

# Brewer Collection Software Setup

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## *Within DosBox, under Linux*

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### Directories to Create / Copy:

1. **Root\brews\Br###**                      The instrument in use.
  - a. **\Data**                      - The last 75 days data
    - i. **\###**                      instrument number directory
      1. All current constants
      2. **\Historic**
        - a. Historically used constants in directories named by date used
    - ii. **\YYYY**                      1 year from current year
    - iii. **\YYYY**                      Current Year
    - iv. **\AVG-###**                      - Diagnostics files
    - v. **\CAL-###**                      - Last Calibration Spreadsheet
      1. **\Historic**                      YYYY                      Previous calibration sessions
    - vi. **\DSP-###**
      1. **\YYYYJJJ** – Dispersions by Date
    - vii. **\Historic**
      1. **\YYYY**- Historic data by year that is more than 2 years old
    - viii. **\LAMP-###**                      - QL files produced on this instrument
      1. **\UV Lamp Calibration System**
        - a. **\YYYY** – Lamp control system diagnostics produced during the UV calibration
  - b. **\Processing** – All files provided to BPS for data processing for WMO submission
  - c. **\Program**                      - Current collection software -main and routines from the “Program Master”
    - i. **\DosBox**                      MegaBuild6 version of DosBox program files and the COM por configuration for the instrument – i.e BrewCom1-###.conf
      1. **\doc** – part of DosBox
      2. **\zmbv** – part of DosBox
    - ii. **\Extras**                      - Examples, backup files and special cases
    - iii. **\Historic**
      1. **\Program Version**                      - Historic collection software used by version number.
    - iv. **\schedules**                      - schedules available to the collection software

## Files that may need Modification:

1. Root\brews\Br#iii\Data\iii\OP\_ST.iii -- This file contains the directories where the constants are accessed and the data collected is to reside; the constants in use; the site specifications; motor activated and schedule in use. – Any change to the listed files must be reflected here.

2. Root\brews\Br#iii\Data\iii \icfjjjyy.iii

The “ICF” file has many elements, one of which is about half way down and is the instrument model type indicated by “mk” for mark and then a roman numeral. The element immediately following the instrument type is the com port to use to communicate with the instrument. We currently use serial1 only so the Brewer “ICF” file can always have a setting “1” for the COM Port. i.e. Always communicate with the instrument through the virtual COM1. The only other option recognized by the software would be a virtual (or actual) COM2.

3. Root\brews\Br#iii\Program\DosBox\BrewCom1-iii.conf -- This file contains all the DOS emulation settings to allow the Brewer collection software to operate properly under Linux.

Under the [cpu] section of the file adjust the setting as follows:

```
core=simple
cputype=386
cycles=fixed 9000
```

Under the {serial} section of the file adjust the setting as follows:

```
serial1=directserial realport:com14 -- where the Brewer is connected, not necessarily
com14
serial2=disabled
serial3=disabled
serial4=disabled
```

4. Root\brews\Br#iii\Program \OP\_ST.FIL -- This file contains the directories where the constants are accessed and the data collected is to reside. If the file is being accessed and the software is externally interrupted (power failure, externally initiated software termination) this file can become corrupted. A backup file, op\_st-.fil is also in this directory providing an example of the file structure within. Use this file to recover the corrupt file if necessary.