F.A.S.T Machine User Guide

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The Hardware

Hard Drives

Your OS, DB and Temp/Cache drives are inside the machine. Please do not attempt to service these drives unless instructed to.

Pre May 2019 Models

The 5 x 2TB hard drives that make up the RAID-5 for the Evidence/Storage drive are external-facing via the five hot-swap bays at the bottom-front of the case (shown below). The light below indicates when the drive is connected and will flash with drive activity. The drives should never be ejected unless advised to do so by FAST Forensics' support.

May 2019+ Models

If you do not see a 5-bay hotswap setup like the picture above, the hard drives that comprise your RAID array are inside your machine. Contact support for guidance on accessing these drives if necessary for any reason.

All Generations

Four (or three, depending on build generation) 3.5" trayless hot swap bays (shown below) are located at the middle-front of the case. 3.5" hard drives can be inserted until they stop, then the rest of the drive will be pushed in while

closing the bay door. It's important not to force the drives while pushing on the door to close. You should feel the drive sliding in the last inch while applying light pressure when closing the door.

To use one of these bays for a 2.5" hard drive or SSD, utilize the 2.5-to-3.5 conversion tray provided (shown below). Click HERE to see a video showing how to use.

Write Blocking

Logicube Write Blocker – Gen 1 FAST Machines

The top two hot swap bays are directly connected to the SAS/SATA ports on the front of the write block. The image below is of a Logicube write blocker.

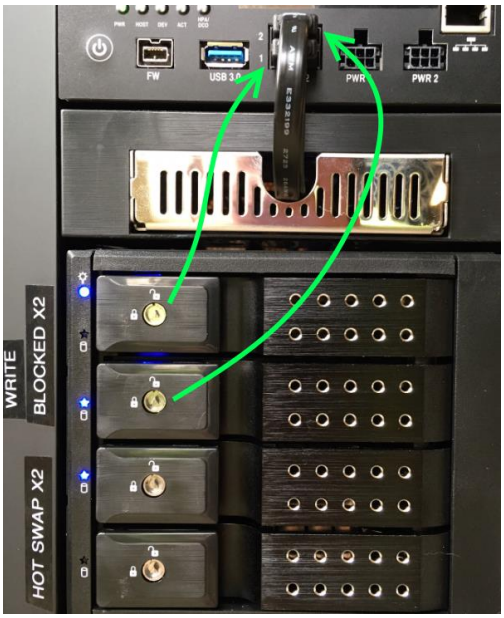


Tableau Write Blocker

If your machine contains a Tableau Write blocker, the two connectors on the front of the Tableau are labeled "SATA/SAS" and "SATA Gen3." The "SATA Gen3" connector feeds the top hot swap bay similar to the picture above. Depending on Generation, the "SATA/SAS" connector may feed the 2nd hot swap bay, which will be marked as such to the left of the bays with "SAS." To write block a SAS HDD you must use the 2nd write blocked hot swap bay. A SATA HDD can be connected to either write blocked hot swap bay (if your machine has 2 x write-blocked bays) but the "SAS" hot swap bay is only capable of SATA 2 speed so it is recommended to only use the "SATA" labeled hot swap for SATA HDD imaging.

There is no need to connect/disconnect anything on the front of the write blocker when connecting a hard drive. Simply insert the evidence hard drive in to one of the two top hot-swap bays.

Logicube Write Blockers

A user guide for the Logicube Write blocker is available here (https://www.getfastforensics.com/support). Please read notes below before reading the user guide.

The write blocker can be accessed via a web page if an Ethernet cable is connected to the available Ethernet network port on the front of the Logicube. A sticker on the Logicube indicates what URL to enter in your browser to access the web interface (HTTP://WP-141XXX). Ignore the manual's note about the IP of the device being on a sticker on the bottom.

There are two ways to gain connectivity to the web interface of the Write Blocker:

1) Connect an Ethernet cable from the port on the front of the write blocker to the same local network that the workstation is connected to. Then browse to the URL (following the example URL above) for the write blocker.
2) Directly connect an Ethernet cable with one end in the port on the front of the write blocker and the other end in one of the available network ports on the back of your workstation. This will cause each adapter to receive an APIPA address (169.254.x.x) and now your workstation will be able to connect to the management URL for the write blocker. **Note** that this will not allow the write blocker to update its firmware directly from the internet as it will only be able to communicate with your workstation. This option only gives you the ability to access the web page of the Write Blocker.

