

DataTrac Pro for AirChek TOUCH

User Manual

Publication 1901 Rev 210311

Introduction

Checking System Requirements

Ensure your PC meets minimum requirements for the DataTrac Pro Software.

Operating System	Microsoft® Windows® Vista®(sp2), 7, 8, 8.1, or 10
Required Software	Microsoft .NET Framework 4.5.1 and SKC USB Drivers <i>(included with installation)</i>
Minimum Display Resolution	1024 x 768
Available Port	USB 2.0A

Checking Hardware Requirements

- e-Cradle (Cat. No. 220-900*)
- Cradle Power Supply (Single-Cat. No. 220-600*, Multi-Cat. No. 220-700)
- USB 2.0A to Mini-B Cable (Cat. No. P71452*)
- AirChek TOUCH Sample Pump (Cat. No. 220 Series)

*These items are available in the DataTrac Pro Hardware Accessory Kit (Cat. No. 877-93). Items also can be purchased separately.

Getting Started

Connecting AirChek TOUCH Pump to PC

The AirChek TOUCH Sample Pump communicates with a PC via e-Cradle, USB connection, and DataTrac Pro Software. *Hardware items are available in the DataTrac Pro Hardware Accessory Kit (Cat. No. 877-93). If chaining multiple cradles, a Multi Cradle Power Supply (Cat. No. 220-700, available separately) will be required. Purchase pump separately.*

1. Prepare/connect cradle as shown in Figure 1.

a. Single e-Cradle:

Ensure cradle is connected to a Single Cradle Power Supply (12 V DC). Insert Mini-B end of communication cable into port on back of e-Cradle.

Insert USB end of cable into USB 2.0A port on PC.

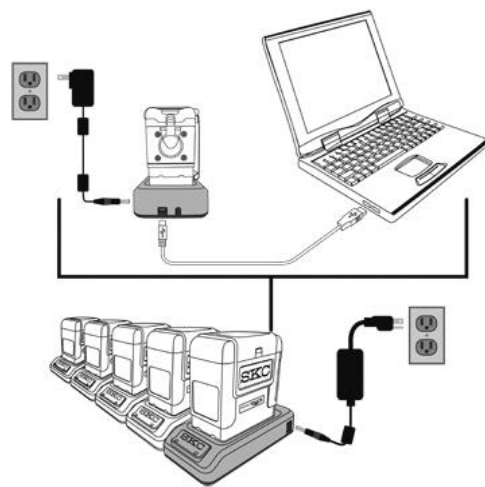
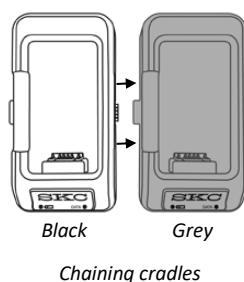


Figure 1. Communication Train

- b. e-Cradle chained with up to 5 Standard Cradles:** Ensure e-Cradle is connected to a Multi Cradle Power Supply (12 V DC, Cat. No. 220-700). Prepare e-Cradle as shown in Figure 1. Press succeeding cradles together as shown in Figure 1. Up to 4 Standard Cradles can be chained to the e-Cradle.
2. Align pump contacts with cradle contacts and insert pump in cradle. Repeat for each additional pump/cradle.
 3. Turn on each pump by pressing the recessed button on the side of each one.
Note: DataTrac Pro will only detect pumps that are powered on.
 4. Download and install DataTrac Pro Software on PC. The right data LED on the cradle(s) will flash green to indicate communication with PC. **Note: Once communication between PC and pump(s) is established, pump(s) will be kept in a wakened state until one of the following occurs: pump(s) is turned off, pump(s) is removed from cradle(s), or DataTrac Pro Software is closed.**

Downloading/Installing DataTrac Pro Software



The DataTrac Pro Installer requires administrator privileges to install properly. DataTrac Pro must be installed separately under the Windows user account of each person who will use the software. The .NET Framework and SKC USB drivers are included in the DataTrac Pro Installer. If .NET Framework is not already installed on the PC, the installer will require the PC to be restarted and the installer will automatically launch once Windows starts again.

