in the CLS User’s Manual for important details about determining the appropriate Container ID format to be used.

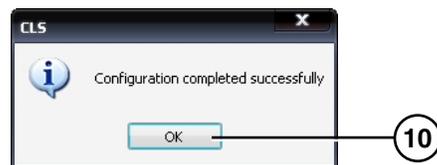
5. To proceed, click the agreement check box.



6. Click the Edit button. The Container ID Formatting fields are enabled for editing.

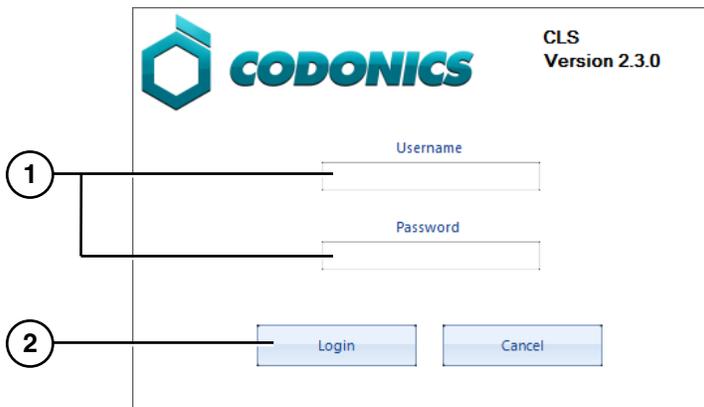


7. Make the necessary changes to the Container ID Formatting fields.
8. Optionally, change the System Setting options from their default selections. For more information about the System Settings options, refer to the CLS User's Manual.
9. Click the Save Configuration button.



10. Click the OK button to close the confirmation message dialog box. The Login dialog box displays.

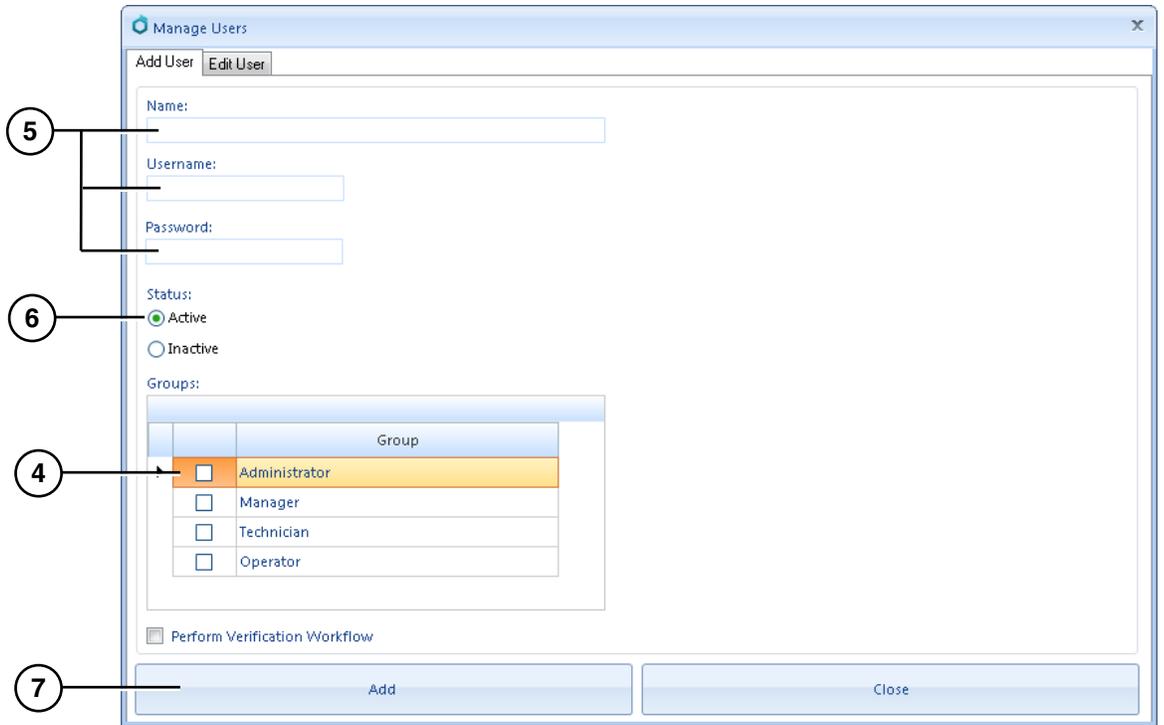
Logging In for the First Time



1. On the Login dialog box, enter the default username and password:
 - Username: admin
 - Password: *ddmm*, where *ddmm* is today's date and month (for example, the password for September 21 would be "2109").
2. Click the Login button.

The CLS application window displays.
3. On the Manage menu, click Users.

NOTE: The default admin user will not be available the next time you log in, so you must create a user account for the administrator.



4. Select the Administrator group.
5. Enter a name, username, and password for the administrator user account.
6. Select the Active status option.
7. Click the Add button.



8. Click the OK button to close the confirmation message dialog box.
9. Create additional users as needed. Assign them to the appropriate Group options. For more information about the CLS application functions to which each Group has access, refer to the CLS User's Manual.

Concentration Values and Routes

CLS is pre-populated with a default set of concentration values and one route, Injectable.

For information about adding and managing concentration values and routes, refer to the CLS User's Manual.

