TECH NOTE

VICON TECHNICAL SERVICES GROUP

Subject: HDD 64k Cluster Size Format
Product: Any ViconNet DVR version 2.18D or 3.X
Number: 1400-0001-96-00
Date: 5/1/2006

Vicon has determined that formatting the data drives for 64k clusters improves efficiency and the integrity of the stored data. This Tech Note describes how to confirm 64k cluster has been set on the Storage Database HDD of ViconNet DVR's and reformat if needed to the 64k Cluster. This only applies to DVR's running ViconNet versions 2.18D or 3.x. Reformatting the Data HDD to the new cluster size optimizes the efficiency of the data recording by Windows and ViconNet.

- ***Note 1:*** *It is not mandatory to do this reformat, but suggested at the time of upgrade to 2.18D or 3.0, eliminating a possible source of a Viconnet RVS error of " Storage DB problem: Data was not received for an extended period of time from xx " This RVS error can sometimes be generated from other causes, but doing this 64k format will eliminate the default cluster size of 4096 as a possible RVS error source.*
- ***Note 2:*** *Formatting the data drives will erase all recorded data.*

Sequence of Steps:

Verify if ViconNet is currently running ok, is version 2.18D or 3.x

1. Determine current Allocation size cluster.
2. Reformat if NOT 64k (NOTE: format erases all recorded data !)
3. Verify if HDD are set at factory label.
4. Confirm ViconNet storage DB is set properly, redo if needed.
5. Final record and playback checks.

---

1. 64K cluster Verification:

- Press "Start" on the task bar, select the "run" option and then click the "Ok" button.
- Type "cmd" in the dialog box as shown in figure 5, and then click the "Ok" button.
- The "cmd" command will open a Dos prompt. Enter the command "fsutil fsinfo ntfsinfo E:" (E being the drive being checked) and press enter
- As in figure 1 , the "Bytes Per Cluster:" should be around 65536, not 4096 shown in fig 2.

Fig 1 Correct cluster " 64K "

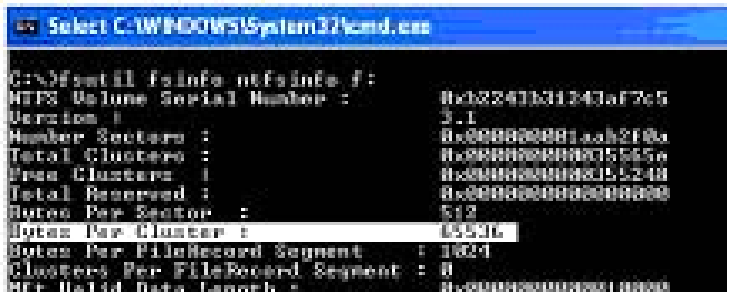
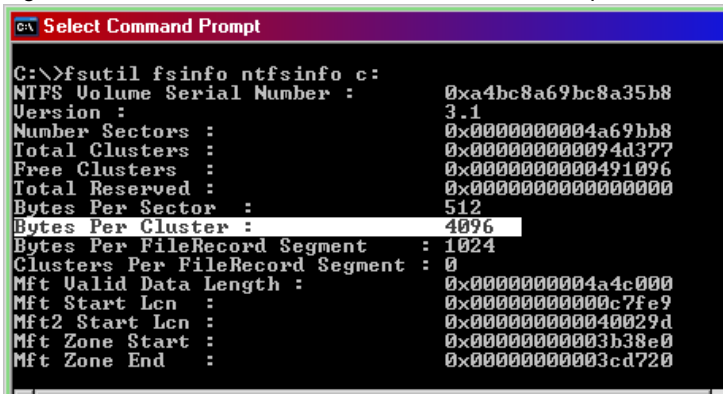


