Manual for creating a bootable USB stick

This manual is valid for A&V Measuring Computers. It explains how to create a bootable USB stick which contains a hard disk imaging program. Once this USB stick has been set up, you may boot an A&V Measuring Computer from it and create a copy of the computer's hard disk. In this manual, we use the program "Clonezilla" as an example.

"Clonezilla" ist open source software and thus publicly available. "Clonezilla" is licensed under GNU General Public License (GPL) Version 2. The figurative trademark "Clonezilla" is registered in the European Community under No. EM08584625 for National Applied Research Laboratories National Center for High-performance Computing, Taiwan. For further information please see <u>www.clonezilla.org</u>. Arndt & Voß GmbH is not connected to National Applied Research Laboratories National Center for High-performance Computing and/or "Clonezilla" in any way. "Clonezilla" solely serves as an example for a hard disk imaging program due to its public availability.

1. Requirements

- In order to create a bootable USB stick containing the program "Clonezilla" you need:
- a computer with internet connection
- a USB stick with a storage capacity of at least 200 MB and formatted with FAT16 or FAT32 (see Fig. 1)

<u>Please note:</u> Not every USB stick which has been made bootable as described below will actually boot with every computer. In case the computer does not boot from the USB stick, please use a different USB stick.

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Fig. 1

2. Download hard disk imaging program

Download a zip-file of the hard disk imaging program "Clonezilla" under the following link: www.clonezilla.org/downloads/download.php?branch=stable

Due to differences in the configuration of the different A&V Measuring Computers models, there are two "Clonezilla" program versions which may be used. Please contact Arndt & Voß GmbH stating the model No. and serial No. (please see black label on the Measuring Computer) in order to find out which version is appropriate for your Measuring Computer.

Version a)

Please make sure to select the following settings correctly: Select CPU architecture: **i486** Select file type: **zip** Click the "Download" button and save the zip-file on a USB stick formatted with FAT16 or FAT32. The download will take a few minutes.

Version b)

Please make sure to select the following settings correctly:

Select CPU architecture: amd64

Select file type: **zip**

Click the "Download" button and save the zip-file on a USB stick formatted with FAT16 or FAT32. The download will take a few minutes.

3. How to make your USB stick bootable

After downloading the zip-file, open the USB stick. In this example, the USB stick is displayed as drive D: (see Fig. 2).



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Right click the zip-file and select "Extract All" (see Fig. 3).





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The Compressed Folders Extraction Wizard for extracting the zip-file is opened. Click on "Continue >" to proceed with extracting the files (see Fig. 4).



Fig. 4

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Extract all files into the top directory of the USB stick, in this example D:\ (see red mark, Fig. 5). If the Compressed Folders Extraction Wizard suggests extracting the files into a folder on the USB stick or into another directory, change the directory name according to the example. Then proceed with "Continue >".

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Fig. 5

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Uncheck the box next to "Show Extracted Files when Complete" and click on "Finish" to continue (see red mark, Fig. 6).



Fig. 6

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Open the **folder "utils"** in the top directory of the USB stick (see Fig. 7).

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Fig. 7

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Open the folder "win32" (see Fig. 8).

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The folder "win32" contains the **file "makeboot.bat**". ATTENTION: This file may only be run from the USB stick!!!

Make sure that you are working on the USB stick (as in the example D:\utils\win32\makeboot.bat, see Fig. 9). Run this file with a double click.



Fig. 9

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Two black process windows are opened (see Fig. 10 and 11). Confirm both by pressing ENTER.



Fig. 10



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Your USB stick is now bootable and contains the open source program "Clonezilla". How this program is used for creating hard disk images is explained in the "Manual for creating a hard disk copy".

Disclaimer:

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