Hardware Database Tutorial

Goal:

To enter an analog input and an analog output Epics records using the Hardware databases web interface. Then retrieve those records from the database using the extraction program.

Instructions

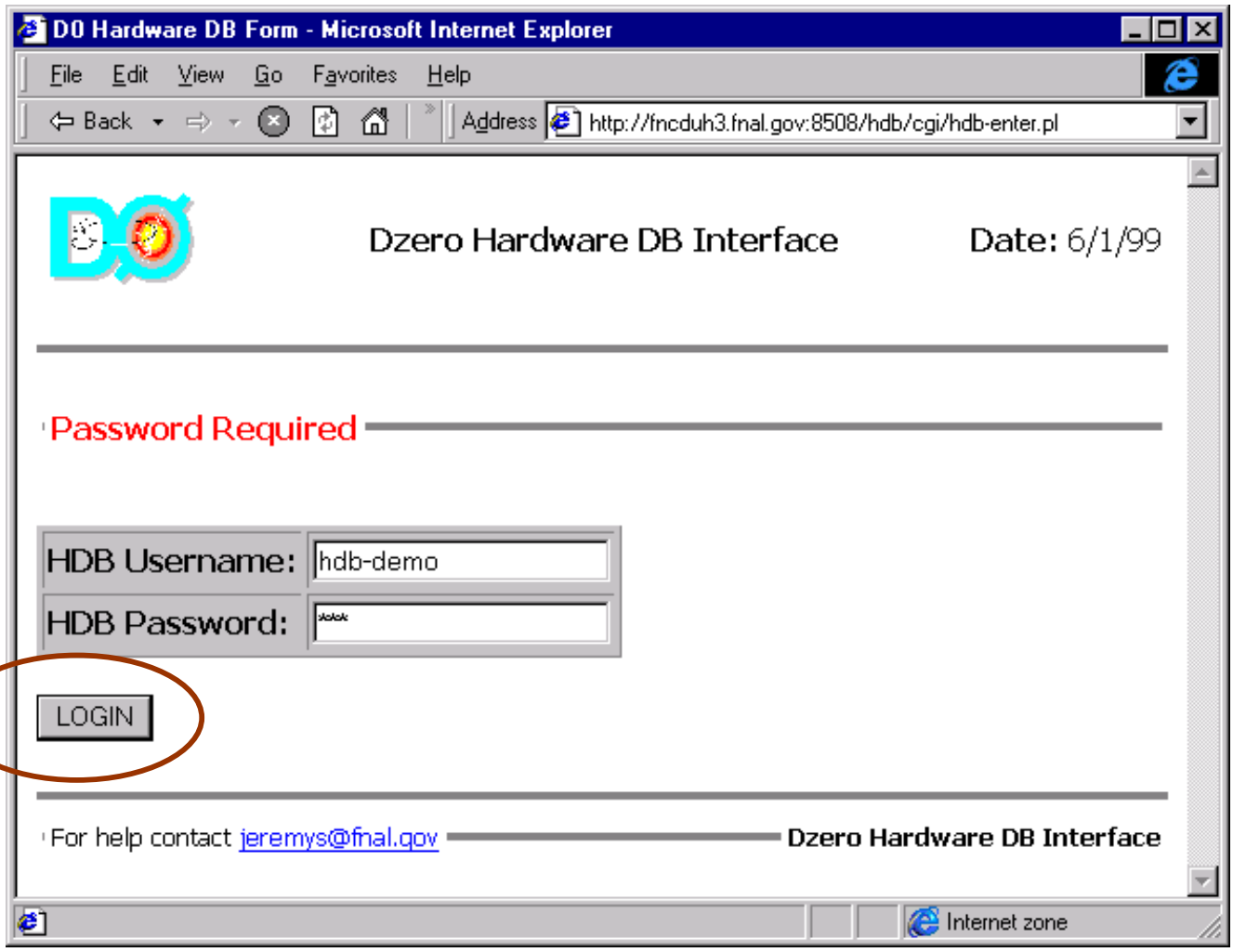
Follow the instructions for entering the records starting on the next page. You will first enter an analog input record, then an analog output record. Once entered you will then use the extraction software to retrieve the Epics records.

```
record(ai,"RM1/AD00")
 {
 field(DESC, "Rack Monitor RM1/AD00")
 field(DTYP, "Raw Soft Channel")
 field(INP, "RM1.AD00 NPP NMS")
 field(SCAN, "1 second")
 field(LINR, "NO CONVERSION")
 field(ASLO, "4.885E-3")
 field(AOFF, "0.0")
 field(HIHI, "9")
 field(HHSV, "MAJOR")
 field(HIGH, "6")
 field(HSV, "MINOR")
 field(LOW, "-6")
 field(LSV, "MINOR")
 field(LOLO, "-9")
 field(LLSV, "MAJOR")
 }
```

```
record(ao,"RM1/DA00")
 {
 field(DESC, "Rack Monitor RM1/DA00")
 field(DTYP, "Raw Soft Channel")
 field(OUT, "RM1.DA00 NPP NMS")
 field(SCAN, "Passive")
 field(OMSL, "supervisory")
 field(LINR, "NO CONVERSION")
 field(DRVH, "10.0")
 field(DRVL, "-10.0")
 field(ASLO, "4.885e-3")
 field(AOFF, "0.0")
 }
```