Adding the Printer to CLS

1. On the Manage menu, click Printers.

The screenshot shows a window titled "Printers" with a standard Windows-style title bar. Inside the window, there are two buttons at the top: "Add Printer" and "Edit Printer". Below these buttons are three input fields. The first is labeled "Windows Printer Name:" and is a text box. The second is labeled "Printer Description:" and is a longer text box. The third is labeled "Default Label Layout:" and is a dropdown menu with "Flag (Neck)" selected. At the bottom of the window is a large "Add" button. Five numbered callouts (2-5) are placed to the left of the window, with lines pointing to the "Windows Printer Name:" field (2), the "Printer Description:" field (3), the "Default Label Layout:" dropdown (4), and the "Add" button (5).

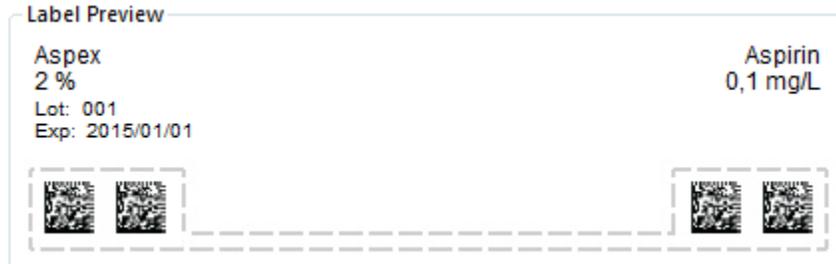
2. Enter the name of the label printer. This is the same name assigned to the printer when you installed its software in Windows.
3. Enter a description that identifies the printer and the label that will be associated with it.

NOTE: For information about adding multiple printers with different layouts, refer to the CLS User's Manual.

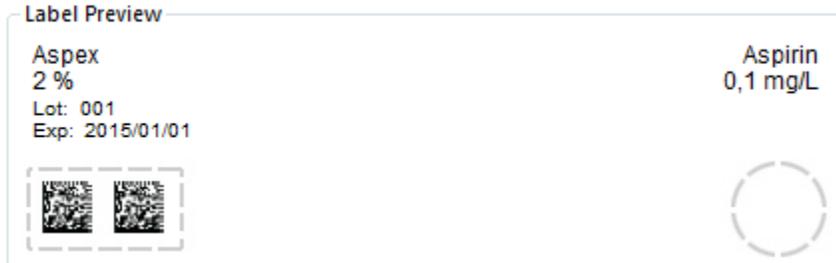
4. Select the default layout to be used when printing container labels to this printer. For a short description and example of the available label layouts, refer to "Available Label Layouts" on the next page.
5. Click the Add button to add the printer.

Available Label Layouts

The Flag label layout, which is best suited for container necks that are ½ in. (1.3 cm) in diameter or less:

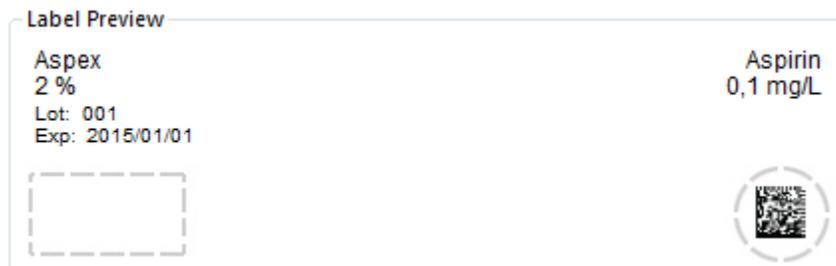


The Rectangle label layout, which is best suited for container seams:



NOTE: Only the rectangle label will be activated when selected to print. The round label is deactivated.

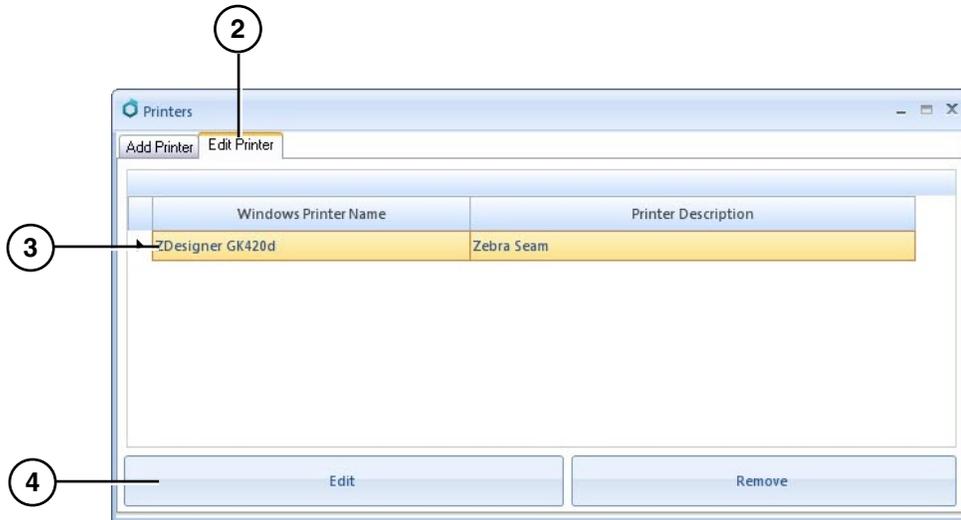
The Round label layout, which is best suited for container bottoms:



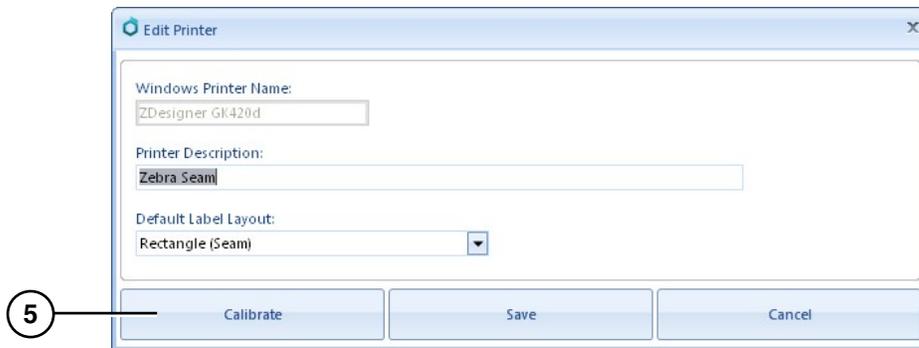
NOTE: Only the round label will be activated when selected to print. The rectangle label is deactivated.

