

McLaneTerm

User Manual

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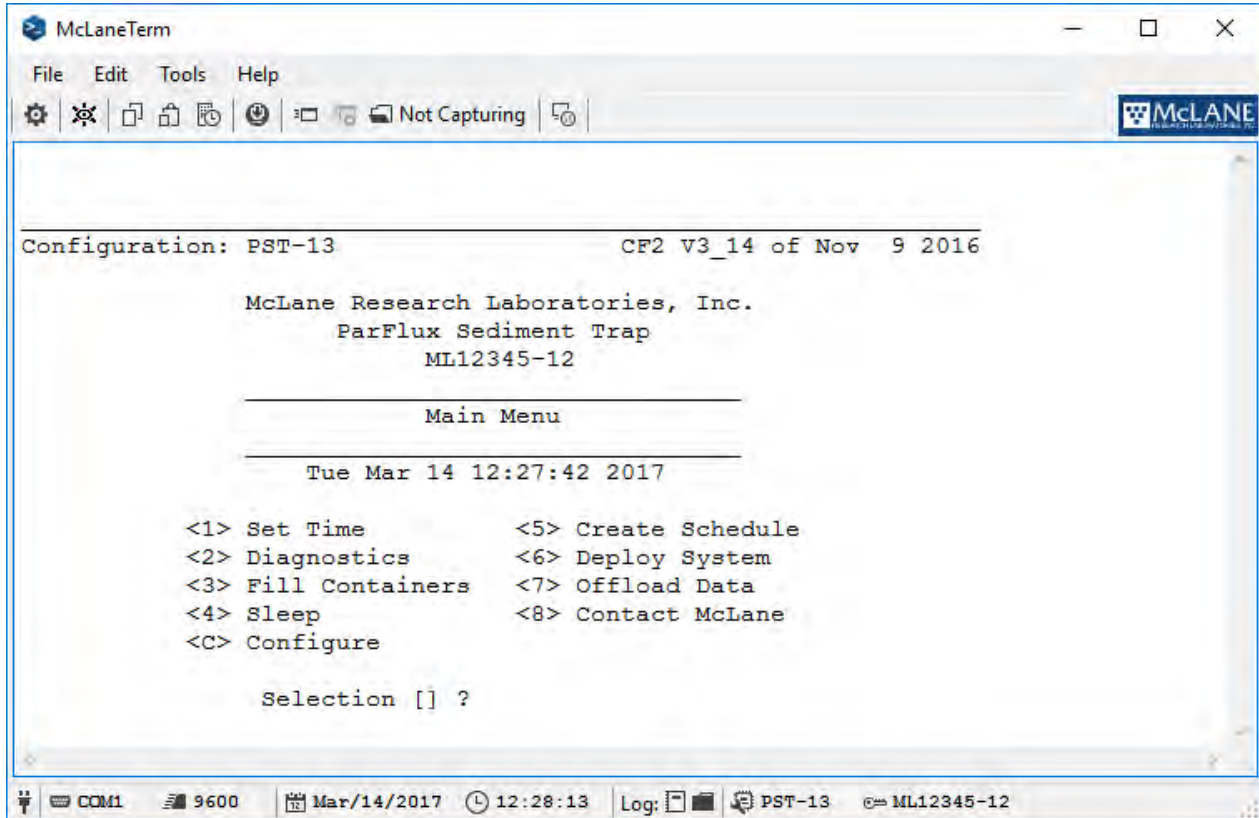
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Table of contents

Getting Started	4
Installing	5
Launching	7
Uninstalling	8
Understanding the UI	9
Settings	11
Using the Terminal Window	13
Entering text	13
Copying and Pasting Text	14
Using Commands	14
Wake-up	14
Paste Date/Time	15
Firmware Update	16
Creating a Capture File	18
Start Capture	19
Stop Capture	20
Open Capture	20
Session Log	21


Getting Started

McLaneTerm is a terminal emulation program used to communicate with serial McLane instruments. With McLaneTerm, you can interact with your McLane instrument's text based interface while it is connected to a serial port on your computer.



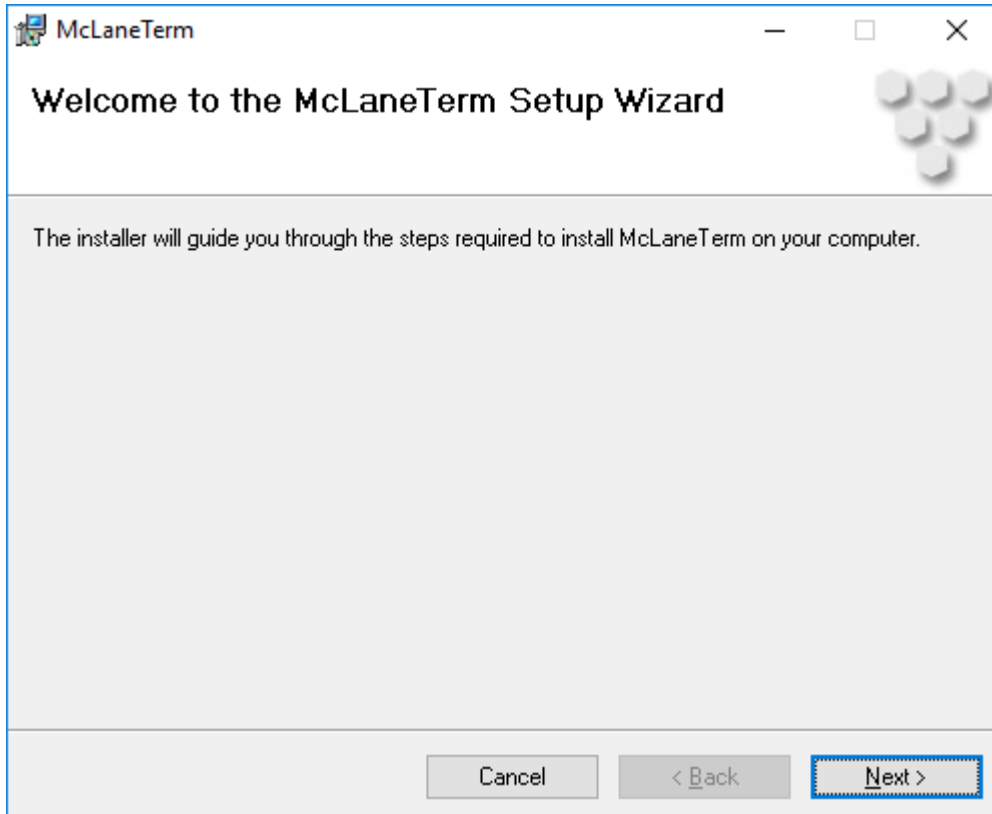
Installing

McLaneTerm is a multiplatform application that runs on Microsoft Windows.