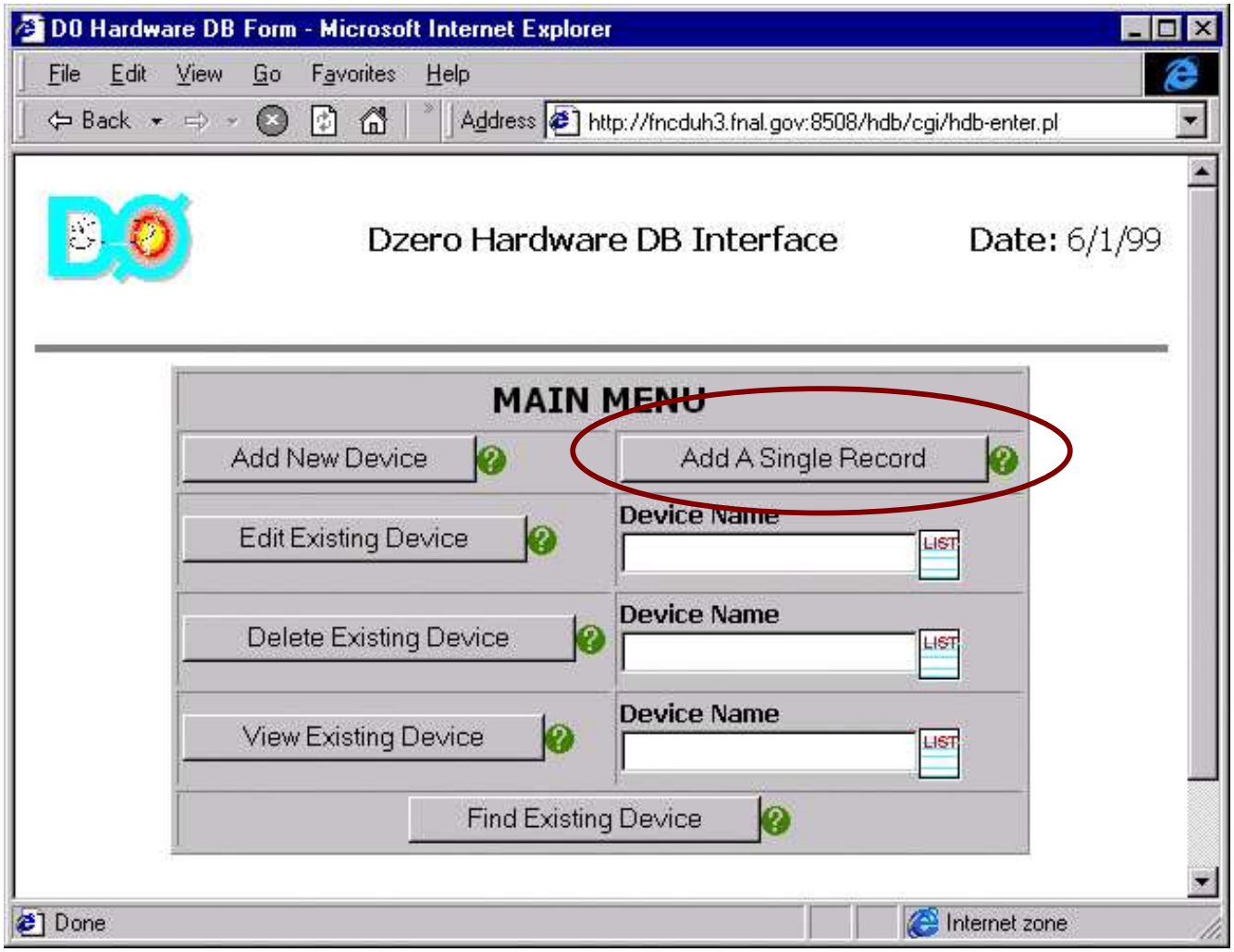
Hardware Database Tutorial

1. Point browser to http://d0db-dev:8508/hdb/
2. Click link “HDB Web Interface”
3. Login (Shown below)
   User name = hdb-demo
   Password = hdb
4. Click “LOGIN”



