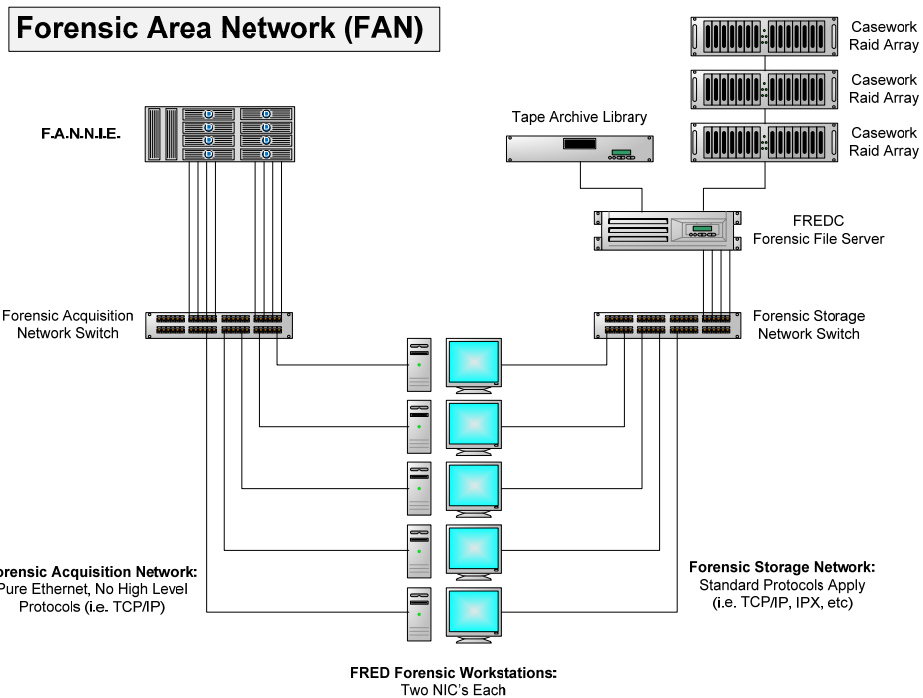


F.A.N.N.I.E. Quick Setup Guide



Forensic Area Network Numerous Imaging Enclosure

1. A FANNIE Data Sheet was provided with the system to document the configuration setting for each drive bay in the enclosure. The information on the sheet includes the MAC address, Admin Password, Access Key (Read Only Access), and Read/Write Key (Read/Write Access) for each drive bay in the enclosure. It is important that the data sheet be retained to simplify drive bay identification on the network (by MAC address) and also the initial configuration settings.
2. For maximum performance it is recommended that each bay on the FANNIE, and all workstations which will access the FANNIE, be connected to a single common GB Ethernet Switch. Furthermore, using a dedicated NIC on the workstation for access to the FANNIE network will also keep the FANNIE traffic isolated from the "standard" network traffic. Workstations with at least two NIC's can then use one NIC for standard network services and a second NIC just for imaging traffic from the FANNIE network. This will ensure maximum performance of your FANNIE imaging enclosure and also isolate this high-bandwidth traffic from your traditional network.



3. It should be noted that FANNIE does NOT utilize any high level protocols on the network. FANNIE operates over pure ethernet AOE (ATAPI Over Ethernet) protocols and therefore does not require any high level protocols to be loaded on the associated workstation NIC's (TCP, IPX, Netbeui, etc). You may actually remove all protocols from the associated network adapter on your workstation if desired (however this is entirely optional).
4. Please be aware that it is also quite possible to simply plug the FANNIE ports directly into an existing network and achieve full functionality of the device. However, performance of the FANNIE, and also the existing network, may suffer as all FANNIE traffic would have to share bandwidth with the existing network traffic.
5. The master power switch on the FANNIE is located on the rear of the enclosure. This will power up the chassis. Individual drive bay power is controlled by the keylock on each bay.
6. Each bay in the FANNIE is managed independently. The FANNIE data sheet identifies each bay by MAC address and includes the associated management password (default = "fannie"). In order to discover, manage, or mount a bay in the FANNIE, a disk must be installed in the bay and the bay locked in and turned on. If you do not have a drive installed, the associated bay will effectively be invisible to the network.