If no Internet connection is available, contact SKC at 724-941-9701 (800-752-8472 U.S. only) to order Cat. No. P87793 (DataTrac Pro and User Manual on USB flash drive) and see Flash Drive Download.

Internet Download (requires Internet connection)



Ensure pump(s) is connected and powered on prior to download.

1. Browse www.skcinc.com/catalog/datatrac/DataTracProTouch/setup.exe.
2. Select Save to download the file to the PC.
3. Once downloaded, Run the setup file and follow wizard instructions.

When installation is complete, DataTrac Pro will launch automatically.

Flash Drive Download



Ensure pump(s) is connected and powered on prior to download.

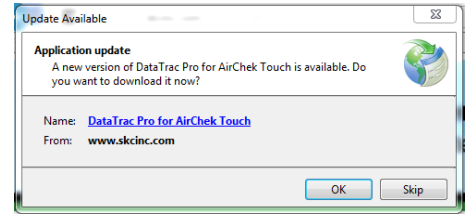
1. Insert flash drive into USB port on PC.
2. Browse files on flash drive.
3. Open the setup file.
4. Run the setup file and follow wizard instructions.

When installation is complete, DataTrac Pro will launch automatically.

Updating DataTrac Pro Software

Internet Download (requires Internet connection)

Launch DataTrac Pro Software. DataTrac Pro will scan automatically for available online updates. If an update is found, the user will be prompted to download/install or skip the update. Click OK to update.





Flash Drive Download

Follow instructions in *Getting Started, Downloading/Installing DataTrac Pro Software, Flash Drive Download*.

Uninstalling DataTrac Pro Software

1. Access the Windows Control Panel on the PC.
2. Select Programs (Programs and Features in Windows 7).
3. Select DataTrac Pro for AirChek TOUCH.
4. Click Uninstall.

Using this Manual

This manual provides graphical guidance to the user. Areas on screens that require user action are highlighted  or . Corresponding text descriptions/details are highlighted in a matching color.

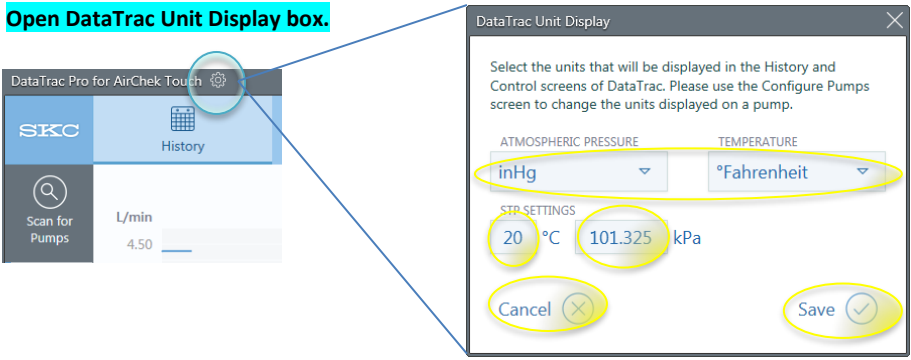
Interacting with DataTrac Pro Software Screens

Click tabs and buttons with mouse to activate or select items. Click in boxes and type using keyboard to enter required information.

Setting Display Preferences for DataTrac Pro

 Before using DataTrac Pro, access the DataTrac Unit Display box to select display preferences for DataTrac Pro and set STP criteria (if required).

Open DataTrac Unit Display box.



Select DataTrac Pro display preferences for temperature and pressure.

Enter STP or other standard criteria for volume conversion.

Select Cancel or Save when finished.

Figure 2. DataTrac Pro Unit Display Box

Using DataTrac Pro Software

Downloading/Managing Sampling History

History Tab

Select History **Get basic help connecting pumps.**

Indicates a fault during sampling.

Export selected event data or save summary to .csv file for import into spreadsheet (see Appendix B for example).

View, sort, select for export/save previously downloaded sampling events, without connecting pumps.