From The Main Menu

5. Click on “Add A Single Record”



6. Select AI as your Record Type

7. Under the box “For A New Device”

-Enter a “Device Name” = Your username + _RM

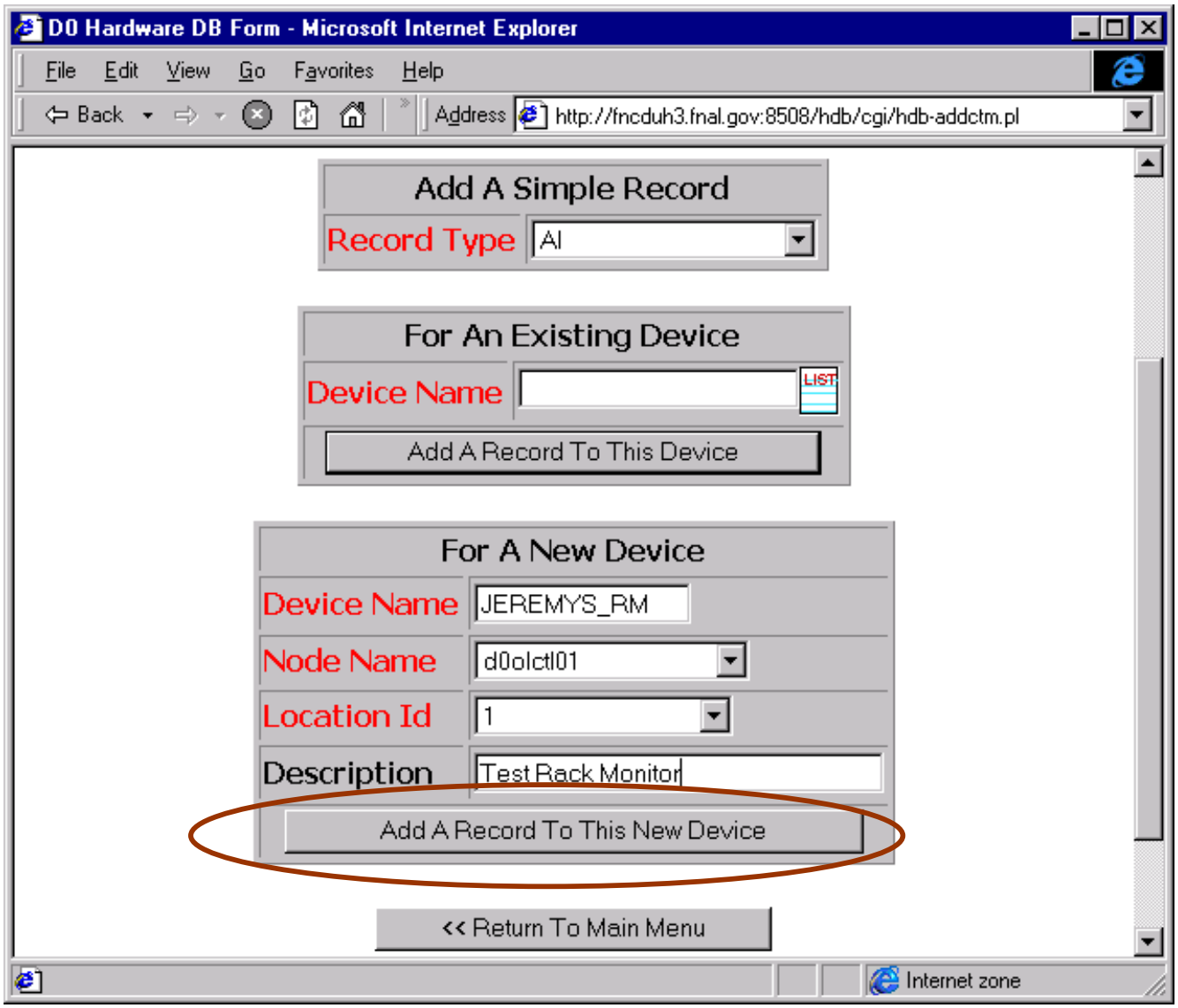
example. JEREMYS_RM

-Select a “Node Name” = d0olctl01

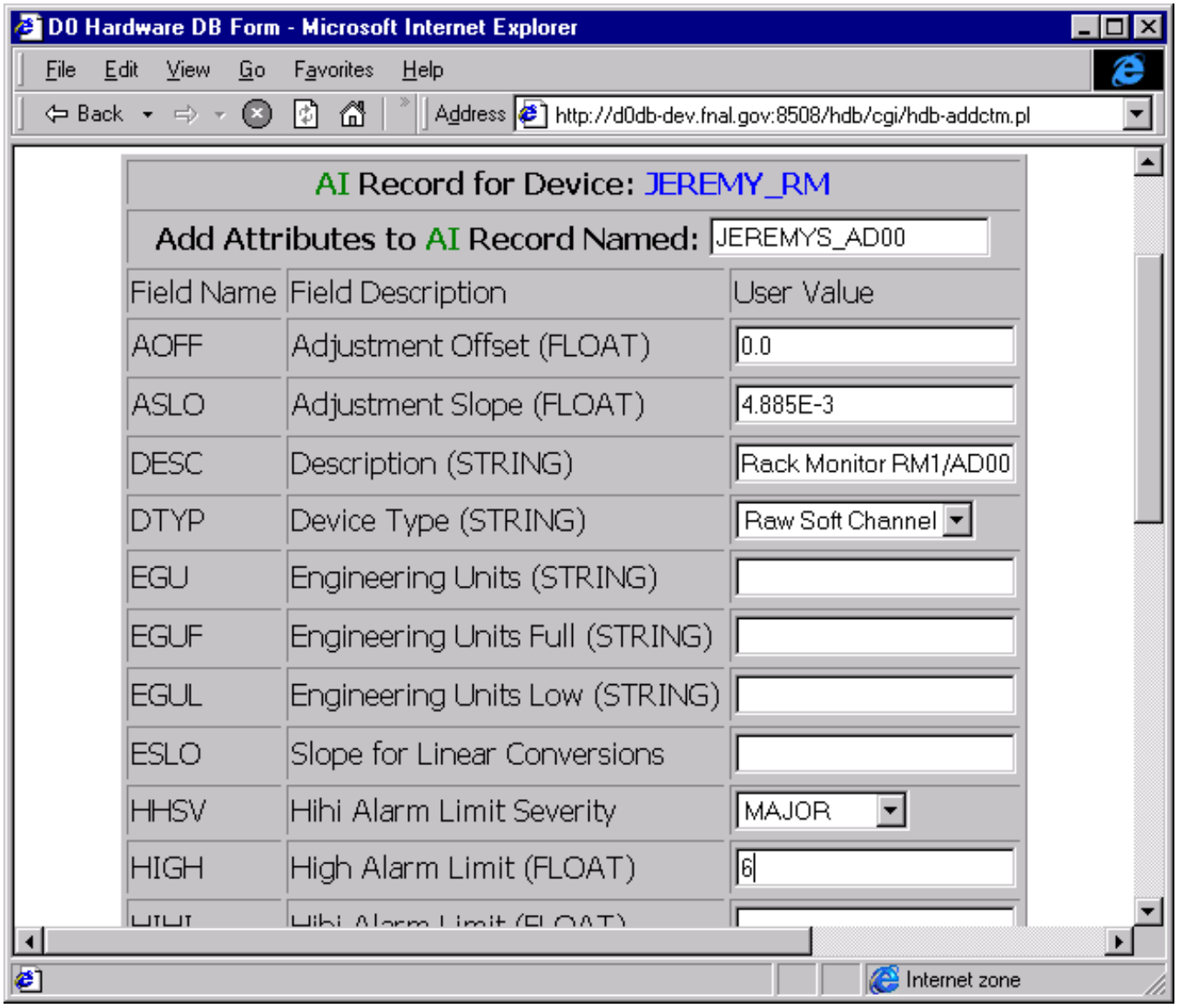
-Select a Location Id = 1

-Enter an optional “Description”