Fig 2 Default cluster, not correct, reformat to 64k required



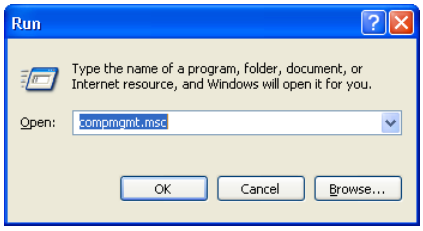
TECH NOTE

VICON TECHNICAL SERVICES GROUP

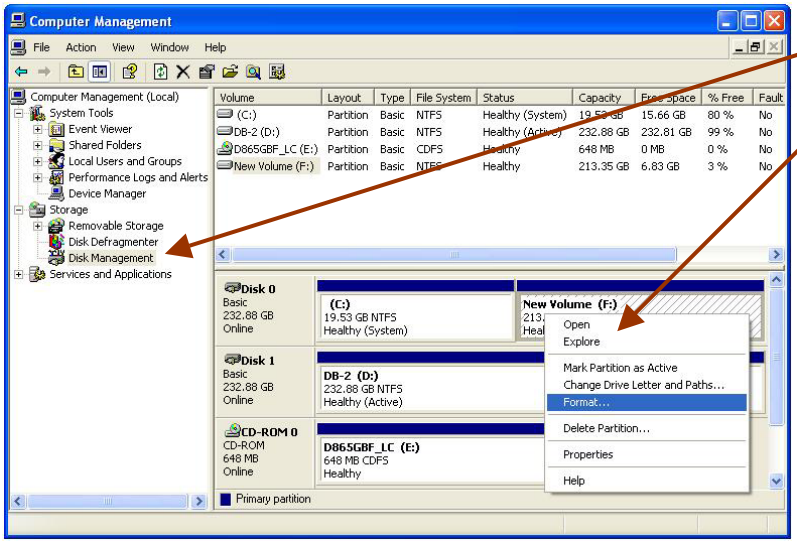
Subject: HDD 64k Cluster Size Format
Product: Any ViconNet DVR version 2.18D or 3.X
Number: 1400-0001-96-00
Date: 5/1/2006

2. Format HDD in Windows XP *Warning! formatting will erase all recorded video!*

- Press the "START" button.
- Choose the "Run" option from the start menu; click the "ok" button".
- The following window will be open.
- Type "compmgmt.msc" in the "open:" dialog;.

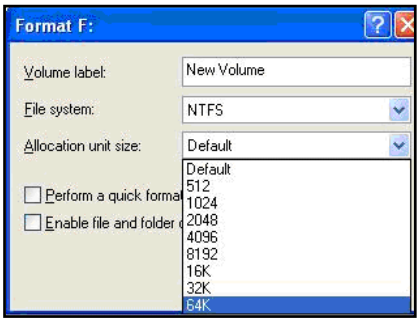


- Click the "ok" button. The window below will open.

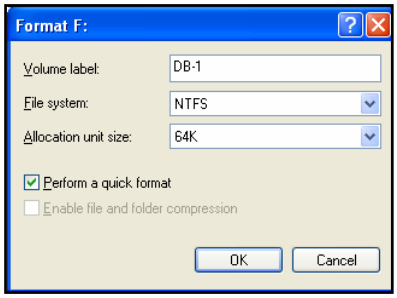


- Select the "Disk Management" option from the list on the left side of the screen.
- Right click on the first DB drive; the following drop down list will be opened.
- Choose the "format" option from the list.
- The format window will be opened; select the "64k" option from the drop down list.

- Select "64k"



- Enter the correct volume label.
  DB-1 for E: / DB-2 for F: etc
- Check "perform a quick format"



- Press the "ok" button. Format is complete when “healthy” is displayed.
- Repeat the format steps on all the remaining Database hard-drives; local and external (Raids).

3. Verify if HDD are set at factory label.

Vicon configures drives at the factory for specific drive letter to and volume label name.
This should be checked. If a change is needed be aware any of the existing data will be unusable.

Verify or Rename the partitions as follows:

- C: Primary partition label: Embedded
- E: Secondary partition label: DB-1
- F: Third partition label: DB-2
- Follow the DB-x naming for each additional partition
- The CD drive is always given the drive letter of D:

4. Confirm ViconNet storage DB is set properly, redo if needed.

Start ViconNet

Note: the "auto record" option and any record macros should be disabled prior to this step. The reason is that the storage database cannot be changed while "auto record" is enabled.

a. Click on the button labeled "Setup" in the top the main ViconNet window. This will open the "Setup Site Selection" window.
b. High light the Kollector entry under the "Site Name" and click on the button labeled "Select" (Fig.13).
c. From the "Main Settings" window, (Fig.14), click on the button labeled "Storage Database Setup".
d. To add, delete, or edit, the currently listed storage, follow the instructions under "Storage Database Utilities".

Storage Database Utilities Editing

a. Drives mapped in the storage database should always follow numerical order, example: E: then F: then G: and so forth, drive C: is never used. If the drives do not follow the numerical order, verify that the current saved data is not required and then correct the mapping order.
b. ADD Disk: Click on the button labeled "ADD Disk", click on the "Select Disk" pull down menu and select the drive letter being added. In the "Size of Directory" window, type the maximum drive size that is shown in the "Maximum Size" window. After adding a drive click on the button labeled "Save" next to the button labeled "Undo". The drive letter and path should appear in the main window. Repeat this for each drive being added.
c. Delete Disk: After all of the database drives are configured correctly, check to see if the "C" drive is listed. If it is, highlight that drive and delete it using the "Delete Disk" button.
d. Finish: Click on the button labeled "Save" just below the "Delete" button. When asked to, click on "Yes" then click on "Close". After clicking on the "Yes" button, click on the button labeled "Clear DB" and then "Close". Finally click on the button labeled "Save & Close" to exit to the "Main Settings" screen.

5. Final record and playback checks

a. Setup auto-recording and any record macros previously disabled.
b. Allow system to record for approx 2-5mins
c. Go into Playback, select all recorded cams
d. Click Play,
e. On the Main GUI all cameras should be playing back properly.