The previous release of ZU (ZU.Betta1.1) used simple methods to remove passwords.

Comparability: Maxtor (except STM),WD,Toshiba,Quantum Fujitsu (except MHW,MHZ,MHY,MJA). There is a mistake for MHX. Nikimi (former Quantum & Maxtor) MDT (former WD) Native Hitachi (DK-xx,HTC..G7AT00) IBM/HGST (many models,except 100h\_byte\_NVRAM & 4K-NVRAM & 2.5" with blue controllers. (mcu=ARM & B9A3..), disks without NVRAM) ExcelStore(former HGST) Seagate(with parallel flash)+Grand(UX with serial flash)

How to use ZU :

ZU /P

ZU /S

ZU /A

- ZU only works on channels /p and /s in IDE-compatibility mode.

/P Primary.

/S Secondary.

/AACE PC3000 ISA.

Removing the passwords on HGST/IBM and Native Hitachi HDDs (eg \_DK23DA, \_DK23FA ..) requires that they be placed in so-called "SafeMode".

ZU.Betta 2.0 now supports working in this mode.

Since different drives require different amounts of time to enter this special mode (eg Native Hitachi HDDs require up to 2 minutes), now, for the sake of convenience, a timer is started when ZU is launched.

The program reports the elapsed time at one second intervals, for example ELAPSED 00:00:22 (00:00:23 ..), while concurrently conducting a survey of readiness on the specified channel.

Press any key to stop this polling if it continues for an excessively long time. The program will then terminate with the message "UNLOCK NOT DONE".

To distinguish between vendors, there are now 2 qualifiers:

CODE: SELECT ALL

- "." for HGST / IBM
- "8" for Native Hitachi

That is, one would use command formats such as the following:

## CODE: SELECT ALL

- ZU / S. battle with HGST on the Secondary channel :)
- ZU / P8 NativeHitachi on Primary channel

Placing the drive in SafeMode can be done using a variety of methods.

HGST PATA models can simply be jumpered for SafeMode, while other drives can be induced into SafeMode by "faulting" the NVRAM or by shorting specific points on the PCB.

In general, one can simply try to apply power to the controller while it is disconnected from the HDA (or unscrew the 2 screws on the controller on the side opposite the interface and slightly lift it with a toothpick :))

After ZU detects the drive and attacks it, the program will report the NativeHitachi message "NOW YOU CAN SCREW IT IN. PRESS ANY KEY WHEN READY".

The HGST message will be "POWER OFF / ON AND EXECUTE ZU AGAIN".

In the first case, you just need to reinstall the controller on the drive, carefully screw it down, and then press any key.

In the second case, turn off the power and reinstall the controller. Then power up the HDD and run ZU again with the same parameters. This procedure applies to IBM / HGST (ExcelStore) models from DTLA to HTS7225xxK9SA00 (5K250) (dozens of models).

The following are not supported: Notebook HDDs with suffix A300 (A301) (eg 5K500 B-250 HTS545025B9A300)(blue controller with 9 screws) 3.5" HDDs with suffixes 332/362. (eg HDS721010CLA332, HTS721032CLA362 ..)

[These will be supported as soon as there is a sufficient number for experimentation.]

2.5-inch SATA hard drives (HGST models)

The following actions can only be performed if your SATA drive is attached to DiskSense unit via Hitachi password extraction adapter.

1. Connect Hitachi password extraction adapter to the IDE Source port of DiskSense unit.

2. Connect the source Hitachi HDD to Hitachi password extraction adapter.

3. Place the hard drive as shown on the picture (no need to disconnect any cables):

- 4. Use a T4 screwdriver to remove four screws as shown below:
- 5. Put a piece of paper between the circuit board and the hard drive assembly:
- 6. Do not remove paper; proceed with unlocking
- 7. To disable the Safe Mode, first remove the paper and then put all screws back:
- 8. Continue with the unlocking process.

2.5-inch SATA hard drives (old models)

The following actions can only be performed if your SATA drive is attached to DiskSense unit via Hitachi password extraction adapter.

1. Connect Hitachi password extraction adapter to the IDE Source port of DiskSense unit.

2. Connect the source Hitachi HDD to Hitachi password extraction adapter.

- 3. Place the hard drive as shown on the picture (no need to disconnect any cables):
- 4. Use a T4 screwdriver to remove two screws as shown below:
- 5. Put a piece of paper between the circuit board and the hard drive assembly:
- 6. Do not remove paper; proceed with unlocking
- 7. To disable the Safe Mode, first remove the paper and then put all screws back:
- 8. Continue with the unlocking process.

Non-ARM 2.5 Hitachi/IBM uses the same procedure for unlocking that ARM uses.

- Block SA access by removing PCB so that drive doesn't lock NVRAM access.
- - Read NVRAM and patch it for SA-C access.
- Place PCB back to the drive and power it on.
- - Access SECI OR ICES (security) and replace it with copy of unlocked drive.
- Write original NVRAM.Done.

HEJ425040F9AT00 - Hitachi Endurastar J4K50 40GB 4260RPM IDE ATA-100 8MB Cache 2.5-inch Hard Drive