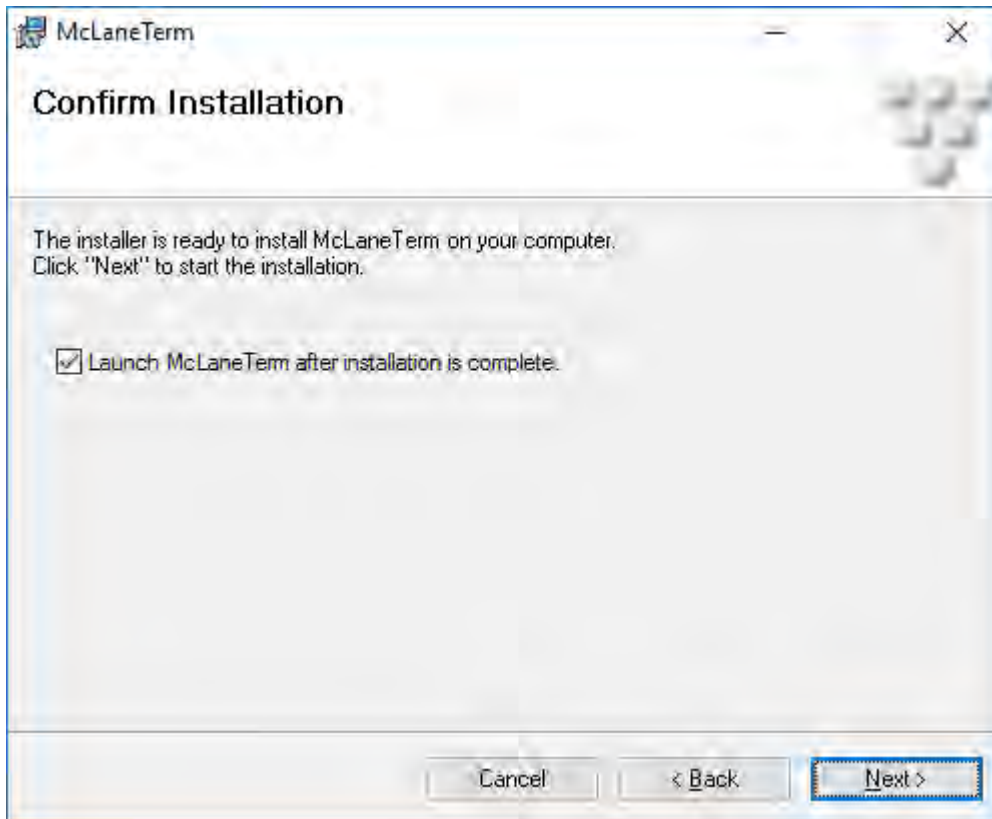
To install McLaneTerm, double-click the file:  McLaneTerm.msi

The installer program will guide you through the setup process with the following screens:

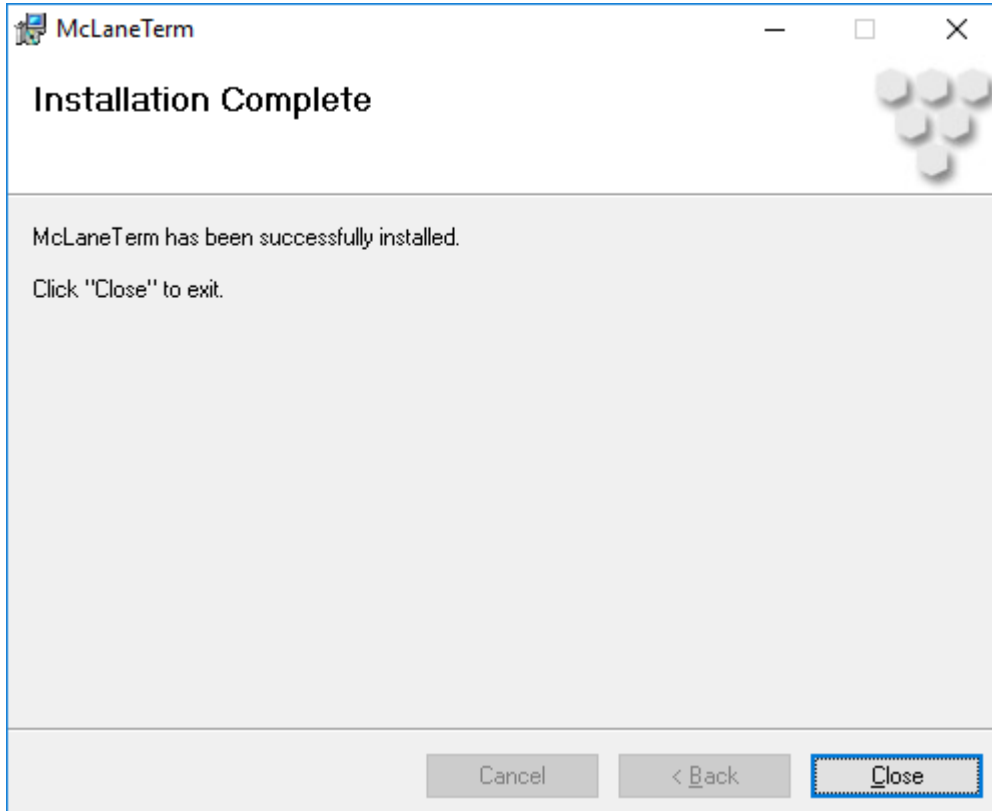
1. Welcome Screen. Click Next to proceed.



2. Confirm Installation. Use the checkbox to determine if McLaneTerm should be launched after installation.



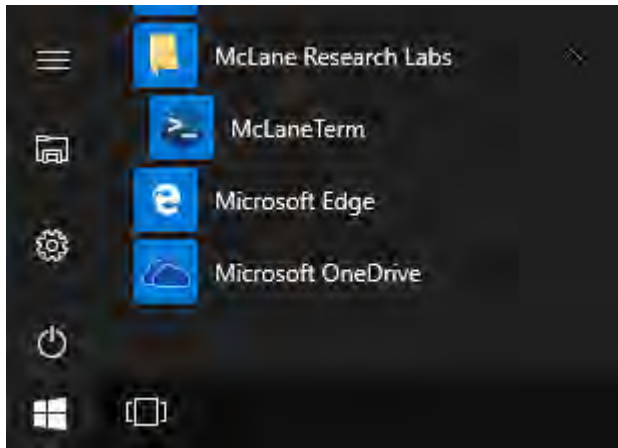
3. Installation Complete. Click Close to finish the setup process.



Launching

After installation is complete, McLaneTerm can be accessed from the operating system's interface.