8. Click on “Add A Record To This New Device”

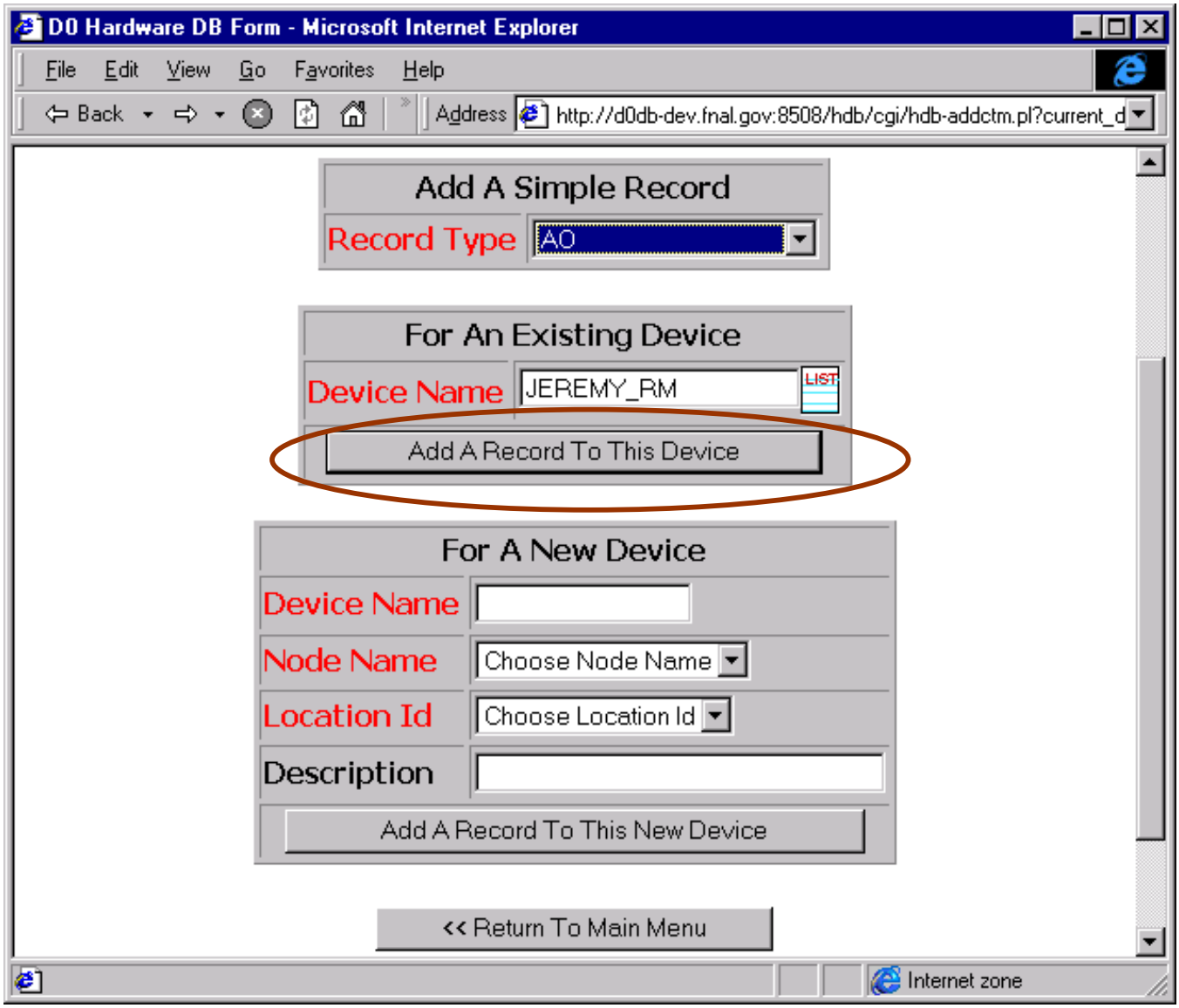


9. Record Named: username+_AD00
   example. JEREMYS_AD00
10. Fill in all AI values found in the Epics .db file for record AD00 (found at the bottom of the tutorial instructions)