Calibrating the Printer

1. On the Manage menu, click Printers.



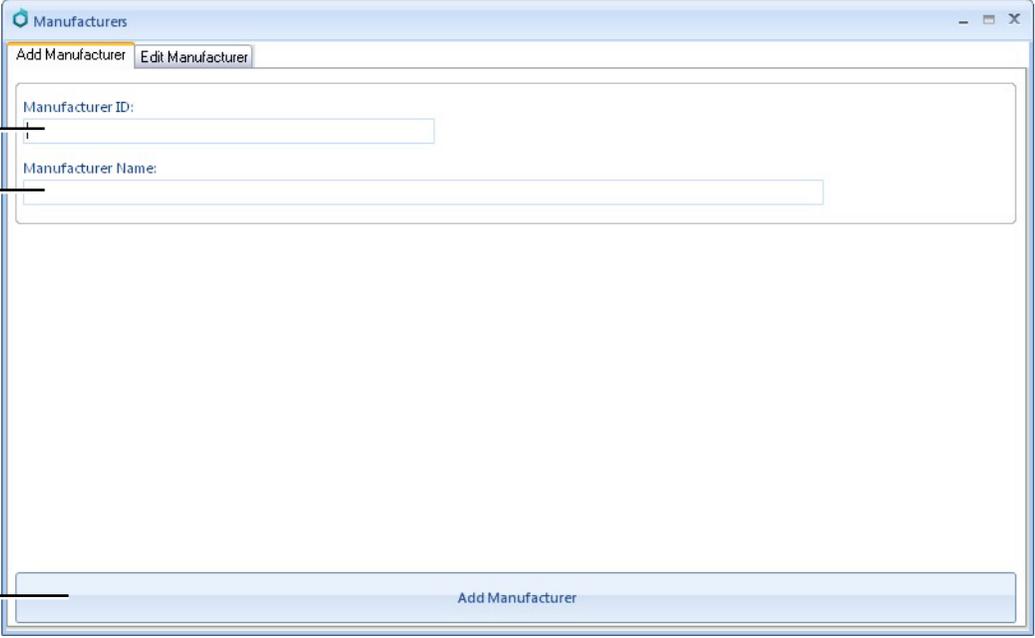
2. Go to the Edit Printer tab.
3. Select the printer.
4. Click the Edit button.



5. Click the Calibrate button.
A print calibration job is sent to the printer.

Adding a Manufacturer

1. On the Manage menu, click Manufacturers.



The screenshot shows a web application window titled "Manufacturers". At the top, there are two tabs: "Add Manufacturer" (which is active) and "Edit Manufacturer". Below the tabs, there is a form with two input fields: "Manufacturer ID:" and "Manufacturer Name:". A circled number "2" with a line pointing to the input fields indicates where to enter the manufacturer information. At the bottom of the form, there is a blue button labeled "Add Manufacturer". A circled number "3" with a line pointing to the button indicates where to click to save the new manufacturer.

2. Enter the manufacturer ID and name.
3. Click the Add Manufacturer button.

Adding a Drug

1. On the Manage menu, click Drugs.

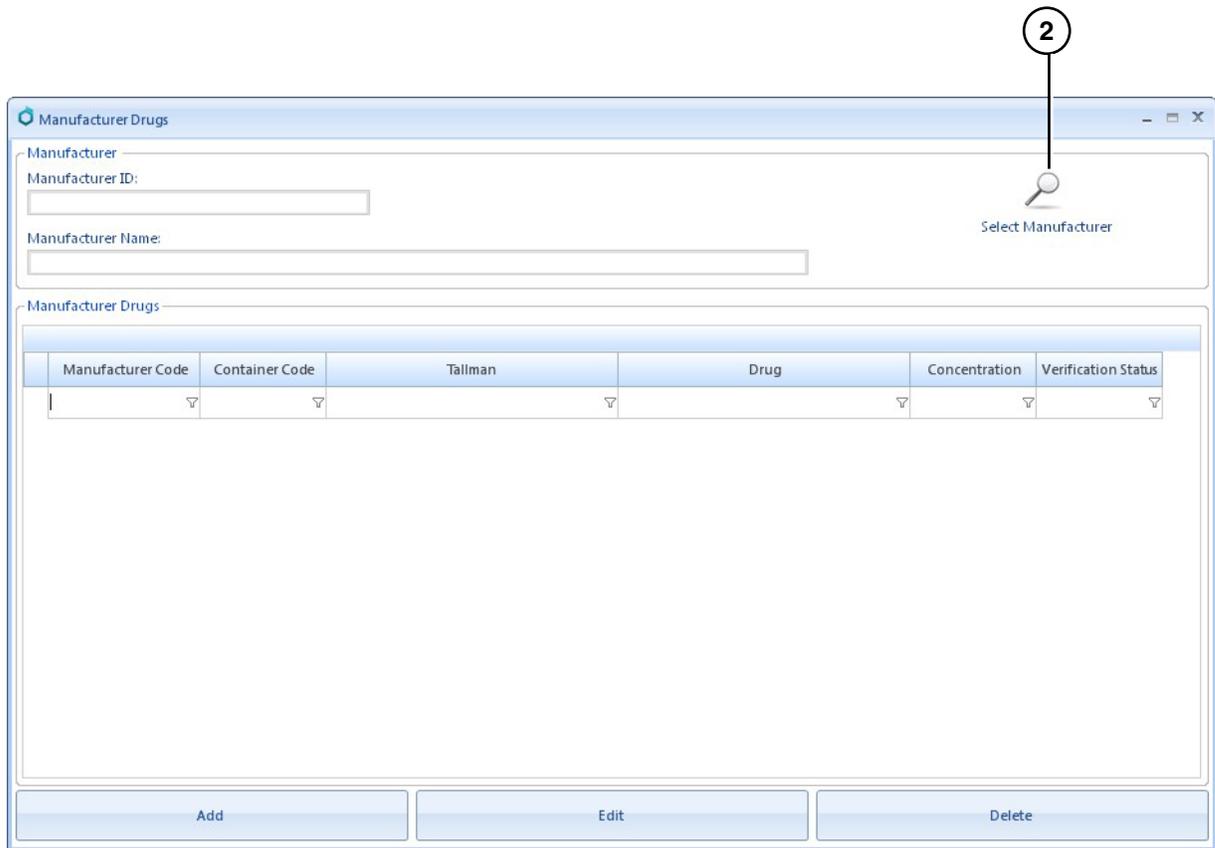
The screenshot shows the 'Add Drug' form with the following fields and controls:

- Container Code:** A text input field with an 'Auto Assign' button to its right.
- Tallman:** A text input field.
- Drug 1:** A text input field.
- Concentration of Drug 1:** A dropdown menu.
- Drug 2 (optional):** A text input field.
- Concentration of Drug 2 (optional):** A dropdown menu.
- Route:** A dropdown menu.
- Default Printer:** A dropdown menu.
- Workflow Approval:** A checkbox.
- Add:** A button at the bottom right.

2. Enter the container code.
You can click the Auto Assign button to automatically enter a container code. The code will be in the Container ID format configured in the System settings.
3. Optionally, enter a Tallman name for the drug.
4. Enter a description for the drug.
5. Enter a concentration for the drug.
6. If the drug is a combination drug, enter the description and concentration for the second drug.
7. Select the route for the drug.
8. Select the default printer for the drug label.
9. Optionally, select the Workflow Approval check box. If selected, administrator approval will be required for each label print job for this drug.
10. Click the Add button to add the drug.

Associating a Drug to a Manufacturer

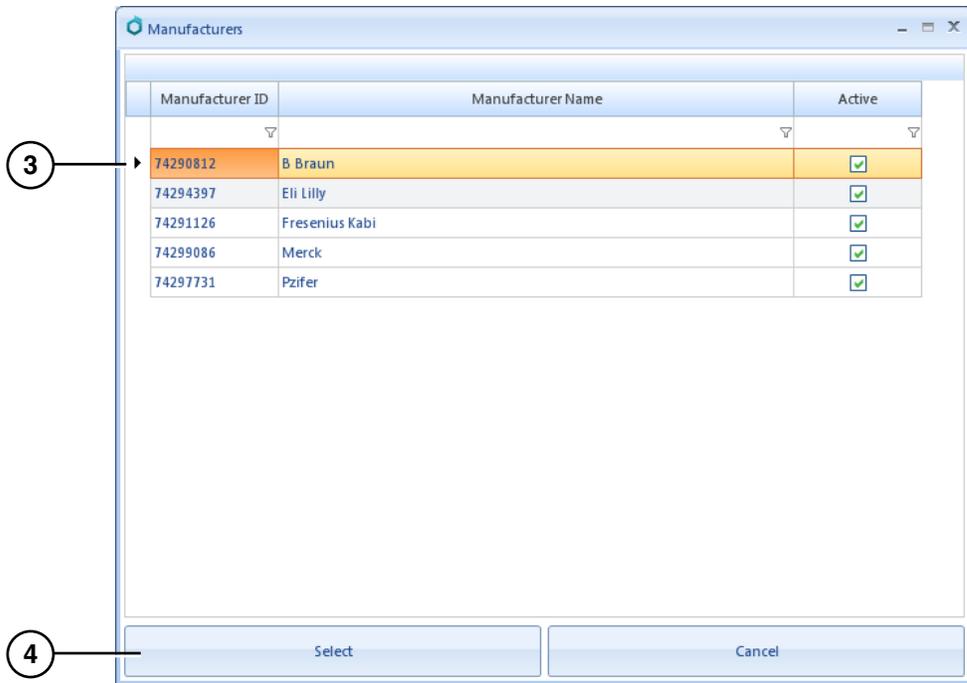
1. On the Manage menu, click Manufacturer Drugs.