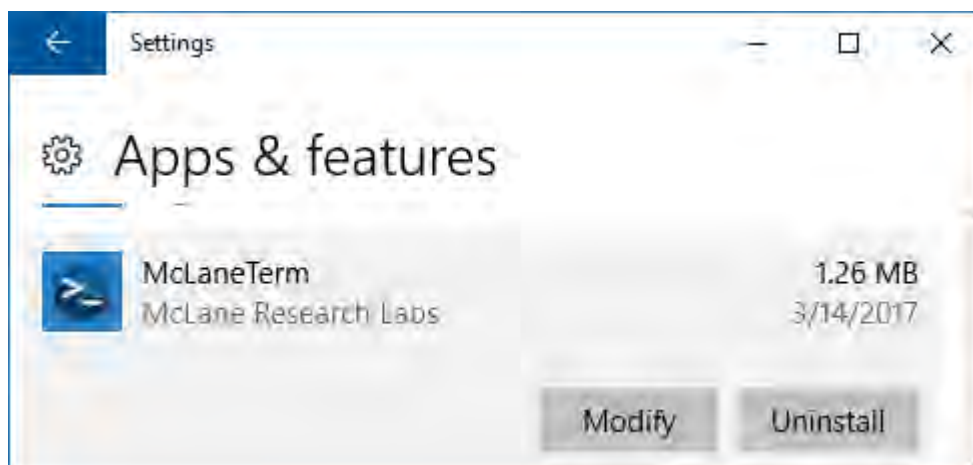
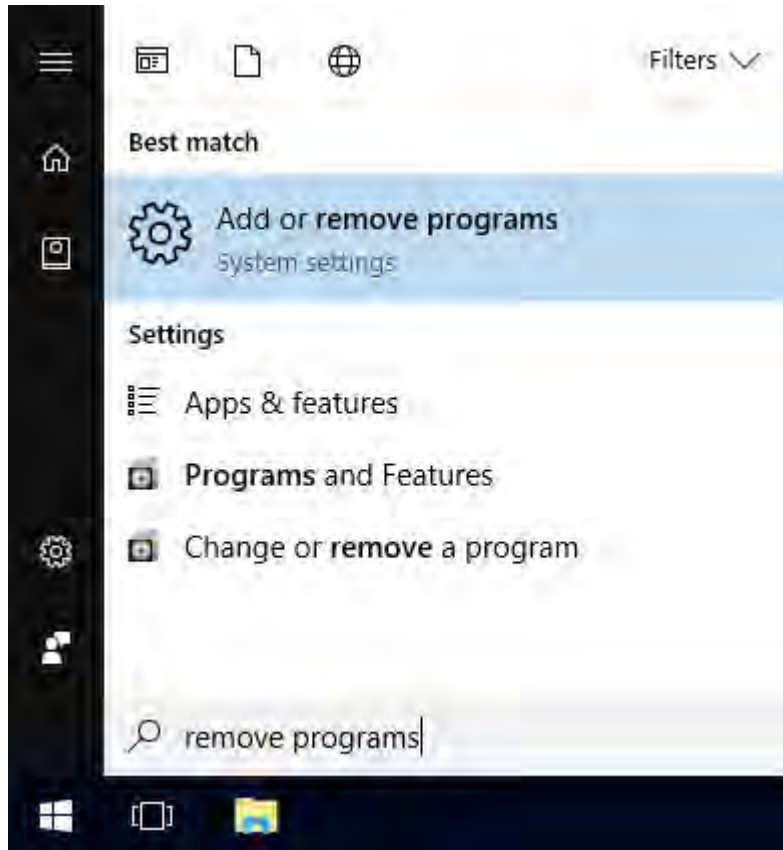
Open McLaneTerm using the desktop shortcut or start menu link created during installation.



Uninstalling

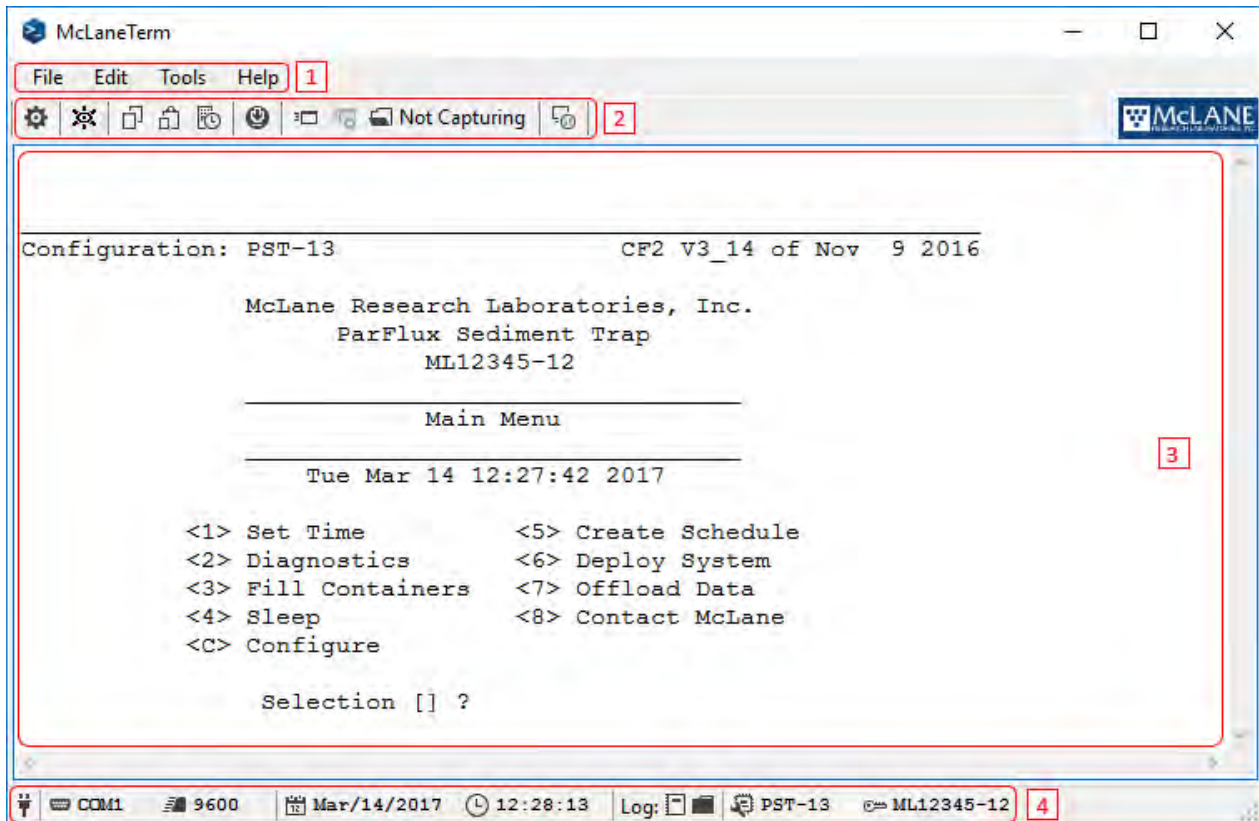
McLaneTerm can be easily removed from the operating system.

To remove McLaneTerm from your computer, open the Add or Remove Programs Link in the Control Panel and click the Uninstall button.