Status	Start	Duration	Rate	Accu. Vol.	STP Vol.	Temp.	Atm. Pressure
Run	5/12/2015 1:48:59 PM	00:00	0.37 L/min	0.12 L		78.2°F	28.85 inHg
Fault	5/12/2015 1:49:13 PM	00:00	1.62 L/min	-0.04 L		77.9°F	28.85 inHg
Run	5/12/2015 1:49:01 PM	00:00	2.12 L/min	0.13 L		77.6°F	28.91 inHg
Total		00:00		0.54 L	0.51 L	78.0°F	28.82 inHg

Pump	Start	Set Rate	Duration	Run Time	Accum. Vol.	Type	Notes
10006	5/12/2015 1:50 PM	1.50 L/min	00:00	00:00	0.10 L		
10006	5/12/2015 1:48 PM	1.50 L/min	00:00	00:00	0.54 L	Fault	
10006	5/12/2015 1:09 PM	2.50 L/min	00:37	00:12	30.09 L	Fault	
10006	5/12/2015 11:50 AM	2.50 L/min	00:09	00:09	22.55 L		
10006	5/12/2015 11:46 AM	2.50 L/min	00:00	00:00	0.67 L		

Figure 3. History Tab Prior to Pump Connection

Detecting Pumps

Once launched, DataTrac Pro scans for pumps in cradles connected by USB to the PC. Detected pumps display as an icon and serial number in the Pump Display Bar. If pumps do not appear automatically in the bar, click Scan for Pumps. **Note: Pumps must be powered on to be detected by DataTrac Pro.**

Select History tab. **Change graph/summary display.**

Scan for connected pump(s).

Select pump to download/view history.

Note: Stop pump before downloading history. "Pump Busy" will display if attempted while pump is running or paused.

Export selected event data or save summary to .csv file for import into spreadsheet (see Appendix B).

Sort pump history or saved events by selecting column head.

Display saved events from all pumps.

Status	Start	Duration	Rate	Accu. Vol.	STP Vol.	Temp.	Atm. Pressure
Run	7/6/2015 1:00:33 PM	00:00	4.00 L/min	0.33 L		76.6°F	28.91 inHg
Total		00:00		0.34 L	0.32 L	76.6°F	28.91 inHg

Pump	Start	Set Rate	Duration	Run Time	Accum. Vol.	Type	Notes
10004	6/30/2015 11:31 AM	2.00 L/min	00:00	00:00	0.21 L		
10004	6/29/2015 3:18 PM	2.00 L/min	00:00	00:00	0.43 L		
10004	6/29/2015 3:18 PM	2.00 L/min	00:00	00:00	0.36 L		
10004	6/29/2015 3:17 PM	2.00 L/min	00:00	00:00	0.27 L		
10004	6/29/2015 3:17 PM	4.00 L/min	00:00	00:00	0.14 L		

Figure 4. History Tab Displaying Connected Pumps

Controlling the Pump

Control Tab



Figure 5. Display Before Run is Clicked

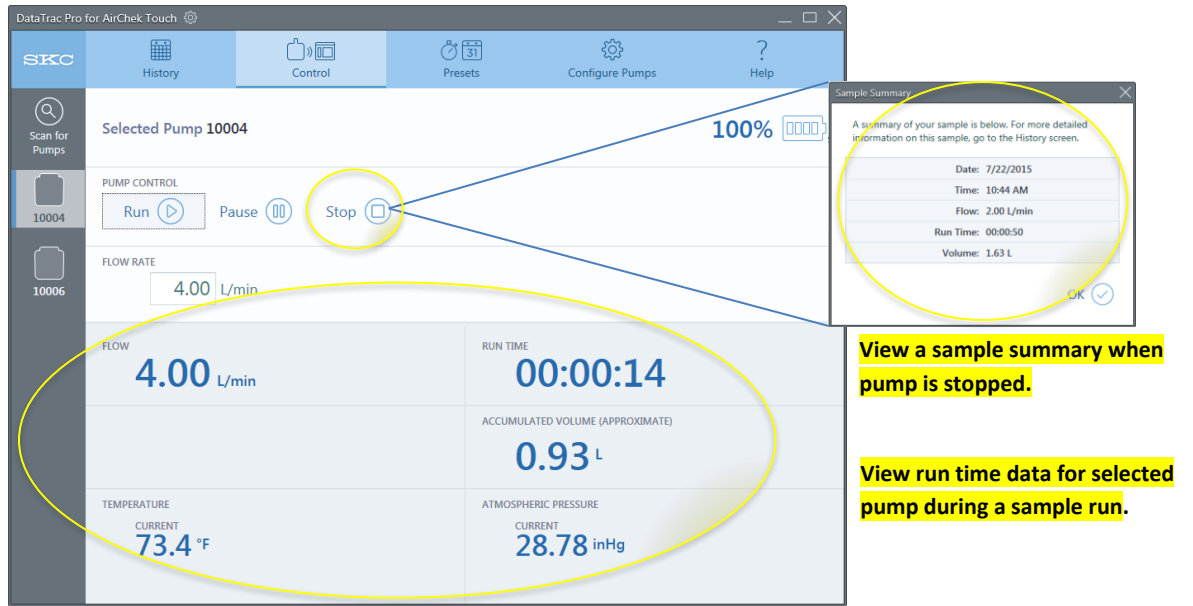
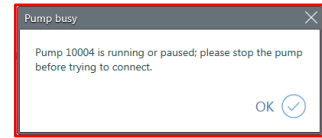


