

## RAM mode and publishing

**Pfaffhausen, 20 June 2012:** We are pleased to present the ArchivistaBox 2012/VII. The new release contains a new RAM mode, self-supporting archives can be created directly in the WebClient, and there are also many other minor enhancements. We would like to briefly introduce the new features below. We will also give you step by step instructions on how to use the ArchivistaDMS to create a self-supporting archive within minutes, which can also be installed solely in the RAM.



## New functions in the 2012/VII version

Scripts for a cluster in RAM are also now available, as well as for the conventional hard disk installation (see `/home/cvs/archivista/jobs/scripts.tgz`). The hard drive will now work with UUID numbers. However, you will be able to continue using the old numbers with 'nouuid'.

With the start option (first screen!) "ram ramonly," the ArchivistaBox can now be run exclusively in RAM. In contrast to the RAM mode, where the data partition is on a hard disk, with "ram ramonly" the entire system is run exclusively in RAM. Moreover, thanks to better memory management, the RAM requirement has been significantly reduced: 1.5 GB for ArchivistaVM, 3.0 GB for ArchivistaDMS and 4.5 GB for ArchivistaDesktop (compared with the previous requirement of 2, 4 or 8 GB, respectively).

The start options "nomod.xxx" or 'allmod' can be used to avoid running certain kernel modules at startup or to negate them again later (if they are enabled). This option has been created for the ArchivistaBox installer, because some netbooks had a problem with the kernel module "atl1c," which resulted in the ArchivistaBox not starting in the RAM mode without the network cable being connected (it simply hung in 70 to 80 percent of cases). "Nomod atl1c" can be used to disable this "troublemaker" in its tracks.

A script can now be called whenever a document is updated in WebClient. This allows user-specific changes to be carried out. You can find an example script called `archivista.pl` under `/home/cvs/archivista/jobs`. This file must be copied with the name of the database to be used added after `/home/data/archivista/cust/autofields` in order to enable the functionality. Please note, the script should be adapted to your own requirements; it can also be integrated in WebAdmin for "jobs administration."

In WebConfig, it is now possible to set up an RSYNC data backup. And this month we

have again fixed a lot of bugs (e.g. password in WebConfig). Further, the publishing of self-supporting archives is now possible directly in a WebClient.

## **Publishing self-supporting archives with ArchivistaDMS**

Introductory note: the following instructions relate to ArchivistaDMS 2012/VII. Users who are interested in ArchivistaVM should continue reading as we will show how easy it is to set up ArchivistaBox in RAM.



### **Starting point for self-supporting archives**

The term "self-supporting archive" means data carriers that contain an archive and the necessary software. In other words, the archive "carries" the software along. In 2003, we produced a solution that could be used to create a database with MySQL and an Apache instance in Windows. Unfortunately, due to the firewall introduced by Windows XP, the archive disk ran only when the Windows Firewall settings were changed (when the firewall was de facto disabled).

For this reason, from 2006, the self-supporting archive created by the ArchivistaBox was created in such a manner as to include the whole ArchivistaBox plus the data. In this way, it was relatively easy to create self-supporting archives. The 32-bit solution at the time had the disadvantage that it ran in a LiveCD mode, which caused larger published archives to be rather slow. In order to create a self-supporting archive, a program had to be started on the ArchivistaDesktop. The created ISO disk then had to be copied to another computer to burn the CD/DVD. The self-supporting archive could only be tested at the end of this procedure. Self-supporting archives can now be created directly in the WebClient. The following instructions will show you how easily self-supporting archives can be created and immediately tested.