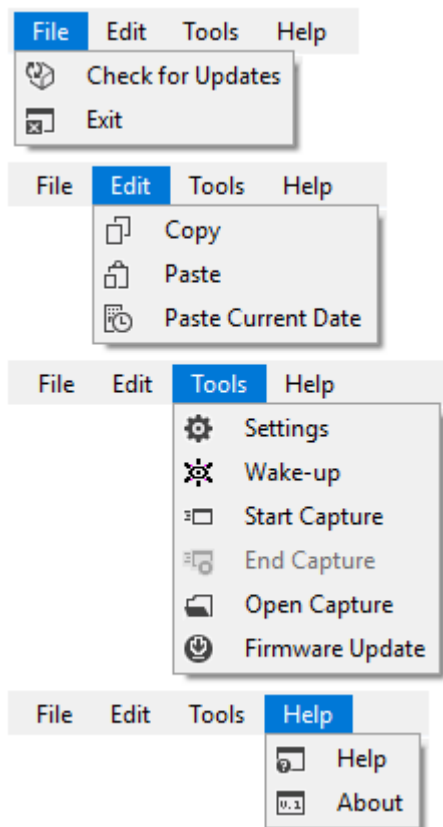
Understanding the UI

The main window in McLaneTerm has 4 sections (Main Menu, Toolbar, Terminal Window and Status Bar).



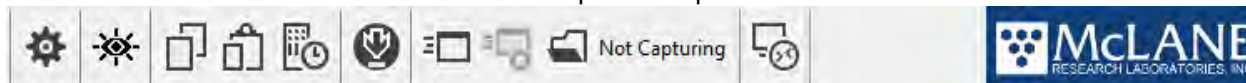
1. Main Menu:

All McLaneTerm functions can be accessed from the Main Menu and sub menus.



2. Toolbar:

The toolbar is located under the Main Menu and provides quick access to most functions.

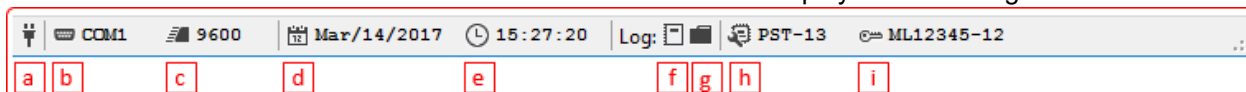


3. Terminal Window:

The Terminal Window is the serial communication interaction portion of McLaneTerm. All text and control characters entered here will be sent to the connected instrument and all serial data returned from the connected instrument will be displayed.

4. Status bar:

The Status Bar is located at the bottom of the user interface and displays the following information:



a. Connection Status. Displays when serial communication is established.

b. Serial Port Name.

c. Baud Rate.

d. Instrument Date. Displays the date reported by the connected instrument when available.

e. Instrument Time. Displays and counts the time reported by the connected instrument when available.

f. Open Session Log file. Click to open the text log file for the current session.

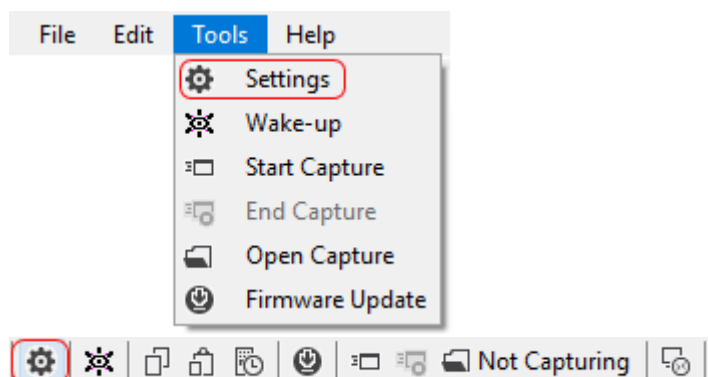
g. Open Log folder. Click to display all session log files.

h. Instrument Configuration. Displays the configuration string reported by the connected instrument when available.

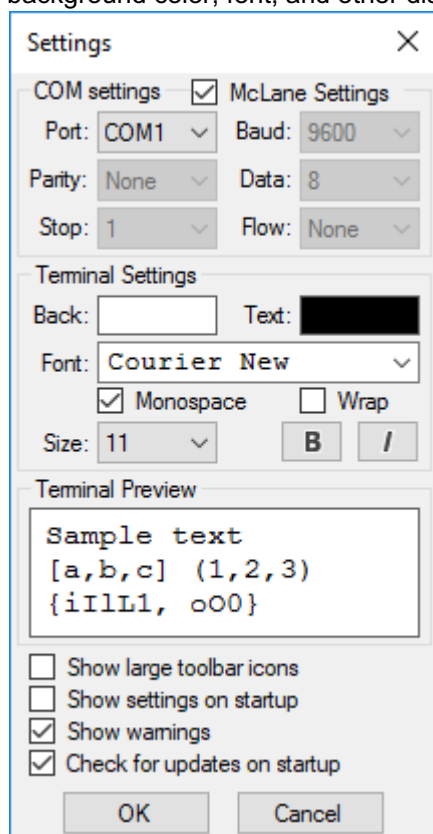
i. Instrument Serial Number. Displays the serial number reported by the connected instrument when available.

Settings

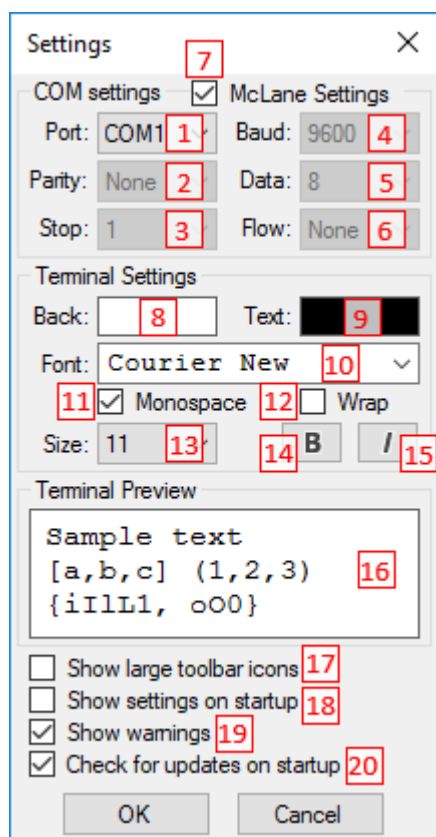
McLaneTerm settings are controlled from a centralized window which can be accessed from the [Tools Menu](#) or the [Toolbar](#):



Clicking the Settings button will display the Settings Window as shown next. Terminal Settings change background color, font, and other display properties:



The following options are available and can be controlled from the Settings Window:



1. Serial port name. All installed serial ports will be displayed in the drop-down.
2. Serial parity control. The drop-down will contain: None, Odd and Even.
3. Serial Stop Bits. The drop-down will contain: 1 and 2.
4. Serial Baud Rate. The drop-down will contain: 1200, 2400, 9600, 19200, 38400, 57600, 115200.
5. Serial Data Bits. The drop-down will contain: 7 and 8.
6. Serial Flow Control. The drop-down will contain: None, Hardware and Software.
7. Serial McLane Settings. This option resets and locks all serial settings to the McLane instrument default. The baud rate can still be changed.
8. Terminal Window Background Color. Click to open a color picker to choose the terminal window background color.
9. Terminal Window Text Color. Click to open a color picker to choose the terminal window text color.
10. Terminal Window Font. The drop-down will contain samples of the installed fonts for the terminal window.
11. Terminal Window Monospace Font Filter. When checked, filters the Font drop-down to only display the installed mono-spaced fonts.
12. Terminal Window Text Wrap. When checked, wraps overflowed horizontal text on the terminal windows to the next line.
13. Terminal Window Font Size.
14. Terminal Window Font Modifier: Bold.
15. Terminal Window Font Modifier: Italic.
16. Terminal Window Preview. Displays the selected visual settings as they would show in the terminal window.
17. Show Large Toolbar Icons.
18. Show Settings on Startup. When checked, displays the settings window every time McLaneTerm is launched.
19. Show Warnings. Enables system warnings when checked.
20. Show for Updates on Startup.