Figure 6. Display After Run is Clicked

Programming and Uploading Sample Presets

Presets Tab

 Stop pump before programming presets. "Pump busy" will display if attempted while pump is running or in pause.

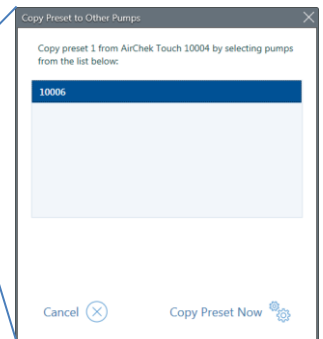


Select Presets tab.

PRESET 1
FLOW RATE: 4.00 L/min
TIMING: Continuous
DURATION: 00 Day(s) 08 H 00 M
START TIME: Yes, 10:04 AM HH:MM
ESTIMATED SAMPLE VOLUME: 1920.00 Liters
* The pump will automatically start at the prescribed time only after this preset is activated on the pump.

PRESET 2
FLOW RATE: 2.00 L/min
TIMING: Intermittent
DURATION: 00 Day(s) 12 H 00 M
CYCLES: 8
SAMPLE: 00 H 30 M
PAUSE: 01 H 00 M
TOTAL SAMPLE TIME: 4 hours
ESTIMATED SAMPLE VOLUME: 480.00 Liters

Upload preset to selected pump(s).



Save (upload) or Cancel preset.

Select/enter start time*.


Select timing (run type), change/enter number of cycles†, total duration†, length of time pump samples, and length of time pump pauses during each cycle

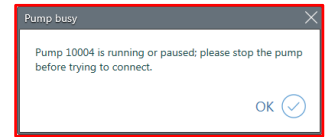
Figure 7. Examples of Continuous Run Preset and Intermittent Run Preset

†Cycles and Duration values are calculated based on the numbers entered. Changing one value will cause the other value to change.

Configuring Pumps/Updating Firmware

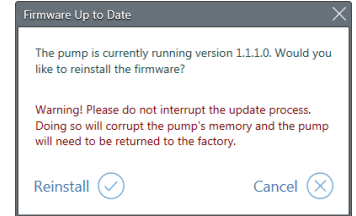
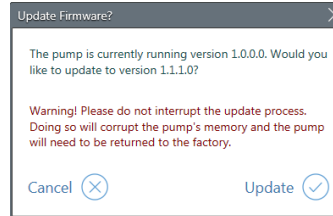
Configure Pumps Tab


-  **Stop pump before configuring/updating. "Pump busy" will display if attempted while pump is running or in pause.**



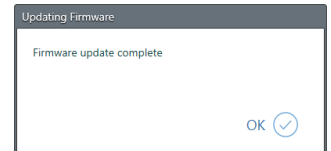
Updating Firmware

- Before updating firmware, ensure pump is seated properly in cradle, cords are inserted fully, and PC is running from AC power.
- Click the Update Firmware button. Message boxes will appear for either an update or reinstallation of the latest update, depending upon firmware version detected in the pump. Click update or reinstall to initiate installation.