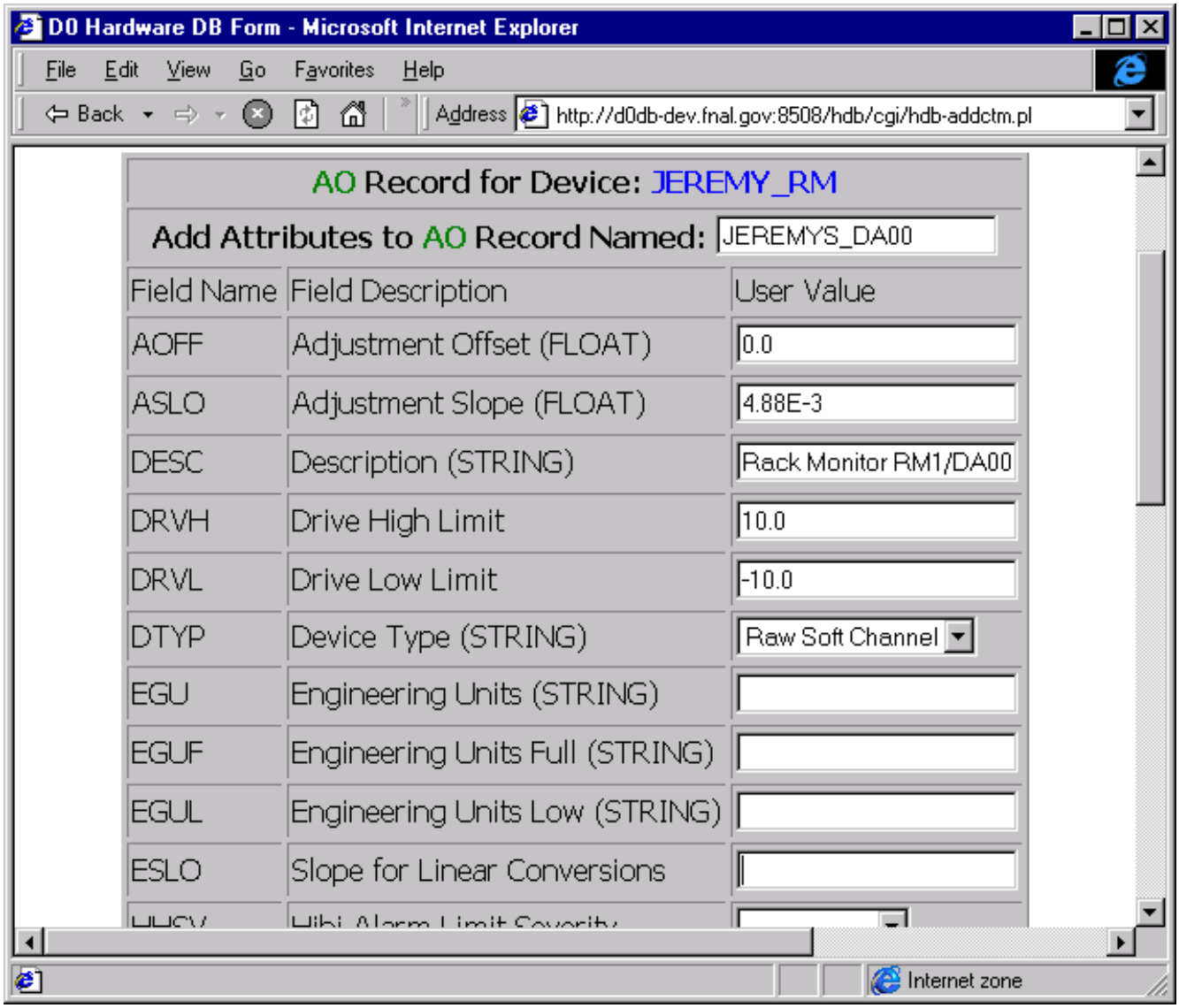


11. Click on “Save And Add Another Record”

12. Select AO as Record Type
13. In the next box click “Add A Record To This Device”



14. Record Named: username+_DA00
    example. JEREMYS_DA00
15. Fill in all AO values found in the Epics .db file for record DA00 (found at the bottom of the tutorial instructions)