In order to save changes made in the Settings window, you must click the OK button. Clicking Cancel will return all settings to their previous states.

All settings controlled from the Settings window are saved across sessions, along with the main window size and position.

Using the Terminal Window

All text entered into the Terminal window is forwarded immediately to the connected instrument using the serial communication parameters defined in the [Settings](#) window. McLaneTerm does not echo typed characters in the Terminal Window and only displays information streamed by the connected device.

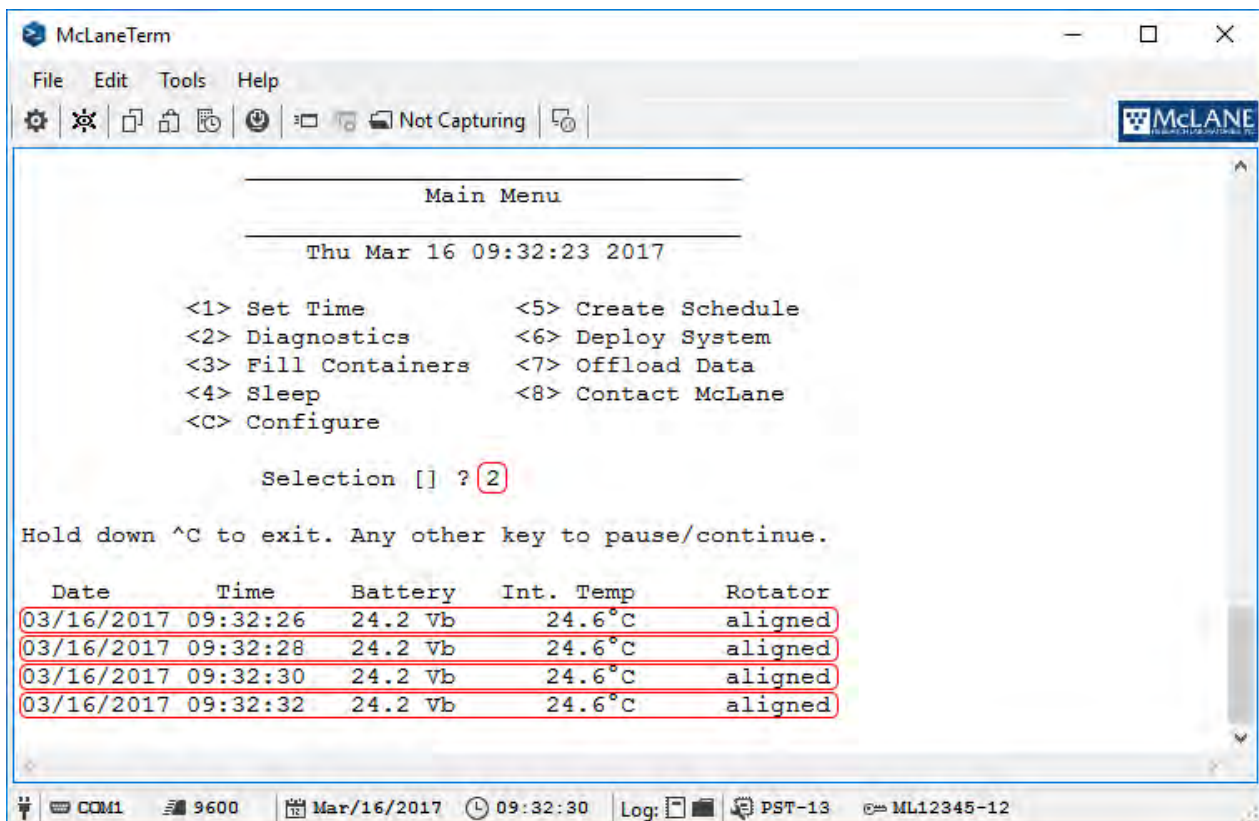
Using the Terminal Window content:

[Entering text](#)

[Copying and Pasting Text](#)

Entering text

Under normal operation, text typed in the Terminal Window will be displayed when an instrument is connected. McLaneTerm will also display all serial data sent by the connected instrument independent of user interaction. In the example shown next, 2 was typed in the terminal window and sent to the connected instrument; in return, the instrument began streaming diagnostic information.

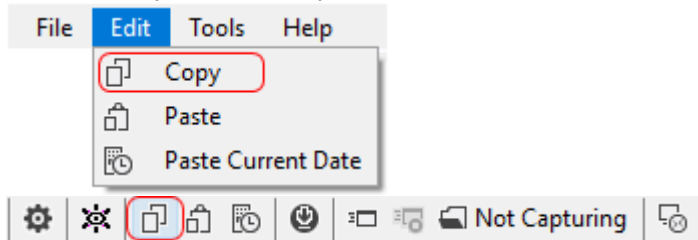


Copying and Pasting Text

McLaneTerm forwards all control characters to the connected instrument, including Ctrl+C and Ctrl+V. As a consequence, copying and pasting text in the [Terminal Window](#) is achieved using the following options:

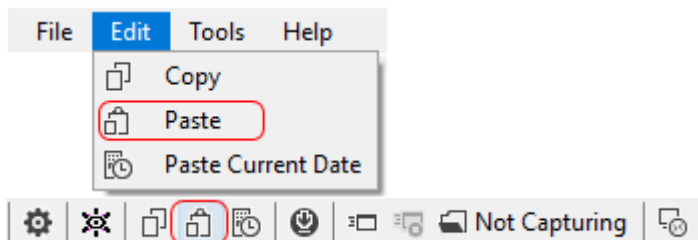
1. Copy:

Can be accessed from the [Main Menu](#) and [Toolbar](#). If there is no text selected in the [Terminal Window](#), all content is copied to the Clipboard. If a selection is made, only the selected text is copied.



2. Paste:

Can be accessed from the [Main Menu](#) and [Toolbar](#). All text content on the Clipboard is sent to the connected instrument.



Using Commands

McLaneTerm can send a wake-up command and paste formatted date and time to the connected McLane instrument.