7. After establishing the FANNIE network and connecting the desired workstations, the AOE driver should be installed from the disc provided with the system. This driver disc supports Windows 2000, XP, and Vista. (Support for the Linux Operating System is provided natively by the kernel).
8. Once the system is rebooted with the new driver installed, it is recommended that a couple of options be changed in the default "miniSAN" driver configuration:
 - Right click on the miniSAN icon on the taskbar and choose "Options".
 - General Page: Deselect "Mount Disk as Persistent"
 - General Page: Set Management View to "Detailed List"
 - Confirm / "OK"
9. Now that the default options are set, you can launch the "Disk Manager" by double clicking on the miniSAN icon on the taskbar. Choose "Discover Disks" to see all FANNIE bays with disks installed and turned on.
10. Once you see the FANNIE bays in the "Disk Manager" window, it is a good idea to double click on each Disk Description field and set the respective bay info for each MAC address (i.e. "Bay1", "Bay2", "Bay3", etc). You should refer to the FANNIE Data sheet provided with your system to easily match up the Bay numbers to each associated MAC address. This information will be stored on each individual workstation and will only need be entered once (per workstation). The driver will remember the disk description for each MAC address. Once again, you will not see, or be able to manage, a FANNIE bay until you place a disk in the bay and turn it on. If you only have a limited number of "test" disks, you can simply move them through the enclosure and manage the bays one or two at a time (set description, access keys, etc).
11. With the disk descriptions set, it is now a good time to set the default access rights for each bay. Two keys are identified for each bay on the FANNIE Data Sheet. The "Access Key" will provide Read access to the bay. The "RW" key will provide Write access to the bay. If you wish to access a bay for write protected imaging, specify ONLY the "Access Key" on the "Registration" page. The Registration page appears the first time you try to mount the drive bay. If you wish to access a bay with full Read/Write access then you must provide BOTH the "Access Key" and "RW Key". The following behavior should be noted for drive registration:
 - Drive bay registration is performed when you first try to mount a drive. Clicking on the "Mount" button for an "unregistered" bay will bring up the "Registration" window which will prompt you for the desired key(s).
 - If you wish to have write protected access to the drive bay, only specify the "Access Key"
 - If you wish full Read-Write access to the bay, specify both the "Access Key" and "RW Key"

- You must click on the "Mount" button a second time after your initial registration to actually mount the drive. The drive will then be mounted using the key(s) provided and with the corresponding access rights (Read-Only or Read-Write).
- Once you have completed the registration for a drive bay, your workstation will remember this configuration information. Each time you "Mount" a previously "registered" disk, the established key(s) will automatically be used to provide the associated access rights (Read-Only or Read-Write)
- If you "Register" a drive bay for Read-Only access, those rights will automatically be established each time you click to "Mount" the associated drive bay.
- If you "Register" a drive bay for Read-Write access, those rights will automatically be established each time you click to "Mount" the associated drive bay.
- If you wish to change the established (remembered) access rights to an individual drive bay (i.e. switch from Read-Only to Read-Write or vice versa), you must first "un register" the access keys information.

12. It is important to understand that if you wish to change your established access rights to a particular drive bay, you must "un-register" the preserved information through the "admin" dialog as follows:

- Select the desired bay in the main Manager window and click on the "Admin" button.
- Click on "Un Register" in the new dialog box which appears.
- This will clear all preserved registration info (keys) for the associated drive bay and you can now use the "Mount" button for the associated device to re-establish new key info for a change in access rights (Read-Only or Read-Write)

13. Once a FANNIE bay is mounted on your system, you will have complete physical access to the drive. The drive may be accessed and managed as any other drive physically connected to your system. The Windows Disk Administrator can be used to identify mounted drives. Disk Administrator can also be used to prepare (format, etc) any mounted drives with full Read-Write access. Windows Explorer can be used to explore the disk contents for supported file systems. Forensic imaging tools can be used to make physical or logical images of mounted drives.

14. To disconnect from a drive bay, simply select the associated drive bay in the Disk Manager window and click "Unmount Disk". The drive bay may now be unlocked to power down and remove the disk.
15. If you wish to ensure that no one in your FANNIE network can EVER achieve Read-Write access to a drive, simply do not distribute or publish the "RW" keys for any of the drive bays. If no one knows the "RW" keys, drive data can never be changed in any of the bays. (As FANNIE is shipped using an obvious pattern to establish both the "Access" and "RW" keys, you may also wish to use the "Admin" dialog to change the "RW" keys to something more obscure.)
16. As shipped, the default password to manage each bay is as listed on your FANNIE Data Sheet. You can change the default management password and access keys for each bay as follows:
 - Select the desired bay on the "Disk Manager" Screen and click on "Admin"
 - Select the "Admin" tab and provide the established password when prompted.
 - You can then change the admin password, Access Key, and RW key on the provided "Access" page.
17. You may issue a factory reset on an individual bay by pressing the little black button on the associated network interface card at the rear of the enclosure. Please note that if you issue a factory reset the following behavior applies to the corresponding bay:
 - The password will be reset to "miniSAN"
 - Full Access (Read/Write) will be allowed to the bay WITHOUT requiring any access key!
18. Following a factory reset, it is highly recommended that you immediately establish a new password, new "Access Key", and new "RW" key. This will help secure drive access and ensure no Read-Write access can be achieved without specification of the associated "RW key".