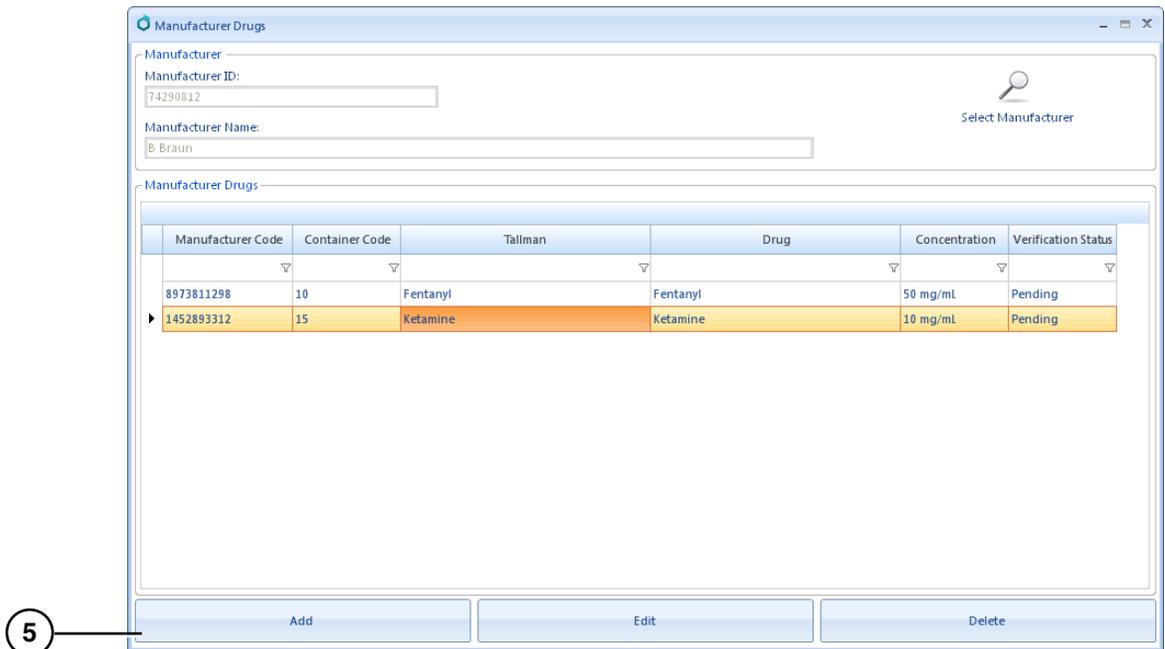
The screenshot shows a software window titled "Manufacturer Drugs". It contains two input fields: "Manufacturer ID:" and "Manufacturer Name:". To the right of these fields is a button with a magnifying glass icon and the text "Select Manufacturer". A circled number "2" is positioned above the button, with a line pointing to it. Below the input fields is a table with the following columns: "Manufacturer Code", "Container Code", "Tallman", "Drug", "Concentration", and "Verification Status". Each column has a small downward arrow icon. At the bottom of the window are three buttons: "Add", "Edit", and "Delete".

Manufacturer Code	Container Code	Tallman	Drug	Concentration	Verification Status
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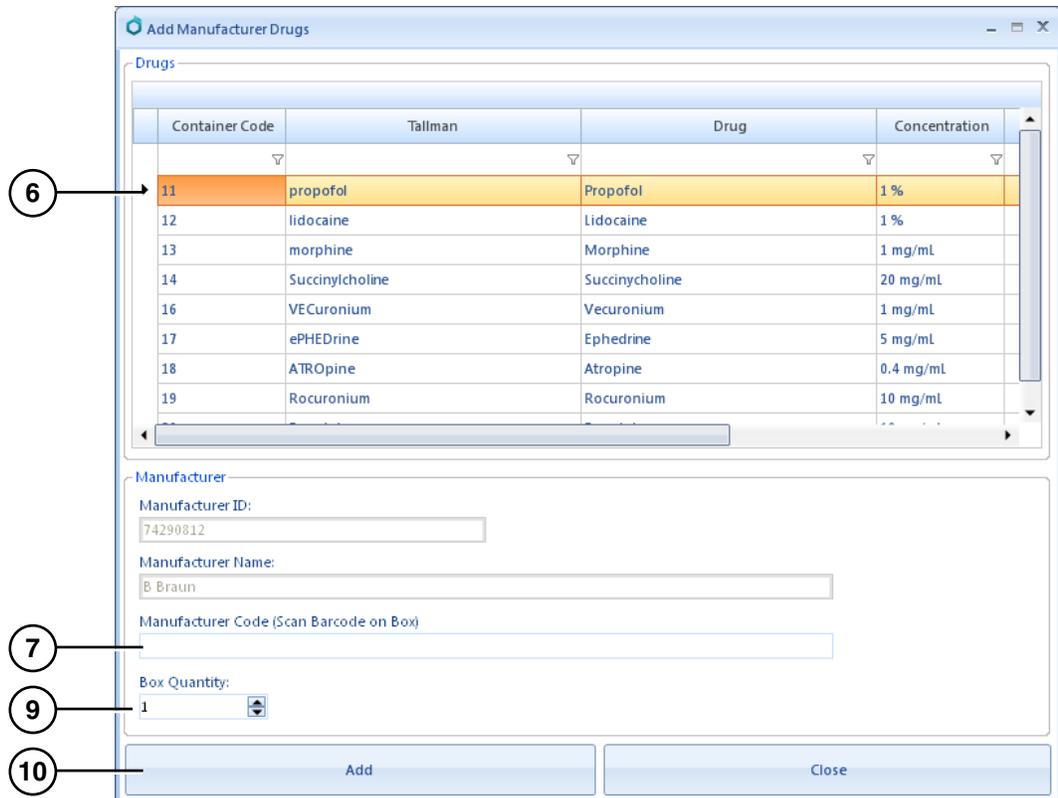
2. Click the Select Manufacturer button.



3. Select the manufacturer.
4. Click the Select button.



5. Click the Add button.



6. Select the drug in the list.
7. Click the Manufacturer Code field.
8. Scan the manufacturer's barcode that is printed on the drug box.
9. Enter the quantity of drug containers that are supplied in the box.
10. Click the Add button to complete the association.