### **Step 1: Installing ArchivistaDMS**



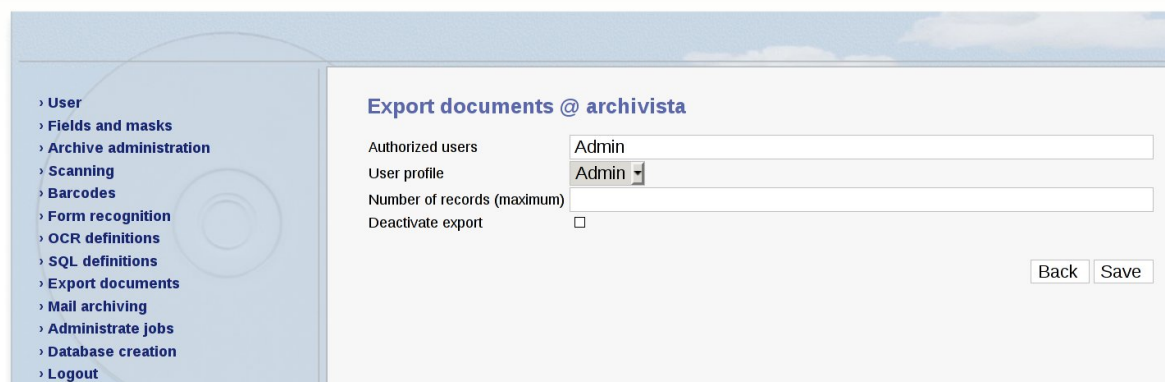
ArchivistaBox 64Bit — in 100 seconds  
to a ready to use server infrastructure

```
Press Return to install ArchivistaBox Environment.  
ArchivistaDMS (build 2012-06-19) - http://www.archivista.ch  
boot: ram ramonly_
```

First, ArchivistaBox DMS must be installed or started. You have the option to select "ram ramonly" on the first screen; this eliminates the need for an installation. The advantage: the entire example can now be executed in RAM. Disadvantage: if you do not have 8 GB RAM available, the command "Create CD" (ISO file) cannot be run later directly in RAM. Otherwise (i.e. without the two options "ram ramonly") you can install ArchivistaBox normally.

## Step 2: Enabling file export in WebAdmin

After the installation, **publishing must first be enabled in WebAdmin.**



The screenshot shows the WebAdmin interface with a sidebar menu on the left and a main configuration area on the right. The sidebar menu includes options like User, Fields and masks, Archive administration, Scanning, Barcodes, Form recognition, OCR definitions, SQL definitions, Export documents, Mail archiving, Administrate jobs, Database creation, and Logout. The main area is titled 'Export documents @ archivista' and contains the following fields:

- Authorized users: A text input field containing 'Admin'.
- User profile: A dropdown menu with 'Admin' selected.
- Number of records (maximum): An empty text input field.
- Deactivate export: A checkbox that is currently unchecked.

At the bottom right of the configuration area, there are 'Back' and 'Save' buttons.

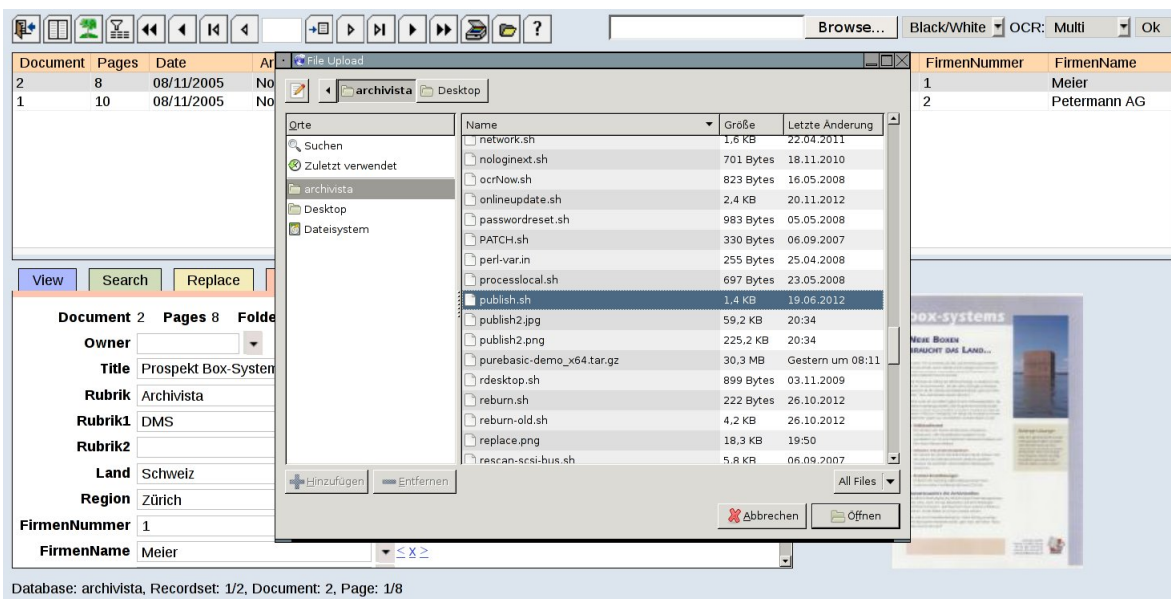
Those users who have the permission to publish archives must be entered in **"Export of files" (here "Admin")**. It is important to note that users entered here can duplicate the archives at the push of a button and if this is used in an uncontrolled fashion any