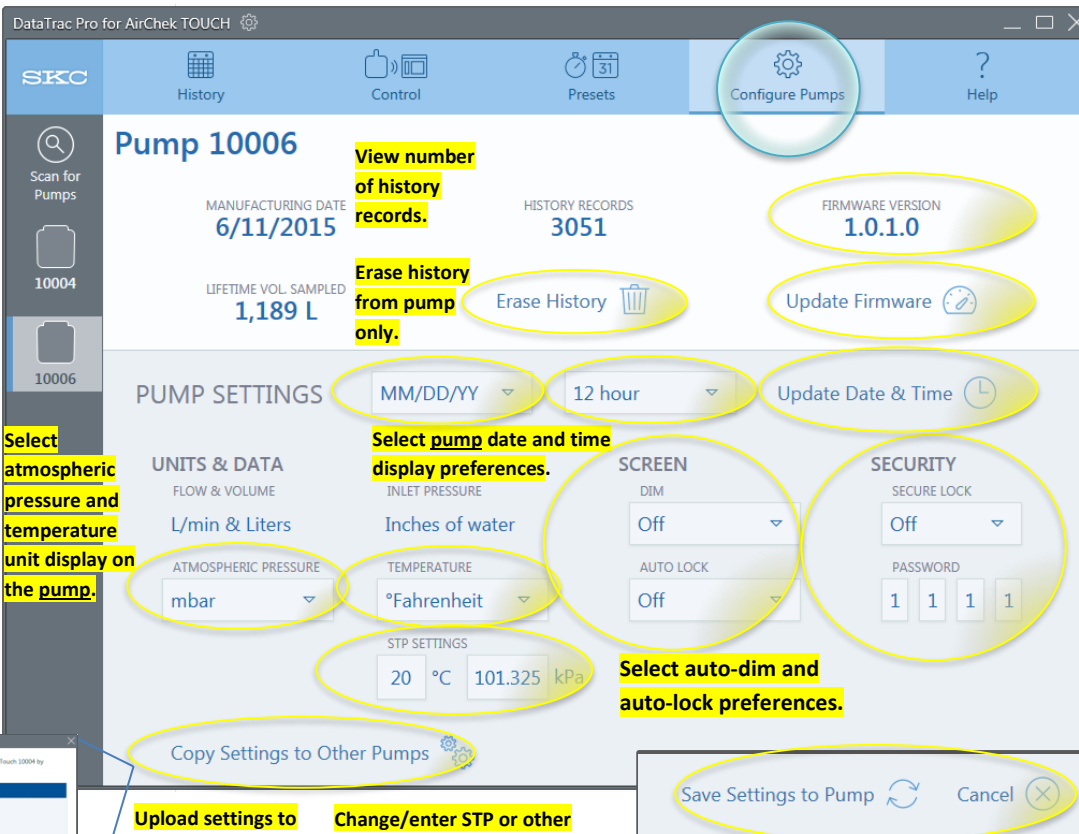


-  **Do not remove pump from cradle during firmware update process. Interruptions to the firmware update will require the pump to be sent to SKC for service.**

- Two separate updates (screens/firmware) may need to be installed depending on the currently installed firmware version. This process completes automatically within five minutes. The pump may reboot twice during the update process. Wait until the Firmware Update Complete message box opens in DataTrac Pro before removing pump from cradle. Date/time update automatically to PC date/time.



Select Configure Pumps tab.



View currently installed firmware version number

Update pump firmware

Synchronize pump date/time with PC.

Select secure lock.

Change/enter secure lock password.

Select atmospheric pressure and temperature unit display on the pump.

View number of history records.
Erase history from pump only.

Select pump date and time display preferences.

Select auto-dim and auto-lock preferences.