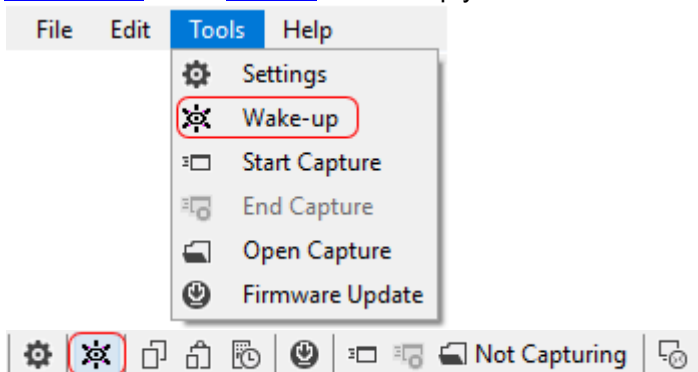
Using Commands content:

[Wake-up](#)

[Paste Date/Time](#)

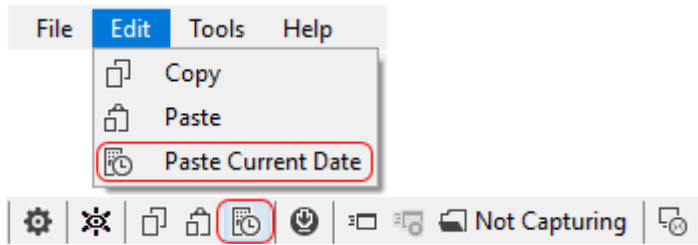
Wake-up

As an alternative to using the [Terminal Window](#) and typing the wake-up character (Ctrl+C), you can use the [Tools Menu](#) or the [Toolbar](#) to wake-up your connected McLane instrument.

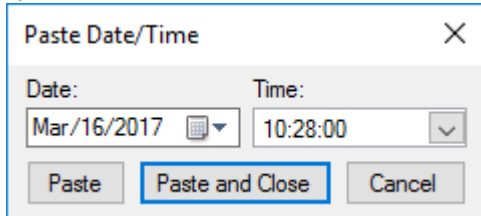


Paste Date/Time

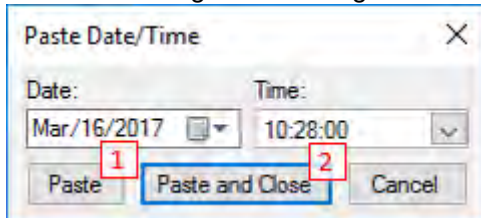
The Paste Date/Time function in the [Edit Menu](#) and [Toolbar](#) sends the current date and time to the connected McLane instrument.



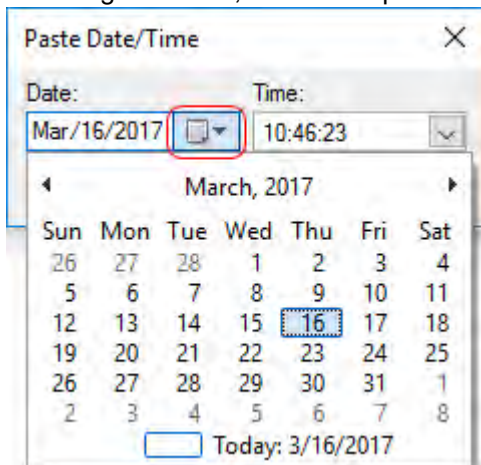
The Paste Date/Time Dialog sends your computer's current date and time to the connected instrument. A special date and time can also be selected.



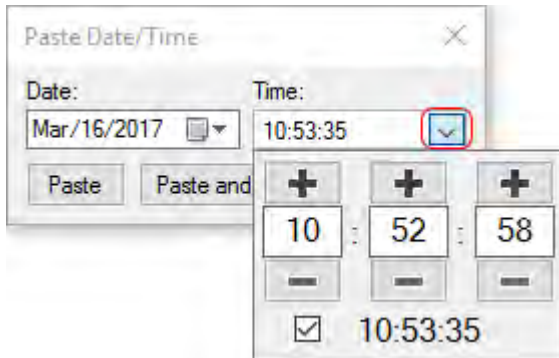
By default, the Paste Date/Time Dialog contains your computer's current date and time. Clicking the Paste button (1) will send the displayed date and time to the connected instrument and leave the Dialog open so multiple dates/times can be entered consecutively. The Paste and Close button (2) will close the Paste Date/Time dialog after sending the selected value to the connected instrument.



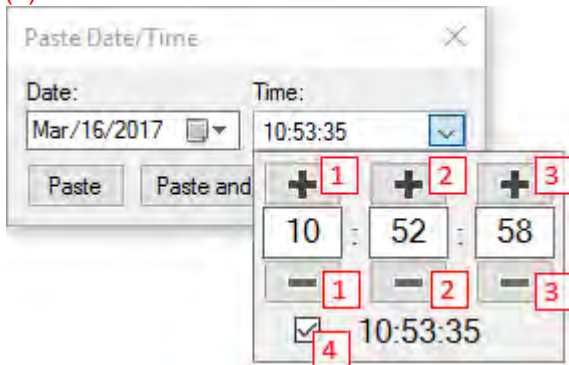
To change the date, use the dropdown calendar to choose the year, month and day.



To change the time, use the time-picker dropdown to choose the hours, minutes and seconds.



Changing the time can be done by using the (+) and (-) buttons for hours (1), minutes (2) and seconds (3), or by entering the numeric value in the respective textbox. To use your computer's current time click the checkbox (4).



Firmware Update

McLaneTerm can be used to update the firmware on your connected McLane instrument. In order to flash new firmware to a connected instrument, you will need a compatible firmware installation file. Contact McLane for firmware updates.

Firmware Update contains the following steps. These steps update firmware on CF2 electronics. Contact McLane for updating firmware on TT8 electronics.

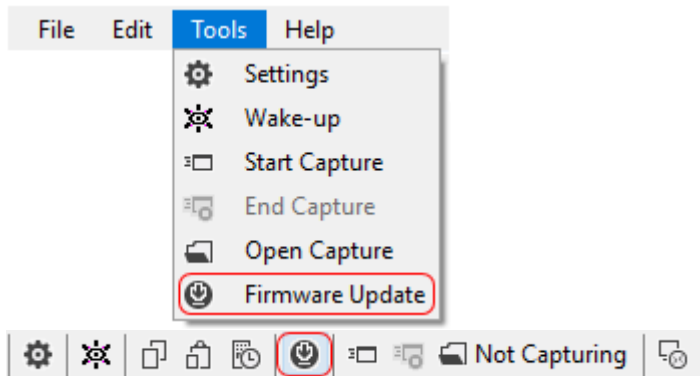
Before launching Firmware Update from McLaneTerm, complete the steps below in the instrument firmware.

1. Exit the McLane firmware:

To exit menu driven firmware: From the Main Menu, type *q* and use the password *mcl*. This command brings you to the CF2> prompt for samplers and the C:\ prompt for profilers.