ArchivistaBox will run out of space relatively quickly. For these reasons, users must be explicitly enabled.

**Important:** In order to create the CD (ISO file) later, the ISO file from ArchivistaDMS must be available for the installed instance under `"/var/lib/vz/template/iso/archivista_cd1.iso."` If the ArchivistaDMS CD is inserted in the first CD-drive, it is automatically copied to `/var/lib/vz/template/iso/archivista_cd1.iso`. In other cases (e.g. using a USB stick for installation) it should be uploaded using ArchivistaVM, WinSCP or scp.

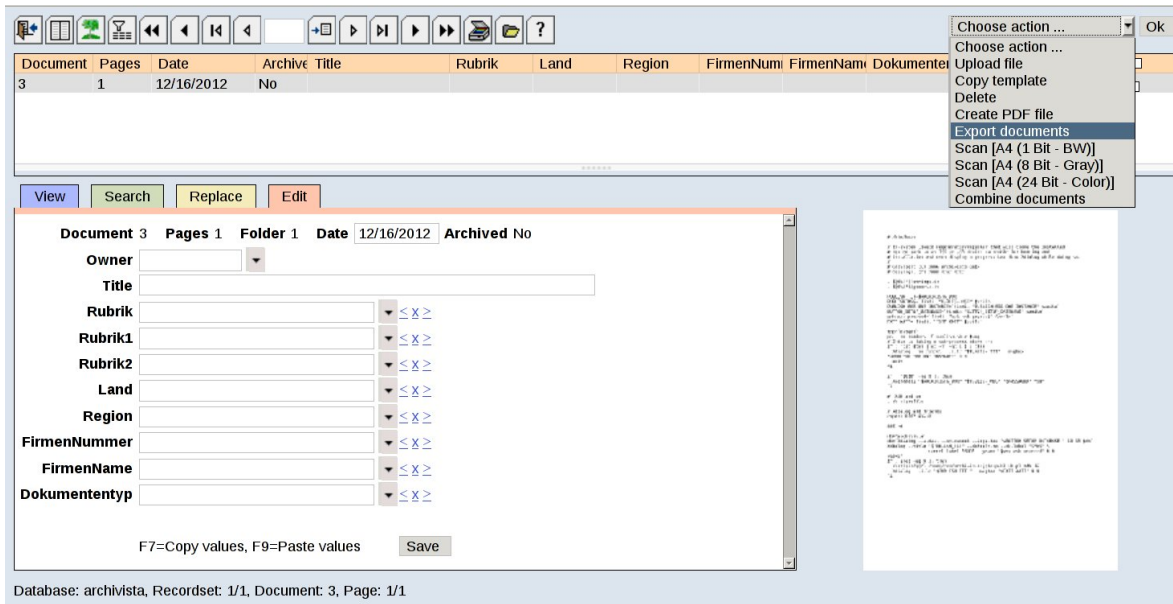
### Step 3: Uploading documents in WebClient

Now **switch to the WebClient**, and upload several documents to follow our example. In our example, we will use the script "publish.sh" directly on the ArchivistaBox.



