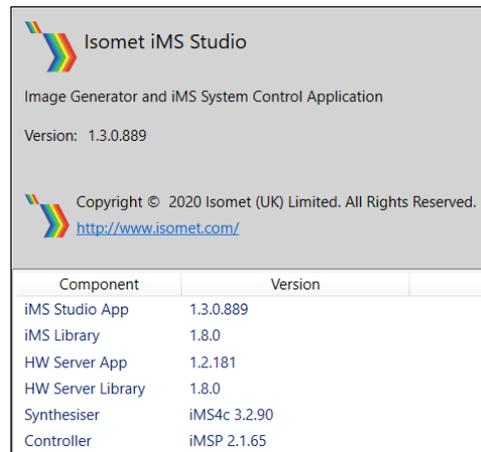


iMS4 Tools: Firmware Revisions, Upgrade, Log Files and Hardware Status

1: Firmware Revisions & Upgrade

1.1: To check SDK and IMS4 build revision

Go to Tool bar > Help >About



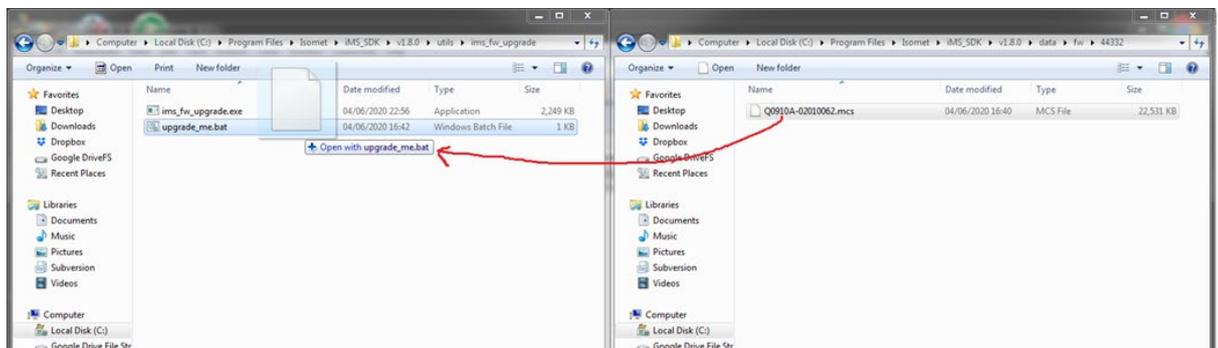
1.2: Procedure for updating the iMS Controller Firmware

Step1: Install version of v1.8.0 (or later) of the SDK.

http://www.isomet.com/ims4_sw.html

Step2: Once installed, open two Explorer Windows.

- Navigate window-1 to : **C:\Program Files\Isomet\iMS_SDK\v1.8.0\utils\ims_fw_upgrade**
Find update_me.bat
- Navigate window-2 to the **location of the new firmware *.mcs file.**
[If updating from a the SDK download, this file is located in
C:\Program Files\Isomet\iMS_SDK\v1.8.0\data\fw\44332]
- ‘Drag and drop’ the *.mcs file from window-2 and place on top of the 'upgrade_me.bat' script in window-1
- Follow the instructions.
- **When complete turn off, pause and then turn on the DC power to the iMS.**



Window-1

Window-2

*As of 2020-07-08 , the latest upgrade file is Q0910A-02010065.mcs

Notes:

- The firmware update procedure can take 5 minutes or more to download and update.
- Should the procedure time-out it will necessary to re-try.
- Cycle the iMS4-P DC power between update attempts.
- Update can be made through either a USB or GbE connection.
- If the update fails, the iMS4 will default back to the factory installed firmware revision.