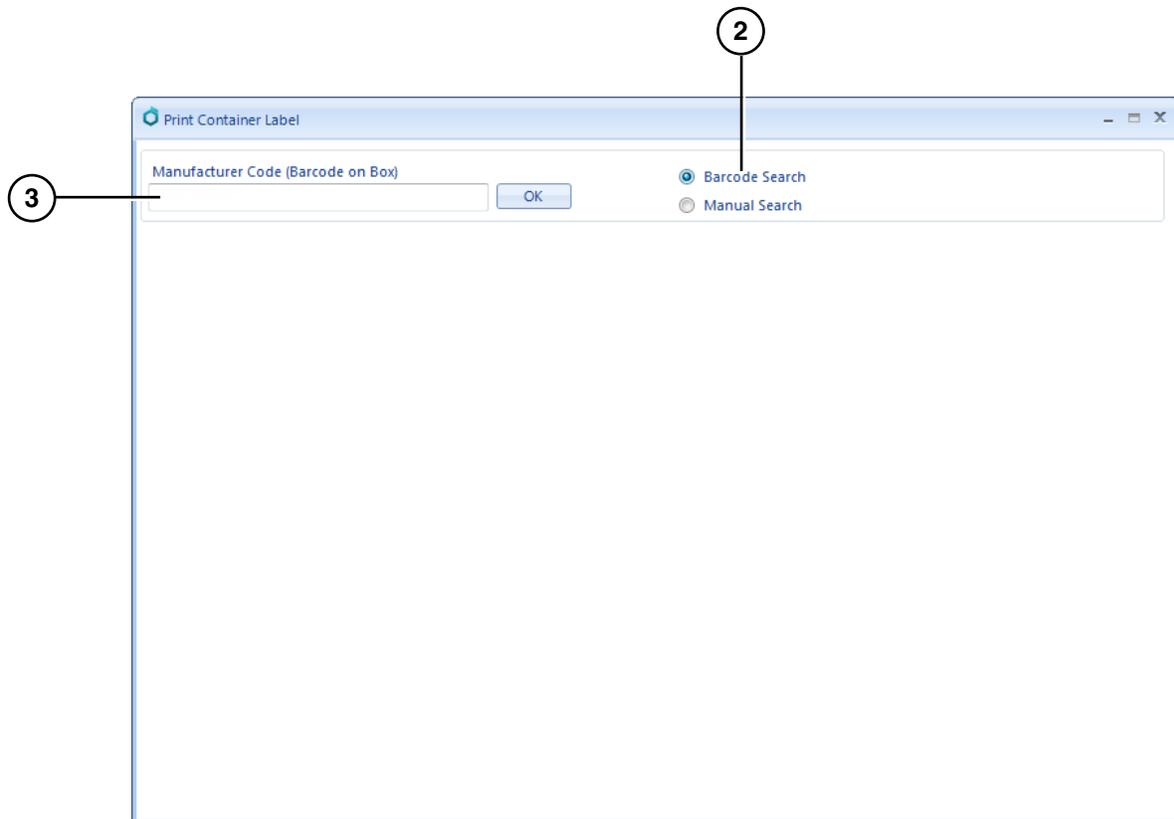


11. Click the OK button to close the confirmation message dialog box.

Printing Container Labels

The following procedure explains how to print a container label by scanning the manufacturer barcode. For other container label printing methods, refer to the CLS User's Manual.

1. On the Label menu, click Print Container Labels.



2. Select the Barcode Search option.
3. Click the Manufacturer Code field.
4. Scan the manufacturer's barcode that is printed on the drug box.

Print Container Label

Enter Drug: Succinylcholine [OK] Barcode Search Manual Search

Manufacturer ID: 4

Manufacturer Name: Merck [Select Manufacturer]

Container Code: 1

Tallman: succINYLCHOLINE

Drug 1: Succinylcholine

Concentration of Drug 1: 20 mg/mL

Drug 2:

Concentration of Drug 2:

Route: INJECTABLE

Lot and Expiration Date

Lot: 71811981222

Expiration Date: October, 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

Today: 6/26/2012

Confirm and Print Container Labels

5. Confirm that the drug information that displays is correct.

6. If the drug information is correct, click the Confirm and Print Container Labels button.

Printing

Container Code: 1

Tallman: succINYLCHOLINE

Label Preview

Succinylcholine
20 mg/mL
Lot: 71811981222
Exp: 2012/10/26

Printer: Zebra Seam

Quantity: 10

Print Labels Calibrate Cancel

7. Choose the label printer.

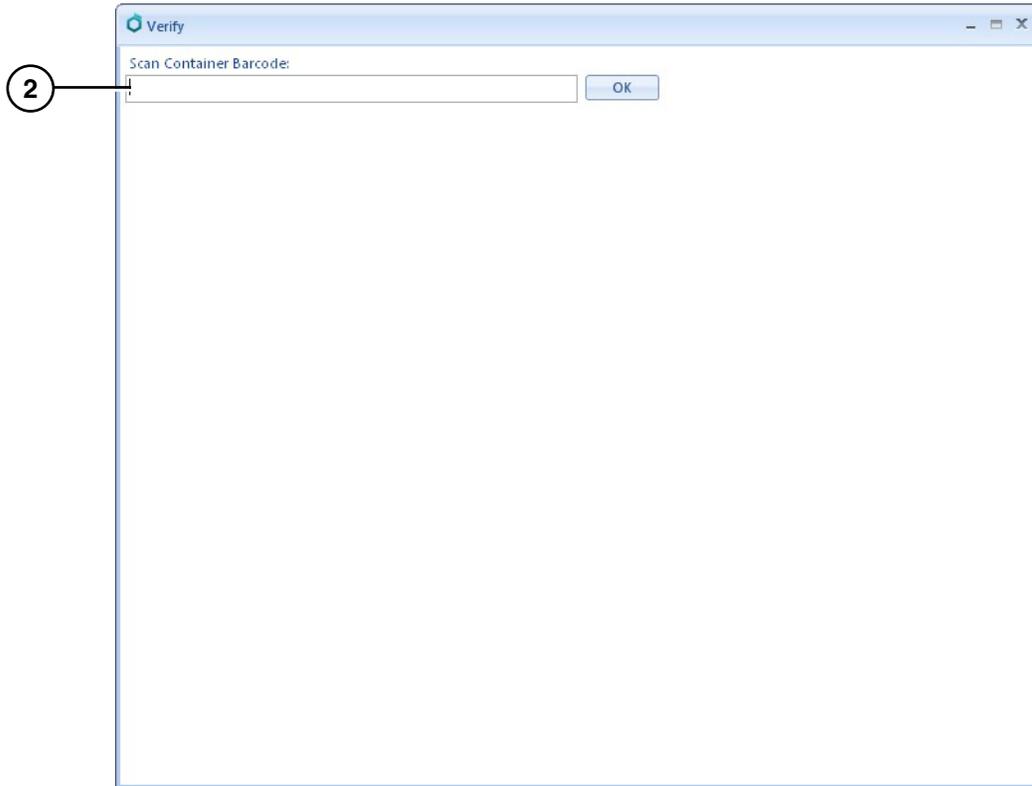
8. Enter the quantity of labels to print.

9. Click the Print Labels button.

Verifying a Container Code

To verify the container code on a printed label:

1. On the Label menu, click Verify Container Code.



2. Click the Scan Container Barcode field.
3. Scan the barcode.

Verify

Scan Container Barcode:

Container Code: 1

Tallman: succiNYLCHOLINE

Drug 1: Succinylcholine

Concentration of Drug 1: 20 mg/mL

Drug 2:

Concentration of Drug 2:

Route: INJECTABLE

Lot: 71811981222

Expiration Date: 2012/10/26

Lot and Expiration Date:

Lot	Expiration Date	Username	Date
71811981222	2012/10/26	admin1	6/26/2012 4:15:06 PM

4

4. Confirm that the displayed container information is correct.

Verifying a Manufacturer Code

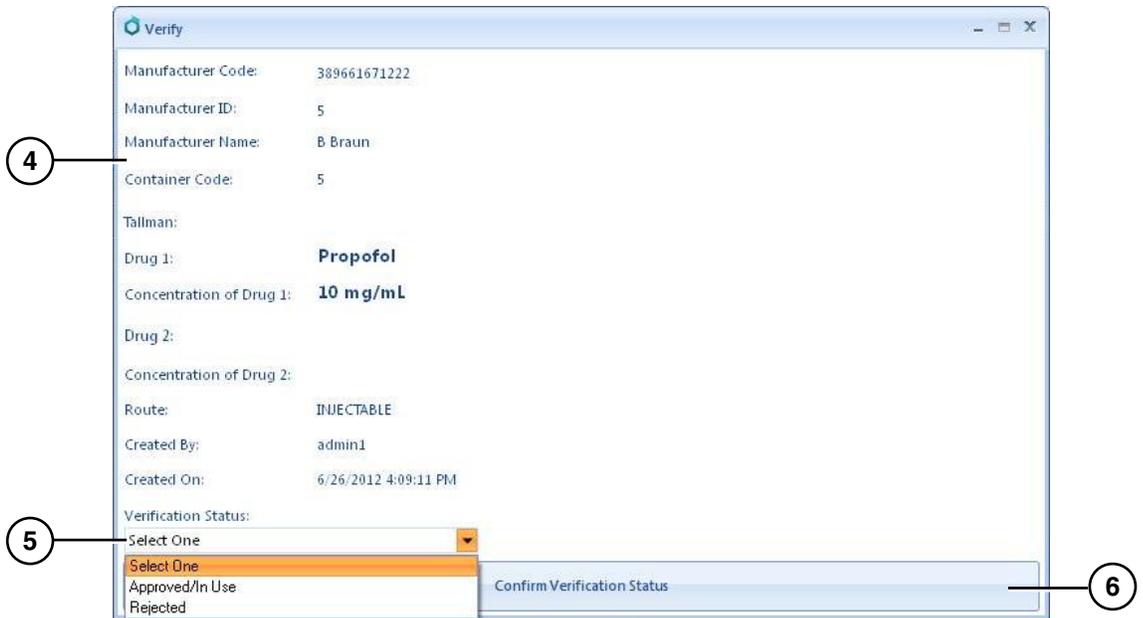
To verify the manufacturer code that was configured for a drug's container:

1. On the Label menu, click Verify Manufacturer Code.

2

Manufacturer ID	Manufacturer	Manufacturer Code	Container Code	Tallman	Drug	Concentration	Created By	Edited By
5	B Braun	389661671222	5		Propofol	10 mg/ml	admin1	
2	Johnson & Johnson	66433426622289	4		Morphine	10 mg/ml	admin1	
4	Merck	2375888454222	1	succiW/L CHOLINE	Succinylcholine	20 mg/ml	admin1	

2. Click the Manufacturer Code field.
3. Scan the barcode.

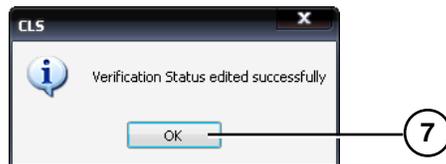


4. Confirm that the displayed manufacturer information is correct.

5. Select the verification status.

NOTE: If the manufacturer information is incorrect and you select the Rejected status option, the manufacturer/drug association will not be available for label printing. The administrator will need to correct the information for review and approval.