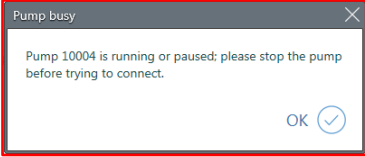
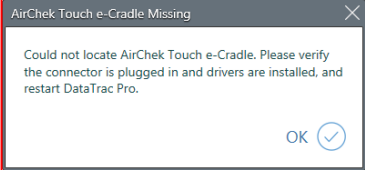
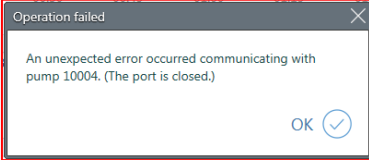
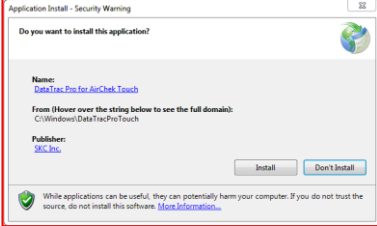
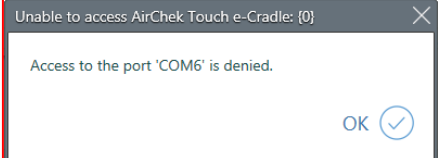
Upload settings to selected pump(s).

Change/enter STP or other standard conditions for volume conversion on the pump.

Appears after settings are changed. Select Save Settings to Pump or Cancel. Copy Settings to Other Pumps will reappear as an option (see left).

Figure 8. Configure Pumps Tab

Troubleshooting

Issue	Possible Solutions
<p>My pump/cradle will not communicate with my PC.</p>	<ol style="list-style-type: none"> 1. Ensure cradle is plugged into USB port on PC (Figure 1). 2. Ensure CalChek Communication Cable is removed from cradle. 3. Check that pump is seated firmly in cradle and powered on. 4. Ensure cradle is connected to 12 V DC power supply (Figure 1).
<p>I keep getting a Pump busy box when I click in the Pump Display Bar or the History, Presets, and Configure Pumps tabs.</p> 	<p>The pump is running or in pause. Stop the pump to access History, Presets, and Configure Pumps functions.</p>
<p>This AirChek TOUCH e-Cradle Missing box popped up when I was installing DataTrac Pro.</p> 	<ol style="list-style-type: none"> 1. Check all USB and power connections. 2. Reinstall DataTrac Pro Software.
<p>This Operation failed box appeared on my PC.</p> 	<ol style="list-style-type: none"> 1. Check all USB and power connections. 2. Close DataTrac Pro Software and relaunch.
<p>This Security Warning appears during installation of DataTrac Pro Software.</p> 	<p>Note the green shield displayed at the bottom of the box. This indicates that it is safe to proceed with installing DataTrac Pro.</p>
<p>The following COM port error is displaying after I launch DataTrac Pro.</p> 	<p>Unplug USB cable from PC and plug into a different USB port (if available). If not, replug into USB port and relaunch DataTrac Pro.</p>

Software Notes

Version	What's New
V.1.0.4	-Issue version
V.1.1.1	-Removed option to cancel firmware update while in progress -Screen/firmware update is now one button on Configure Pumps tab -Date/time automatically update immediately after firmware update -Added History Records number and Erase History button to Configure Pumps tab
V.1.1.2	-Tweak temp/pressure compensation while manually calibrating with more than 5000 ft altitude -Tweak to initial motor speed after fault recovery
V.1.1.3	-Updated battery thresholds to optimize low power behavior from battery pack -If insufficient power is available to power the pump after a reset, pump goes to sleep immediately and blinks red LEDs three times. -Changes battery indicator to red when sample is stopped due to critical battery condition
V.1.1.4	-Bug fix for temperature and pressure averages in samples longer than 18 hours -Fixes corrupted long history logs when pump is manually reset or the firmware is updated
V.1.1.8	-Updated CalChk screens.