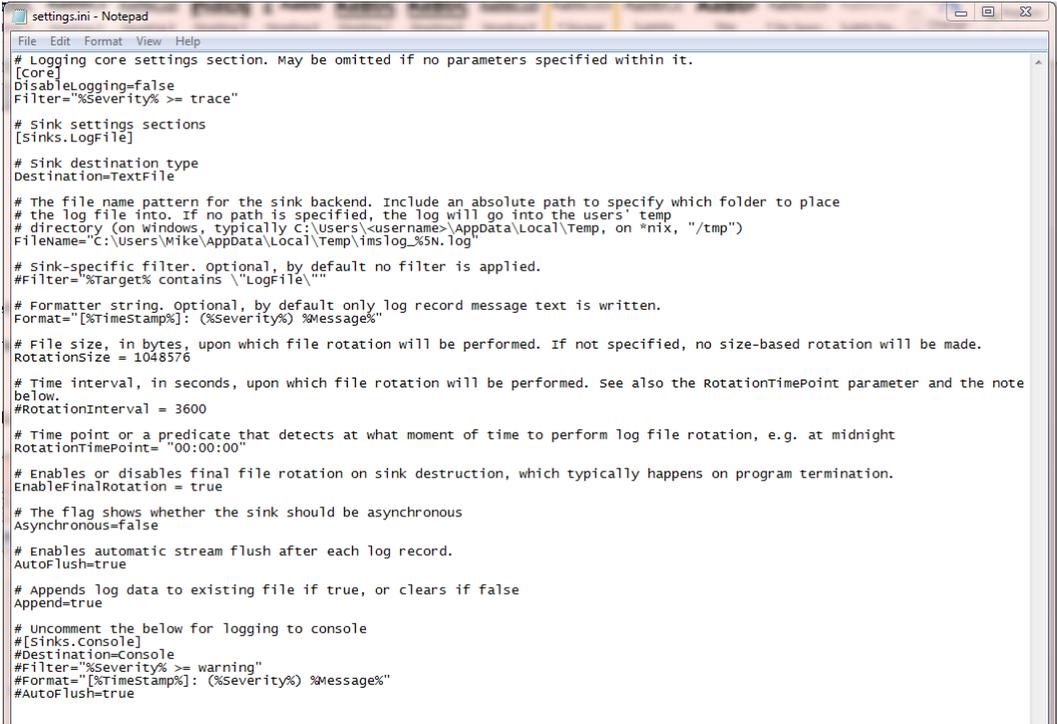
2: Log File

In cases of difficulty and when seeking Isomet support, it can be helpful to generate a log file. The log files will need to be initiated. This is the default condition.

- 2.1: Check the system.ini file has been correctly loaded and active. This is automatically installed with the SDK. Typical location:

C:\Users\\AppData\Local\Isomet\iMS_SDK\settings.ini

Open the system.ini file with Notepad and check the first few lines of text



```
settings.ini - Notepad
File Edit Format View Help
# Logging core settings section. May be omitted if no parameters specified within it.
[Core]
DisableLogging=false
Filter="%Severity% >= trace"

# Sink settings sections
[Sinks.LogFile]

# Sink destination type
Destination=TextFile

# The file name pattern for the sink backend. Include an absolute path to specify which folder to place
# the log file into. If no path is specified, the log will go into the users' temp
# directory (on Windows, typically C:\Users\\AppData\Local\Temp, on *nix, "/tmp")
Filename="C:\Users\Mike\AppData\Local\Temp\imslog_%5N.log"

# Sink-specific filter. optional, by default no filter is applied.
#Filter="%Target% contains '\LogFile\'"

# Formatter string. optional, by default only log record message text is written.
Format="[%TimeStamp%]: (%Severity%) %Message%"

# File size, in bytes, upon which file rotation will be performed. If not specified, no size-based rotation will be made.
RotationSize = 1048576

# Time interval, in seconds, upon which file rotation will be performed. See also the RotationTimePoint parameter and the note
# below.
#RotationInterval = 3600

# Time point or a predicate that detects at what moment of time to perform log file rotation, e.g. at midnight
RotationTimePoint="00:00:00"

# Enables or disables final file rotation on sink destruction, which typically happens on program termination.
EnableFinalRotation = true

# The flag shows whether the sink should be asynchronous
Asynchronous=false

# Enables automatic stream flush after each log record.
AutoFlush=true

# Appends log data to existing file if true, or clears if false
Append=true

# Uncomment the below for logging to console
#[Sinks.console]
#Destination=Console
#Filter="%Severity% >= warning"
#Format="[%TimeStamp%]: (%Severity%) %Message%"
#AutoFlush=true
```

By default, the log file is active; **DisableLogging = false**

(If logging needs to be deactivated, then change to *DisableLogging = true*)

Default severity level for logging data is "error"; **Filter="%Severity% >= error**