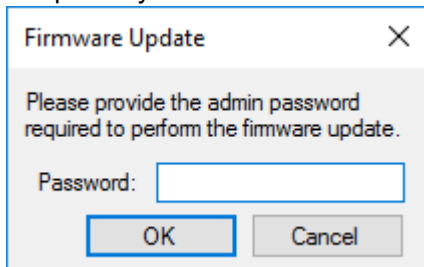
To exit adaptive firmware: At the command line type *main_menu* to return to the Main Menu. From the Main Menu, type *q* and use the password *mcl*. This command brings you to the CF2> prompt for samplers.

2. Proceed to the Firmware update function on the [Tools Menu](#) or the [Toolbar](#).

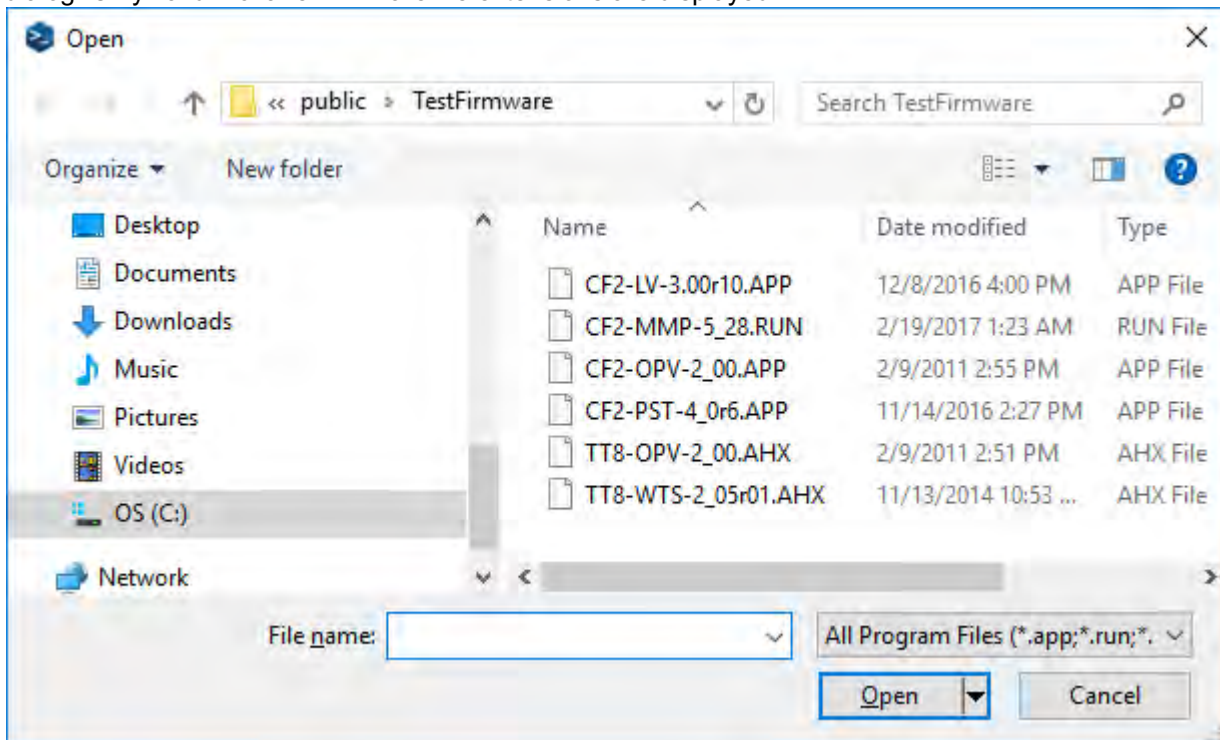


3. Admin Password:

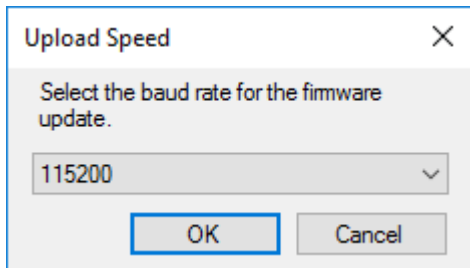
Provide the administrator's password required to initiate the firmware update. Contact McLane for Firmware compatibility.



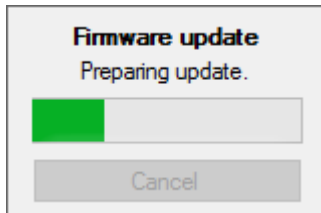
4. Choose the Firmware binary file compatible with the connected McLane instrument from the file browser dialog. Only valid McLane Firmware file extensions are displayed.



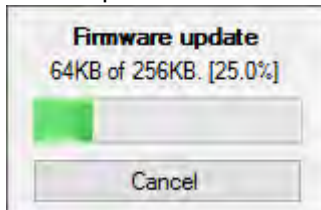
5. Choose the Firmware upload baud rate. In most cases the default upload baud rate value of 115200 can be used. However, on long or inconsistent connections, the baud rate can be lowered to minimize the potential for transfer errors.



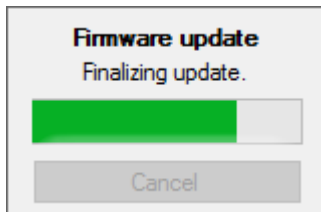
6. Preparing for Update. McLaneTerm checks the Firmware file and prepares it for uploading to the connected instrument.



7. File Transfer. The Firmware file is transferred to the connected instrument and the progress bar tracks the transfer process.



8. Finalizing Update. McLaneTerm checks the connected instrument for a successful update and attempts to return to the Main Menu.



Creating a Capture File

With McLaneTerm, you can capture content from the [Terminal Window](#) and save it to a file. All Capture functions can be found on the [Tools Menu](#) and [Toolbar](#).

Creating a Capture File content:

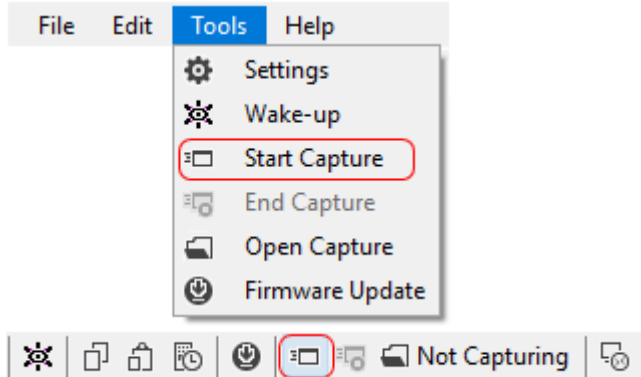
[Start Capture](#)

[Stop Capture](#)