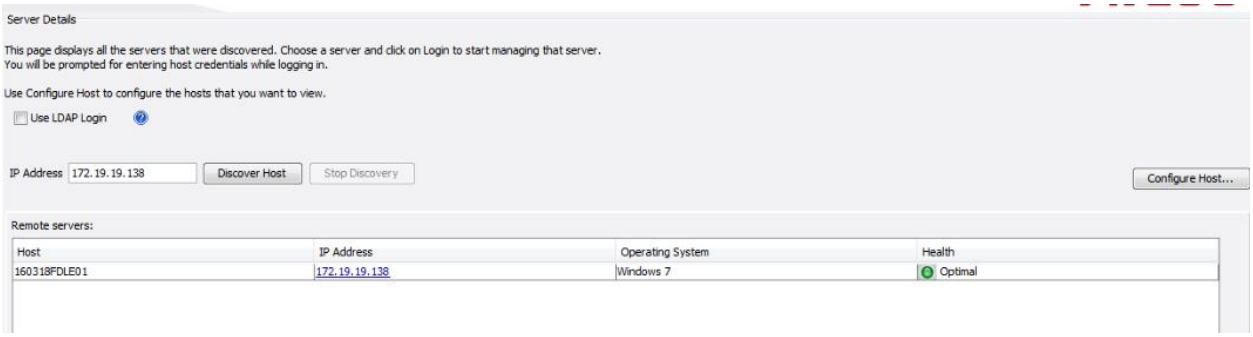
Note that if both write-blocked hot-swap bays have hard drives in them and a USB device is connected to the Logicube's USB 3.0 port, you can image all three at the same time (for instance). If imaging multiple devices simultaneously, all devices must be connected to the write blocker first, and then you can start imaging them all. You cannot connect a device while another is already imaging.

RAID Drive Failures

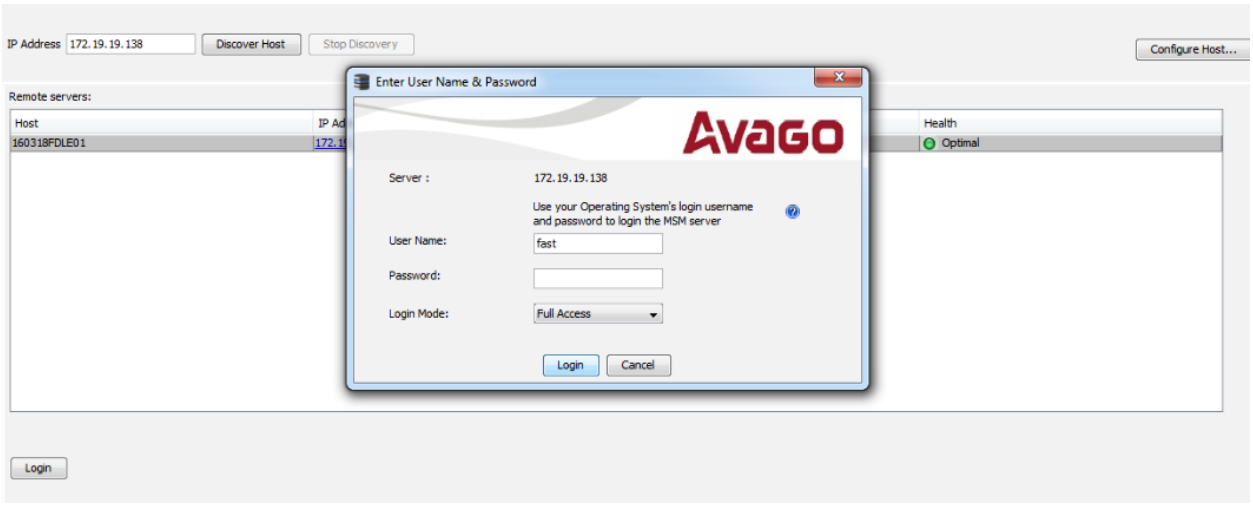
In the event of any RAID error, please contact FAST support immediately.

In the event of an issue with one of the five hard drives in the RAID-5 array, you will be notified via a popup window from the "MegaRAID Storage Manager." If one drive fails in the array, the E: drive will continue to function in windows. The RAID-5 array can function with one failed drive, however all data on the E: drive will be lost if a 2nd drive were to fail at the same time. While there is a failed drive, and during rebuild, the performance of the E: drive can be slightly impacted. **It is highly recommended to keep regular backups of your E:\ drive to external storage.**