For a more detailed record, change to **Filter="%Severity% >= trace"**

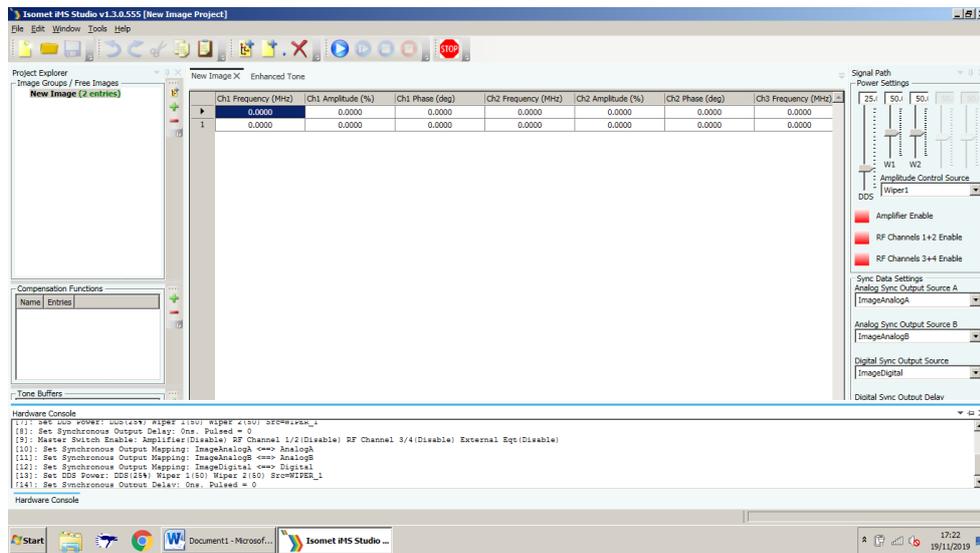
2.2: Find and View log file

Location: C:\Users\\AppData\Local\Temp\
File: imslog_#####.log

where ##### starts at 00000 and increments with each new log write.
Sort and find by date stamp.

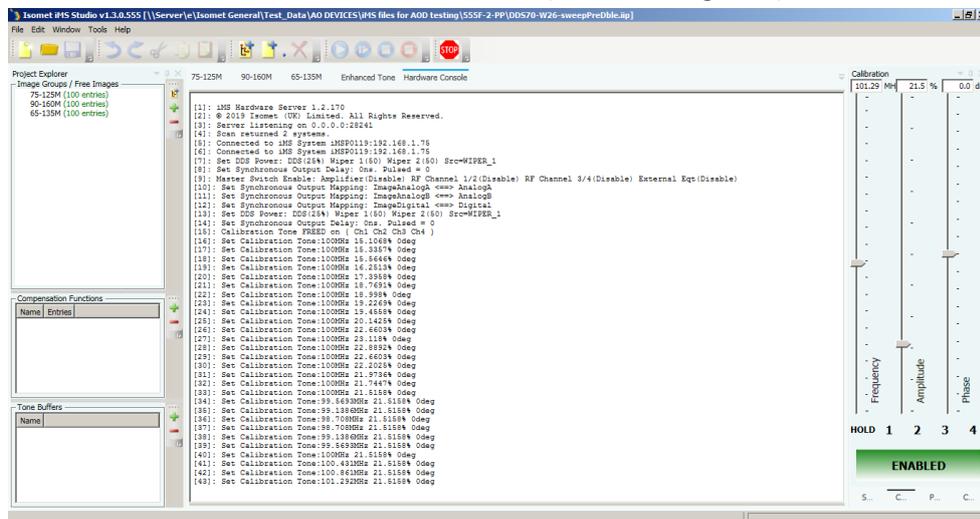
3: Hardware status/response using Isomet Studio

Click on Hardware Console lower left of GUI window



To expand view select the Down Arrow at the top right of Console window
and select : Dock as Tabbed Document . This will allow a full screen view

The example below shows the Console output as the sliders in Calibration mode are changed.
Note : The calibration button must be active (ENABLED in green)



4: Supported Compilers

See API documentation:

(file:///C:/Program Files/Isomet/iMS_SDK/v1.8.2/doc/html/index.html#sec_Platform)

We support MSVC compilers v140 (2015) and v141 (2017)

These can be developed in any recent IDE, e.g. Visual Studio 2015-2019.

In planning is an update for the v142 (2019) compiler version.

Meanwhile the 2019 Visual Studio IDE can be used with the v141 2017 compiler.