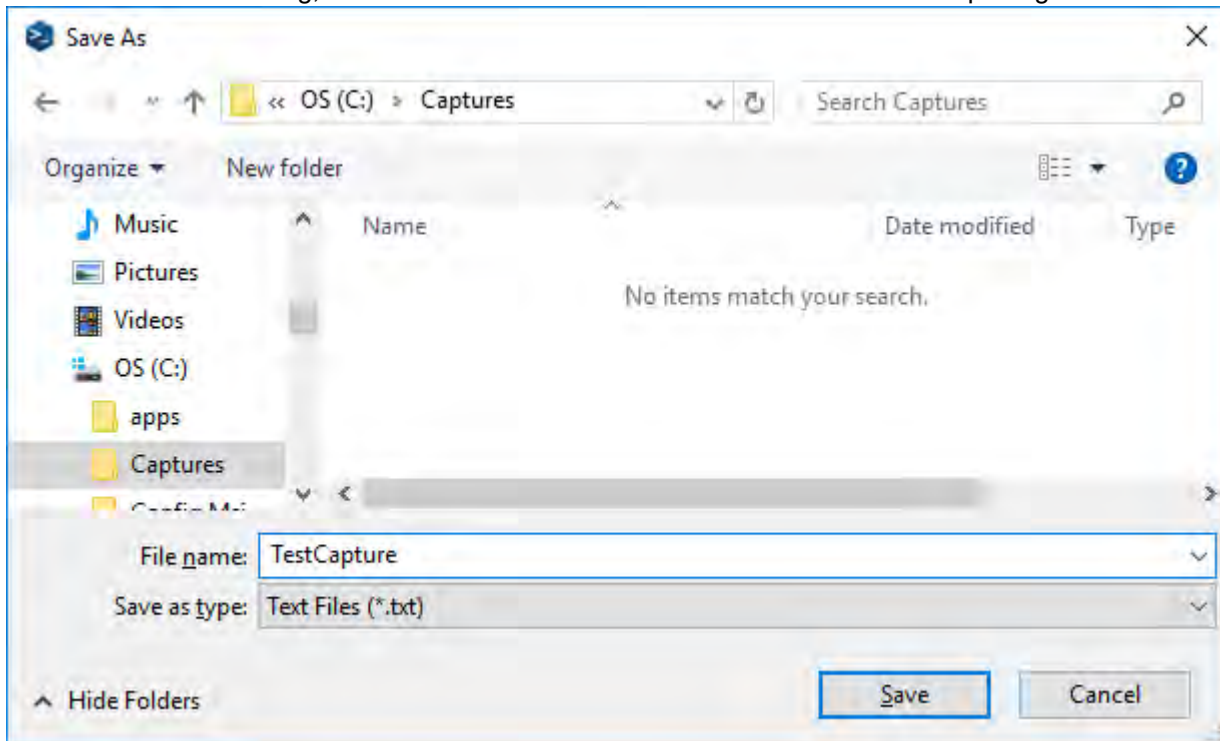
[Open Capture](#)

Start Capture

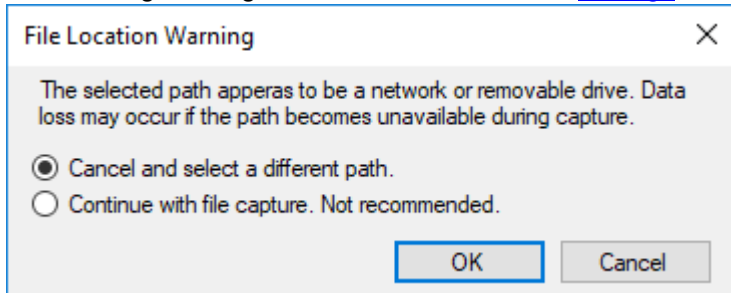
Start Capture:



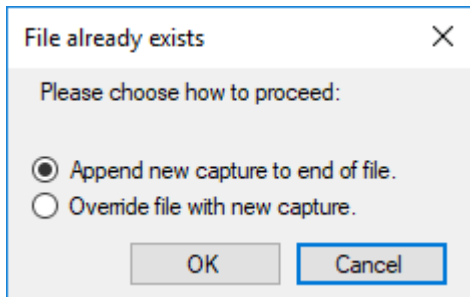
From the Save File Dialog, choose a file name and location. Click Save to start capturing.



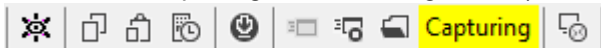
If choosing a network or removable storage drive, McLaneTerm will ask for confirmation. This warning message can be disabled from the [Settings](#) window.



If choosing a preexisting file, McLaneTerm will ask if the file should be overwritten or content should be appended.

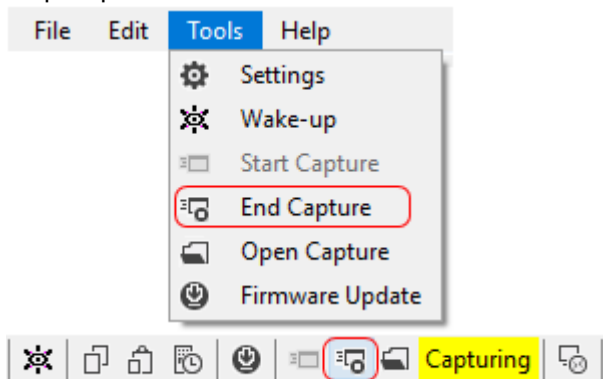


The [Toolbar](#) capturing text will change from (Not Capturing) to (Capturing) and be highlighted yellow.



Stop Capture

Stop Capture:

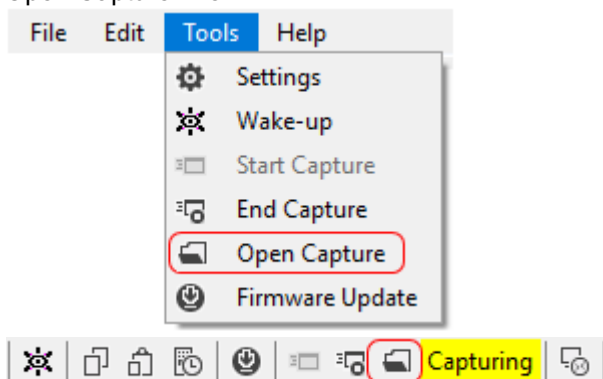


The Capture File is released for editing.

The [Toolbar](#) capturing text will change from (Capturing) to (Not Capturing).

Open Capture

Open Capture File:



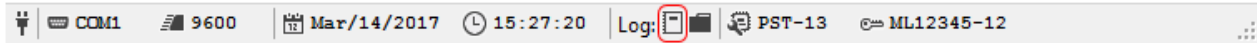
The capture file is opened using your computer's default application for handling text files.

You can open the capture file even during an active capture.

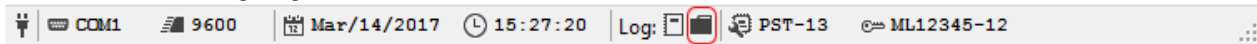
Session Log

Along with the user chosen [Capture File](#), McLaneTerm will maintain a Session Log with all the content from the [Terminal Window](#).

The Session Log can be accessed from the [Status Bar](#).



The folder containing Logs from all sessions can also be accessed from the [Status Bar](#).



Session Log files are named according to each session start date and time.