6. Click the Confirm Verification Status button.



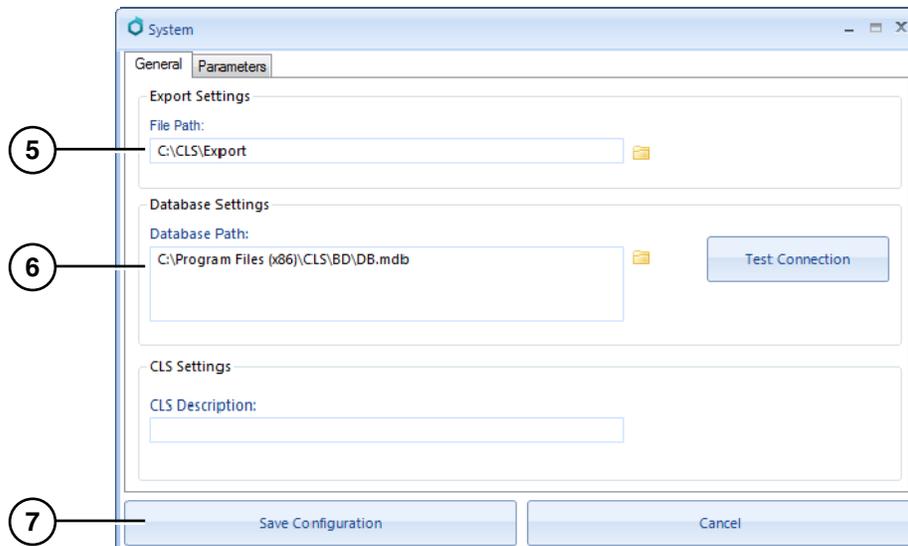
7. Click the OK button to close the confirmation message dialog box.

Using CLS on a Network

CLS clients on the same network can share the same CLS database.

To configure support for CLS clients on a network:

1. In Windows Explorer, create a shared folder on the network.
2. In the shared folder, create the following folders:
 - A folder for the exports
 - A folder for the database
3. Copy the database you want to use to the database folder.
4. On the Settings menu in CLS at each client, click System.



5. Enter the file path for the exports folder.
6. Enter the file path for the database folder.
7. Click the Save Configuration button.

Securing CLS

Backing Up CLS Data

Your CLS data should be backed up frequently, ideally after every major session on your computer. Include your CLS folder (defined in the installation) in your backup list.

Never store your backups on your main hard drive. If you do and your hard drive crashes, your backup files will be lost. Backups of your most important data should not be stored in the same room or, ideally, at the same site as the original.

Protecting CLS Against Malware and Intruders

To protect your CLS data from malware and intruders:

- Install anti-virus and anti-spyware programs from a trusted source.
- Run a scan with your anti-virus/anti-spyware product on a regular basis.
- Update software regularly.
- Use strong passwords and keep them secret.
- Never turn off your firewall.
- Use flash drives cautiously.

Troubleshooting

Problem	Solution
The CLS application cannot be installed or is not running as expected.	Verify that the computer meets the minimum system requirements that are listed in “Minimum System Requirements” on page 3.
The printer will not power on.	Check the external power supply and cable. Check the power switch on the rear panel. Refer to the printer documentation.
The barcode scanner will not power on.	Unplug and reattach the USB connection to the computer. Refer to the scanner documentation.
The barcode scanner will not read barcodes.	Configure the scanner. Refer to “Configuring the Scanner” on page 7.
Login fails.	Verify the user name. Verify the password. Verify that the user account is active. Verify that at least one user account is configured to be an administrator account.
A barcode search result is the message “The Drug was not found in local database.”	Verify that you are scanning the manufacturer barcode and not another type of barcode. On the Manage menu, click Manufacturer Drugs. Select the manufacturer of the drug and search in the first column (ManufacturerCode) of the drug list for the manufacturer code. If the code does not exist, click the Add button and associate the code with the respective drug.
A manual search result is the message “The Drug was not found in local database, Create Drug Now?”	Make sure that the search is being performed using the description of the drug. On the Manage menu, click Drugs. Go to the Edit Drug tab and search in the Drug column for the description of the drug. If the drug does not exist, add the drug. Refer to “Adding a Drug” on page 22.
The Manual Search option is disabled.	The user must belong to the Administrator, Manager, or Technician group to have access to the Manual Search feature.
The user does not have permission to confirm a drug when clicking the Confirm and Print Container Labels button.	The user must belong to the Administrator or Manager group to be able to confirm drugs.
The CLS application cannot print labels.	Make sure the printer selected for printing is configured with the same name in Windows. Check the printer external power supply and cables. Check that the printer is online.

Problem	Solution
There is a blank label between printed labels.	In the printer Properties options, make sure that the size of the label is set to 3 in. (7.6 cm) wide by 2 in. (5.1 cm) high. Calibrate the printer. Refer to “Calibrating the Printer” on page 19. For more information, refer to the printer documentation.
When using the Auto Assign Container Codes feature, a message indicates that there are no more codes available for use.	Contact Codonics Technical Support (+1.440.243.1198).
When verifying a Container code, a message indicates that the drug was not found in local database.	Contact Codonics Technical Support (+1.440.243.1198).
When attempting to verify a manufacturer code, the Verify Manufacturer Code option does not appear on Label menu.	In the System settings, make sure that the Verification Workflow option is selected. In the user’s account settings, make sure that the Perform Verification Workflow option is selected. For more information about these settings, refer to the CLS User’s Manual.

NOTE: For additional troubleshooting issues, refer to the Container Labeling System User’s Manual.

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