# **Command Line Interface**



Document Revision: 1.6

Document Date: 30.Oct.2023

#### **Purpose**

This command line interface is intended for developers who want to seamlessly embed MediCollector functionality into their applications. Using this interface, you can quickly and easily acquire data from one of our supported medical devices and use that data within your own application. When the command line is executed, it will query the specified medical device and return the latest values for all numeric signals into a text file for you.

#### Please note the following:

- This interface is available in all versions of our products, except MediCollector CENTRAL. It is recommended that developers first download and test the interface using our MediCollector BEDSIDE product because it has a GUI which is useful for testing and debugging. When ready for deployment, users can switch to MediCollector CLI which is a trimmed-down and less-expensive version without a GUI.
- The data is outputted to a tab-delimited text file and saved to the path specified by the programmer. The text file will have 2 rows. The first row contains the names of each signal. And the second row contains the signal values.
- The first column is always the timestamp (unless the TESTONLY parameter is TRUE). The timestamp is in the following fixed format: YYYY.MM.DD hh:mm:ss.000. The time is in 24-hour time and retrieved from the system clock on your PC. And the time always has 3 digits after the decimal point.
- If you run this command line using an unlicensed copy of MediCollector (e.g. in evaluation mode), it will only return a valid value for one randomly chosen signal. All other signals/columns will be replaced with the word "DEMO". This will allow you test the software. To remove this restriction, you need to purchase a subscription from our website.
- If an error occurs (e.g. cable is disconnected), the outputted text file will contain details about the error instead of the actual data. You will know if an error occurs because the output file will contain only 1 line of text, which will start with the word "Error".
- When you execute this command line, MediCollector will wait up to a maximum timeout of 15 seconds for data. If, for whatever reason, no data is received within that timeout, it will abort and generate an error.
- This interface will only retrieve NUMERIC values, such as HR, BR, RR, Pulse, SpO2, BP, ABP, Temp, etc. It will not retrieve waveforms such as ECG. Obviously, there is no point in retrieving a single instantaneous value of a high frequency waveform, such as ECG, as it is constantly changing and becomes meaningless if only 1 datapoint is returned.
- You can optionally run the command with the /TESTONLY parameter. When doing so, the command line will not actually retrieve data. Instead, it will just check to confirm that the specified device is detected on the specified port. If the device is detected, "OK" will be written to the target text file (and the Return Code will be 0). If the device is not detected, the relevant error message will be written to the text file (and the Return Code will be 1).
- Users should be careful when using the command line interface in the MediCollector SERVICE version of our products. If you attempt to run the command line while the service is running, you might get an error because the service is occupying the COM port.

### **Syntax**

If using the MediCollector BEDSIDE or CLI product, you should call the *medicollector.exe* executable using this syntax:

medicollector.exe "PathToOutputFile" /device "DeviceName" [/port ComPort] [/nodialog] [/overwrite] [/testonly]

If using the MediCollector SERVICE product, you should call the *medicollector\_service.exe* executable:

medicollector\_service "PathToOutputFile" /device "DeviceName" [/port ComPort] [/nodialog] [/overwrite] [/testonly]

#### **Return Code**

After execution, you can check for errors in 2 manners:

- The return code is stored in %errorlevel% after execution. The values are 0 = No error, 1 = Error.
- View the content of your target text file at PathToOutputfile for error message.

#### **Parameters**

PathToOutputFile	Required	This is the absolute path where the output file will be saved. If a file already exists								
		at this path, an error will be generated. This is parameter is required. You must								
		use double-quotes around this parameter if there is a space character in the path.								
/device DeviceName	Required	This is the name of the device as seen in the list in MediCollector. This is								
		parameter is required. You must use double-quotes around this parameter if								
		there is a space character in it, as seen in the example below. Some options for								
		this parameter are:								
		"Philips Intellivue Series"								
		• "GE S/5 Series"								
		"GE Solar/Dash Series"								
		"Draeger Infinity Series"								
		"Simulated Device"								
/port ComPort	Sometimes	This is the COM port where the device is connected. This parameter is required if								
	Required	the specified device requires a COM port, otherwise the parameter is optional.								
/nodialog	Optional	If present, this parameter will prevent a progress dialog box from appearing								
		the command line is called. This is parameter is optional.								
		NOTE: When using the command line with MediCollector BEDSIDE product, a								
		splash screen will ALWAYS appear when running the command line. If you want								
		to run completely invisibly, you will need to use the MediCollector CLI product.								
/overwrite	Optional	If present, this will allow the <i>PathtoOutputFile</i> to be overwritten. If not present,								
		and a file already exists at PathToOutputFile, then an error will be returned								
		because the file will not be overwritten.								
/testonly	Optional	If present, MediCollector will not retrieve data from the specified device. Instead,								
		it will check to confirm the device is present on the specific port by attempting to								
		communicate with the device. If the device is detected, "OK" will be written to								
		the target text file (and the Return Code will be 0). If the device is not detected,								
		the relevant error message will be written to the text file (and the Return Code will be 1).								
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### **Examples**

Below is an example of how to retrieve data from a Philips Intellivue device on COM1 using our MediCollector BEDSIDE product:

medicollector "C:\temp\my output file.txt" /device "Philips Intellivue Series" /port COM1