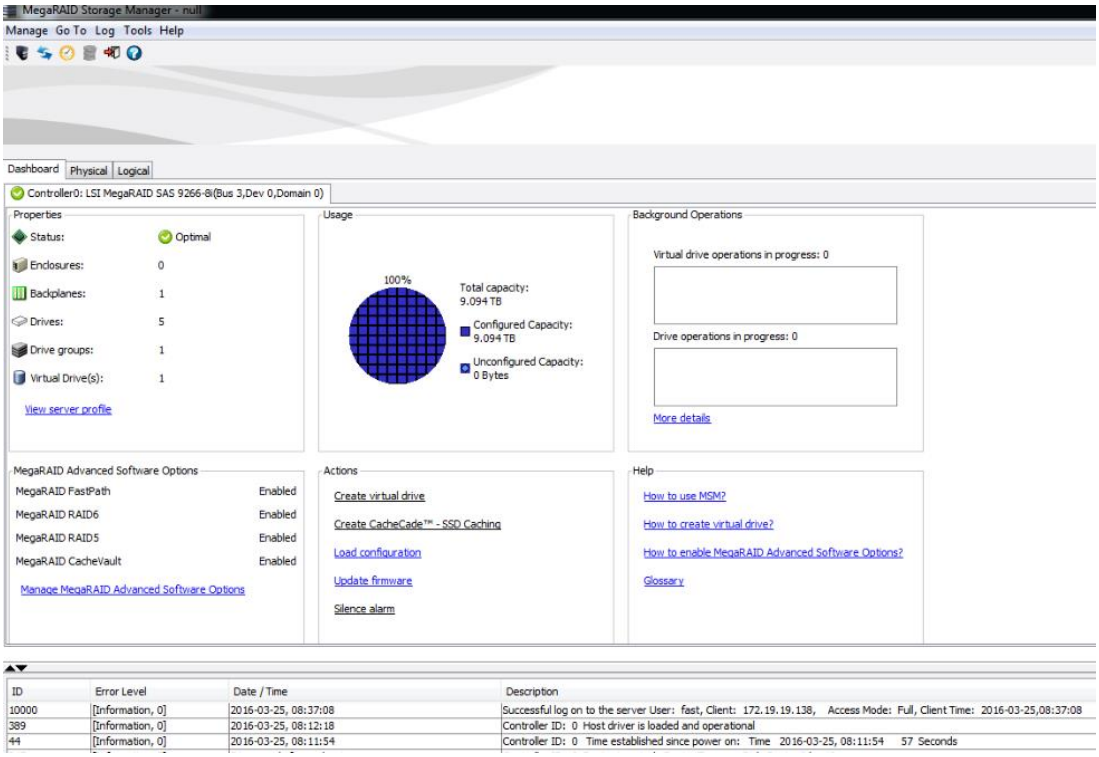
The MegaRAID Storage Manager can be launched from the icon on your desktop or from within the start menu. Upon launch you will see your computer name under the "Host" list, your local IP address and the health of your logical RAID Arrays:



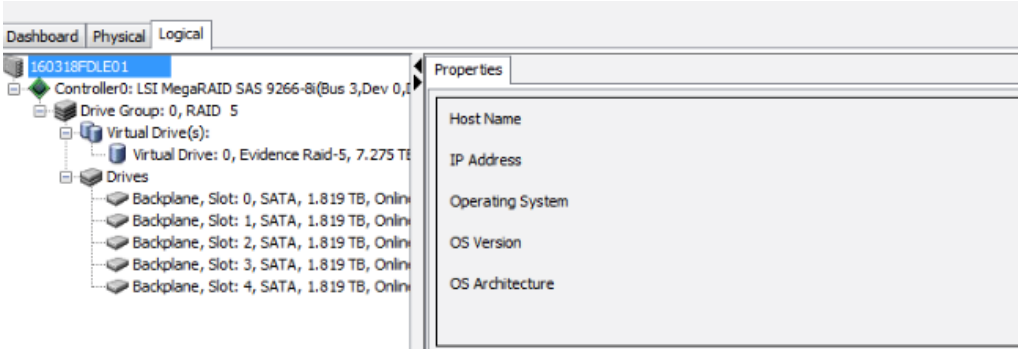
Double click your host and you will be presented with a login screen. The username is **fast** and the password remains blank. Click **Login**.



After login you are presented a dashboard with overall health of your RAID system, as well as the logs:



Click the **Logical** tab at the top to see your RAID Volume(s) and drives:



Please consult FAST Forensics support at 813-602-1943 for assistance with RAID failures & remediation.

The Power Supply

Note that the fan on the power supply may not spin unless there is enough power drawn by your machine to require its cooling. This is a silence feature and is by design.

The UPS Battery Backup

The UPS provided with your FAST Machine is very important for the protection of both your machine and its data. The rear of the UPS has 5 power plugs (left, shown below) that provide surge protection **and** battery backup. The remaining four plugs on the right only provide surge protection. Be sure your computer is connected to one of the left plugs for surge and battery protection. It's OK to connect separate power strips to these plugs for more plug capacity.

There should also be a USB cable connected from the USB port (white, top-right above) on the UPS, to a USB port on your computer. This is used to monitor the UPS from the **Power Panel Personal Edition** application on your FAST machine.

The **Power Panel** application can be configured to shut your computer down for you, in the event of a power failure, if the UPS has less than 5 minutes of battery life remaining in order to smoothly shut down the OS and minimize risk of OS/Data corruption.

Audible alerts will sound from the UPS in the event of overload (too many devices connected), loss of power and lower battery life. The amount of time your computer can remain running in the event of a power loss depends on how many devices are connected to the UPS, how much power they draw and what your computer is doing while running on battery backup (more system resources utilized on your computer = more power drawn = less time on battery).