Appendices

Appendix A

SKC End-user License Agreement

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Appendix B Exported Sample Event Data Imported into Microsoft Excel

AirChek Touch 10004 Sample 201506171147 for DataTrac Pro OI Appendix B.csv - Microsoft Excel

	A	B	C	D	E	F	G	H	I	J	K
	Timestamp	Elapsed Time	Run State	Actual Flow (L/min)	Accumulated Volume (L)	STP Volume (L)	Temperature (°F)	Atmospheric Pressure (inHg)	Battery Voltage (V)	Flow Faults	
1	6/17/2015 11:47	0:00:02	Run	2.07	0.069	0.066	74	29.03	8.389	0	
2	6/17/2015 11:47	0:00:04	Run	2.004	0.135	0.129	74	29.03	8.392	0	
3	6/17/2015 11:48	0:00:06	Run	2.005	0.202	0.194	74	29.03	8.385	0	
4	6/17/2015 11:48	0:00:08	Run	1.998	0.269	0.258	74	29.03	8.392	0	
5	6/17/2015 11:48	0:00:10	Run	2	0.335	0.321	73.9	29.03	8.362	0	
6	6/17/2015 11:48	0:00:12	Run	2.005	0.402	0.386	73.9	29.03	8.377	0	
7	6/17/2015 11:48	0:00:14	Run	1.998	0.469	0.45	73.9	29	8.389	0	
8	6/17/2015 11:48	0:00:16	Run	1.999	0.536	0.514	73.9	29.03	8.381	0	
9	6/17/2015 11:48	0:00:18	Run	2.004	0.602	0.578	73.9	29.03	8.392	0	
10	6/17/2015 11:48	0:00:20	Run	2.003	0.669	0.642	73.9	29.03	8.392	0	
11	6/17/2015 11:48	0:00:22	Run	1.998	0.736	0.706	73.9	29.03	8.381	0	
12	6/17/2015 11:48	0:00:24	Run	2.003	0.803	0.77	73.9	29.03	8.381	0	
13	6/17/2015 11:48	0:00:26	Run	2.001	0.869	0.833	73.9	29	8.396	0	
14	6/17/2015 11:48	0:00:28	Run	0.998	0.902	0.865	73.9	29.03	8.37	0	
15	6/17/2015 11:48	0:00:30	Run	0	0.902	0.865	73.9	29.03	8.301	0	
16	6/17/2015 11:48	0:00:32	Run	0	0.902	0.865	73.9	29.03	8.339	0	
17	6/17/2015 11:48	0:00:34	Run	0	0.902	0.865	73.9	29.03	8.335	0	
18	6/17/2015 11:48	0:00:36	Run	0	0.902	0.865	73.9	29.03	8.324	0	
19	6/17/2015 11:48	0:00:38	Run	0	0.902	0.865	73.9	29.03	8.332	1	
20	6/17/2015 11:48	0:00:40	Run	0	0.902	0.865	73.9	29.03	8.389	1	
21	6/17/2015 11:48	0:00:42	Run	0	0.902	0.865	73.9	29.03	8.392	1	
22	6/17/2015 11:48	0:00:44	Run	0	0.902	0.865	73.9	29.03	8.392	1	
23	6/17/2015 11:48	0:00:46	Run	0	0.902	0.865	73.9	29.03	8.396	1	
24	6/17/2015 11:48	0:00:48	Run	0	0.902	0.865	73.9	29.03	8.396	1	
25	6/17/2015 11:48	0:00:50	Run	0	0.902	0.865	73.9	29.03	8.381	1	
26	6/17/2015 11:48	0:00:52	Run	0	0.902	0.865	73.9	29.03	8.392	1	
27	6/17/2015 11:48	0:00:53	Run	6.922	1.018	0.977	73.9	29.03	8.396	1	
28	6/17/2015 11:48	0:00:54	Run	0	1.018	0.975	73.9	28.97	8.339	1	
29	6/17/2015 11:48	0:00:56	Run	0	1.018	0.976	73.9	29	8.385	1	
30	6/17/2015 11:48	0:00:58	Run	0	1.018	0.977	73.9	29.03	8.271	1	
31	6/17/2015 11:48	0:01:00	Run	0	1.018	0.977	73.9	29.03	8.29	1	
32	6/17/2015 11:48	0:01:02	Run	0	1.018	0.977	73.9	29.03	8.267	1	
33	6/17/2015 11:48	0:01:04	Run	0	1.018	0.977	73.9	29.03	8.263	2	
34	6/17/2015 11:49	0:01:06	Run	0	1.018	0.977	73.9	29.03	8.392	2	
35	6/17/2015 11:49	0:01:08	Run	0	1.018	0.977	73.9	29.03	8.392	2	



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