Below is the same command executed using the MediCollector SERVICE product:

medicollector\_service "C:\temp\my output file.txt" /device "Philips Intellivue Series" /port COM1

Below is an example of how to retrieve data from a GE S/5 device, such as a Carescape B850, on COM2:

medicollector "C:\temp\my output file.txt" /device "GE S/5 Series" /port COM2

Below is an example of how to retrieve data from the Simulated Device without showing a progress dialog and by overwriting the text file at the specified path:

medicollector "C:\temp\my output file.txt" /device "Simulated Device" /nodialog /overwrite

Below is an example of how to use the command line to check if a GE SOLAR device is attached to COM1 (e.g. using the /testonly parameter). This command will not show a progress dialog and will overwrite the target text file if it exists:

medicollector "C:\temp\my output file.txt" /device "GE Solar/Dash Series" /nodialog /overwrite /testonly

Below are 2 commands which could be pasted into a batch file. The first command will run the command line interface and pause execution until data collection finishes. The second line returns the error code after execution is complete.:

START /wait medicollector "C:\temp\my output file.txt" /device "Simulated Device" /nodialog /overwrite echo %errorlevel%

### Output

The output is a tab-delimited text file that looks like this:

TIMESTAMP	HR	BR	RR	Temp	NBP(DIA)	NBP (SYS)	Sp02
2019.04.29 13:23:10.000	60	60	60	98	120	80	99

If running in demo mode, only one randomly selected cell will return a value. All others will be masked, as seen below. To remove this restriction, you will need to purchase a valid license.

TIMESTAMP	HR	BR	RR	Temp	NBP(DIA)	NBP (SYS)	Sp02
2019.04.29 13:23:10.000	DEMO	DEMO	DEMO	98	DEMO	DEMO	Demo

If an error occurs, the text file will contain the error message as seen below. You will know if an error occurs because the output file will contain only 1 line of text, which will start with the word "Error:".

Error 123: The cause of error is just an example blah blah.

### Connecting your medical device

Follow these instructions to connect your device.

- 1. First, make sure your device is on our <u>list of supported devices</u>.
- 2. On that list, find the corresponding "cable pack" required for connecting your device.
- 3. Review the <u>requirements</u> for the cable pack. For example, your device may need a special communications card.
- 4. Purchase the cable pack from MediCollector.
- 5. If your computer doesn't have a serial port (most don't), you should also purchase a USB-to-Serial adapter.
- 6. Once your cables have arrived, follow the accompanying instructions to connect your device

If you are confused about cabling requirements, please contact us. We'd be happy to guide you through the process.



**Please Note!** You can always test MediCollector command line interface without connecting a medical device. Simply set the *DeviceName* field to "Simulated Device".

#### **System Requirements**

Before installing the software on your computer, review the following minimum system requirements:

- Microsoft Windows 7 or newer (64 bit only)
- 2.0 GHz CPU (x86 only ARM processors are NOT SUPPORTED)
- 1.0 GB RAM
- USB port (only required to unlock the evaluation version)
- Serial port (if your computer doesn't have one, you can use a USB-to-serial converter instead)

## Installing the software

Download the latest installer from the <u>MediCollector website</u>. The software can be installed by double-clicking on the downloaded installer file.

## **Updating the software**

It is recommended that you occasionally check the MediCollector website for software updates. We regularly release minor updates, improvements, and bug fixes via the website. To update an existing installation, simply download and run the latest installer. It will overwrite the existing installation automatically but will not affect your data files. There is no need to un-install the old version when upgrading. To stay up to date on the latest changes, you can also join our mailing list.

## Purchase a subscription

To purchase a subscription, please <u>see our website</u>. We offer many ways to purchase a subscription (e.g. credit card, Purchase Order, wire transfer, etc.). Once you have purchased a subscription, you will receive an email with instructions on how to activate your subscription. This email will contain a *License ID* and *Password* which you enter into the software to activate your subscription (see below).

#### **Activate a subscription**

To activate and manage your MediCollector CLI licenses, launch the executable named **MediCollector License Activator.exe** located at the following path:

C:\Program Files\MediCollector CLI\MediCollector License Activator.exe



If you purchased a subscription for a different product (e.g. MediCollector BEDSIDE or SERVICE), the activation instructions below are identical except that you will launch that specific product and selected HELP>LICENSES from the main menu.

To activate your subscription, follow these instructions:

- 1. Click the *Activate* button
- 2. Click the Automatic Activation button
- 3. Enter the *License ID* and *Password* that was provided to you via email when you purchased the software. If you can't find this information, please <u>contact us</u> and we will re-send it.
- 4. Click the Activate button
- 5. Your license should be activated on your computer.

You can also activate your subscription on a computer that does not have Internet access. This is done by following the instructions above but click *Manual Activation* in Step 2.

#### Renew a subscription

As your subscription approaches expiration, you will begin to receive emails providing a simple way to renew your subscription. The MediCollector software will also prompt you to renew your subscription. We offer many ways to renew. The easiest way to renew your subscription is login to our <u>License Portal</u> and purchase a renewal online using a credit card. Your software installation will then automatically detect the renewal and extend your subscription immediately. We also accept Purchase Orders and Wire Transfers and other methods for renewal. Please <u>contact us</u> for assistance.