Any other documents (including MS Office files) may also be placed in the archive instead of this file. It should be borne in mind that a maximum of 4 GB of data can be published per archive because otherwise a new DVD cannot be created.

### Step 4: Selecting the documents for publishing



Before publishing can be started, the **required documents must be selected using the "Search" function**. Next, go to **"Edit"** and select **"Export documents"**.

## Step 5: Exporting files in WebClient

Define database name:

Cancel OK

Now, enter the name of the new database (in this case, archivpub) to export the current selection to this database.

In order to automatically create an ArchivistaBox CD (ISO file) after you have exported the selection to the required database, confirm the following query with "OK."

## Step 6: Testing the published ArchivistaVM archive

Now **go to ArchivistaVM** (it is included with every ArchivistaBox). Just as a quick reminder, log out of the WebClient, then click on "Home" and login to ArchivistaVM using "root" and "archivista."

Virtual Machines

List
Create
Migrate

Configuration

|   |   |
|---|---|
| Type: <span style="border: 1px solid #ccc; padding: 2px;">Fully virtualized (KVM)</span>                | VMID: <span style="border: 1px solid #ccc; padding: 2px;">106</span>                              |
| Installation Media: <span style="border: 1px solid #ccc; padding: 2px;">archivista_archivpub.iso</span> | Cluster Node: <span style="border: 1px solid #ccc; padding: 2px;">avbox251 (192.168.2.251)</span> |
| Name: <span style="border: 1px solid #ccc; padding: 2px;">publishtest</span>                            | Start at boot: <input type="checkbox"/>   |
| Disk space (GB): <span style="border: 1px solid #ccc; padding: 2px;">32</span>                          | Disk type: <span style="border: 1px solid #ccc; padding: 2px;">IDE</span>                         |
| Cache: <span style="border: 1px solid #ccc; padding: 2px;">writeback</span>                             | Format: <span style="border: 1px solid #ccc; padding: 2px;">qcow2</span>                          |
| Memory (MB): <span style="border: 1px solid #ccc; padding: 2px;">4092</span>                            | CPU (Cores/Socket): <span style="border: 1px solid #ccc; padding: 2px;">1</span>                  |
| Guest Type: <span style="border: 1px solid #ccc; padding: 2px;">Linux 3.x</span>                        | Sockets/Board: <span style="border: 1px solid #ccc; padding: 2px;">1</span>                       |