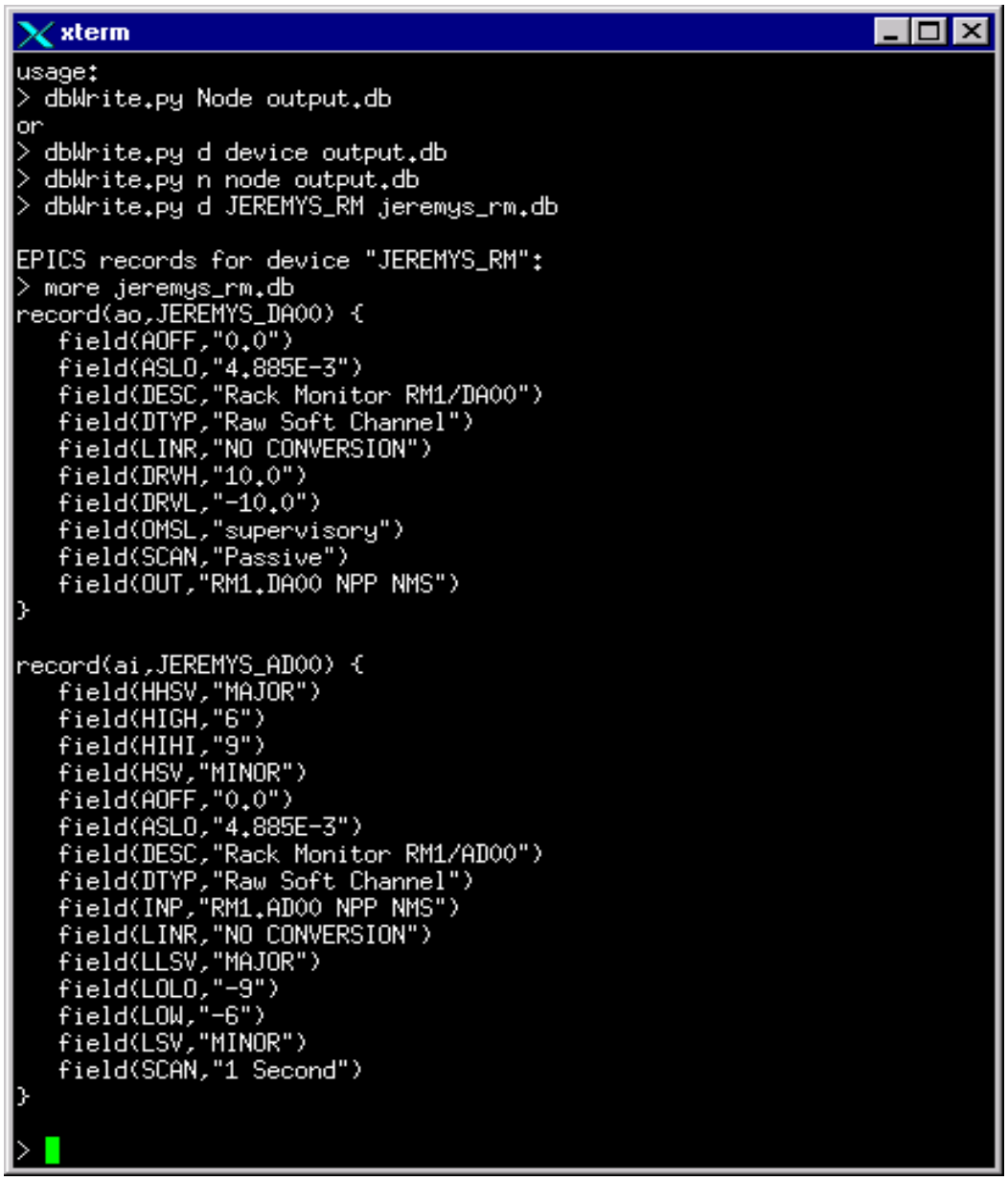


16. Click on “Save And Return To Main Menu” Records are now entered. Next step is to extract the Epics file.

Epics File Extraction

1. telnet d02ka
2. cd /projects/776/online_2/hardware_db/current/py/
3. setup n32
4. setup python_dcoracle
5. dbWrite.py d {device name} {output filename}

   NOTE: device name = username+_RM (case sensitive)

   Output file should have a .db extension.

6. more {your output file}