Network

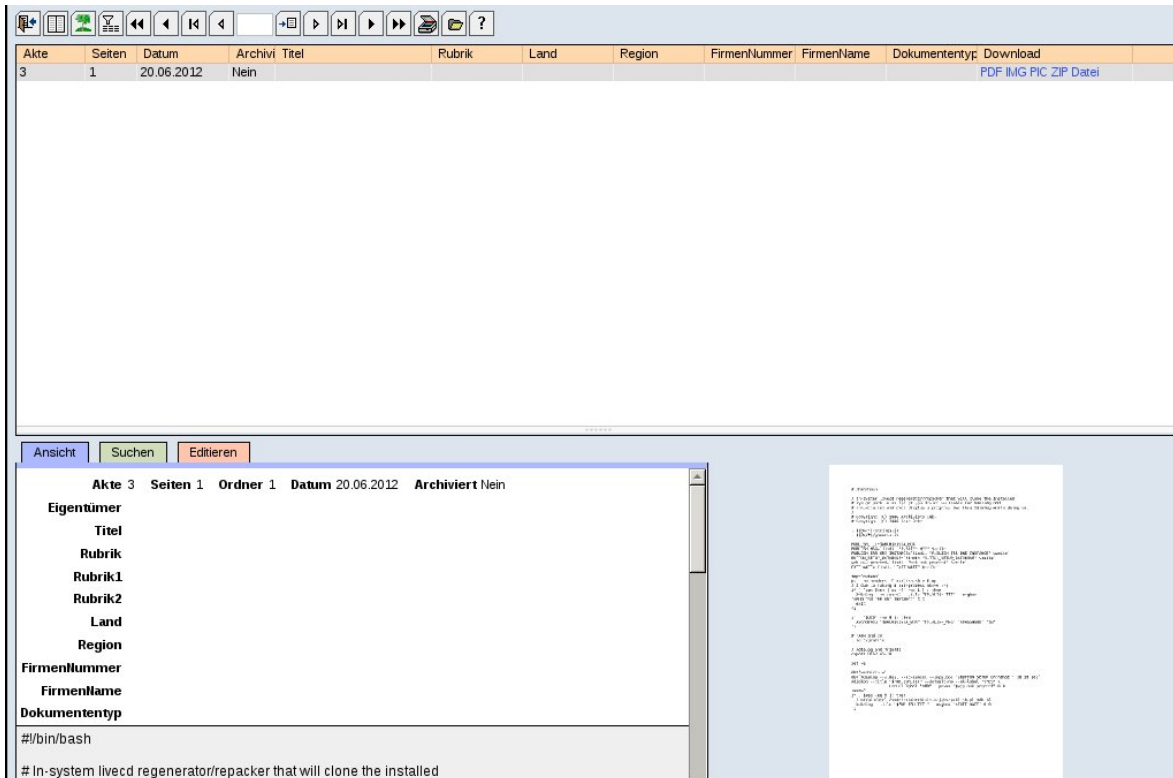
|   |  |
|---|--|
| Bridge: <span style="border: 1px solid #ccc; padding: 2px;">vmb0</span> | Network Card: <span style="border: 1px solid #ccc; padding: 2px;">rtl8139</span> |
|---|--|

➔ create

The published CD can now be tested in a virtualised environment. For this purpose, a virtualised instance must be set up in ArchivistaVM. Select the created CD with the name "**archivista\_archivpub.iso**" (or the previously used name) under "**Installation media.**" Furthermore, at least 4 GB memory must be available in RAM mode. To be more exact, there needs to be 3 GB available in the RAM mode plus roughly the size of the created ISO file.

**Important: if the ISO file does not exist, you must check "view system files" in WebConfig to see why the ISO file has not (yet) been created. In our example, it takes 20 to 30 seconds to create the ISO file. In the case of larger archives, this should not exceed 1 to 2 minutes.**

Once the virtualised instance has been created, the CD can be started. The published ArchivistaBox created starts directly with 'ram ramonly', i.e. the ArchivistaBox will be started and set up in RAM.



**Please note:** if the published archive cannot be started in RAM mode, a normal installation can be performed on the first screen using the "linux" option.

The ISO file created can then be burned to a CD/DVD. If you want to do this directly from the ArchivistaBox, a terminal window must first be opened on the ArchivistaBox desktop (ALT-F7). Subsequently, use the "su" command to change to the root user. The command "cdrecord -scanbus" can be used to search for a burner. Next, use "cdrecord /var/lib/vz/template/iso/archivista\_archivpub.iso dev=1,0,0 speed=4 -v" to burn the CD/DVD directly. It is important to specify the correct device number. The number found with "cdrecord -scanbus" (e.g. dev=7,0,0) should be entered instead of dev=1,0,0.

**Conclusion:** with ArchivistaDMS 2012/VII, self-supporting archives can be created within minutes directly in the WebClient and tested in a virtualised environment directly on the same machine. The above example can be run through in the RAM, if you have 4 GB (or better, 8 GB) RAM available.