

Here's the plan:

This Quick Start guide will walk you through the process of installing the Arkeia backup software on your Linux machine for your backup tape drive.

This guide assumes a basic familiarity with the Linux operating system. More detailed information is available for you in the online manual (admmanual.pdf) included on the Arkeia CD.

You need to install your tape drive before installing Arkeia. If you haven't yet, please do that now.

Now you are ready to work through a few simple steps:

Install the Arkeia client component, server component, and graphical user interface (GUI) on your backup server machine.

Configure that installation and run a test backup.

Set up and perform the first backup to tape.

Install and configure the client component on any client machines.

Before we begin...

Please take a moment now to confirm that your machine is ready:

Is it at least a 200 Mghz Pentium, with 32 MB of RAM?

Are you running Linux, with TCP/IP running?

Check your network. Can you ping each of the following machines by host name and get the correct IP addresses back: the server from itself, each client from the server, and the server from each client?

Do you have enough disk space? The backup server machine will need 15 MB, plus 1 MB for every 100 MB to be backed up (this is for the catalog). Each client machine will need to have 10 MB available.

In addition, Arkeia will need 15 MB in a temporary directory during installation.

Install Arkeia

We will start with installing, configuring, and testing the entire package on the server machine first, before dealing with the other machines on the network.

Install the client component.

These instructions describe what you will see and type in the terminal emulation program window.

Insert the Arkeia disk in your CD ROM drive.

Change directories to your CD ROM location: `cd /mnt/cdrom`

Arkeia installs directly from the CD. It is not necessary to copy the files onto your machine first.

Go to the directory appropriate for your system, for example:

```
cd arkeia/linux/intel/RedHat6.0 (case sensitive)
```

This is the directory for installing Arkeia for the Linux operating system on an Intel machine running RedHat version 6.0.

To see the version numbers, type `ls` at the `#` prompt to list the files. The file names each include their version numbers. The client, server, and GUI components may have different version numbers.

To install the Arkeia client, type:

```
rpm -Uvh arkeia-client-x.x.x-x.i386.rpm
```

where x.x.x-x is the version number for the file on your Arkeia disk.

The terminal will display:

```
arkeia-client ##### (progress bar)
```

After a few moments the command line will re-appear.

Now the Arkeia client component is installed on the server, in the directory `usr/knox`. This is the working directory as well.

The name of your server is automatically used for the ADMINSERVER.

Install the server & GUI components.

Now install the Arkeia Server and GUI using the same process, but typing the following for each:

```
Server: rpm -Uvh arkeia-server-x.x.x-x.i386.rpm
```

```
GUI: rpm -Uvh arkeia-gui-x.x.x-x.i386.rpm
```

You may see the message: `no crontab for root` That's OK for now. It only means Arkeia is installing the scheduler.

Restart the Arkeia daemon now by typing: `NLSERVD`

You may see the comment: "No such file or directory." This is normal. After a pause the command line will reappear.

Now Arkeia is fully installed on your server machine. Before we continue with putting Arkeia on any client machines we need to configure Arkeia and do a test backup to check this installation.

Some useful terms...

You'll want to have a good understanding of some basic terms when using Arkeia. There is a more complete glossary on the Arkeia web site. For reference, here are a few terms we will be using in just a moment:

Tape - A single, removable tape cartridge.

Tape Drive - A standalone drive, or the drive component of a library unit.

Drivepack - The tape drive (or drives) that will be used for the backup.

Tape Pool - The designated tape(s) to be used in a particular backup.

Savepack - The set of machines, directories, and/or files to be backed up.

Null - For our purposes this means virtual; not existing in reality. Something we're only pretending exists for testing purposes: *a null tape drive*.

Configure and Test Arkeia

Before using Arkeia we will configure it for your particular system and do a test backup of the server machine to be sure everything is working correctly. This test doesn't use an actual tape. The virtual tape for testing is called a "null tape", in a "null tape drive". No information will be backed up.

First, start Arkeia from the command line:

```
ARKEIA & (case sensitive)
```

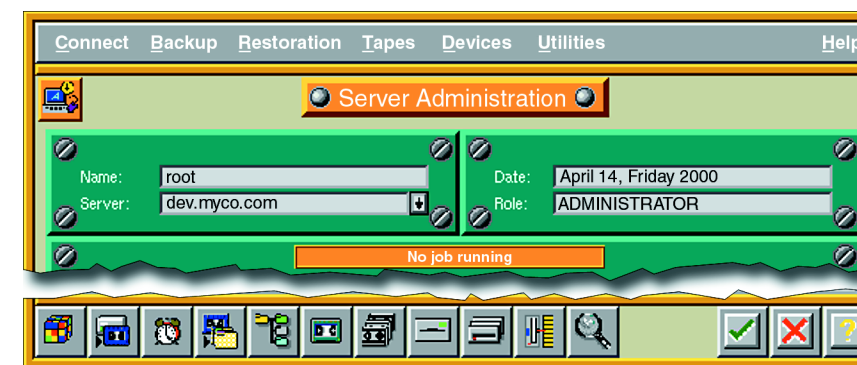
You will see the Welcome to Arkeia screen appear.

Whenever you want information on any field in Arkeia just click on, or tab to, that field and press the F1 key, or click the "?" button in the corner of the Arkeia screen.

Make sure the Login name is "root". Leave the password field empty. Click the green check box in the lower right corner to log in. Arkeia will validate your password, then display the Server Administration screen.

Note - a common situation at this point is that the wrong host name could be saved in the `admin.cfg` file, in `/usr/knox/nlp/`. If Arkeia cannot start, use your editor program to check that file. `Admin.cfg` should be a one-line file containing only the host name for your backup server (for example: `main.mycompany.com`). If there is anything different, edit and save it now. Restart the Arkeia daemon (`NLSERVD`), then start Arkeia as above.

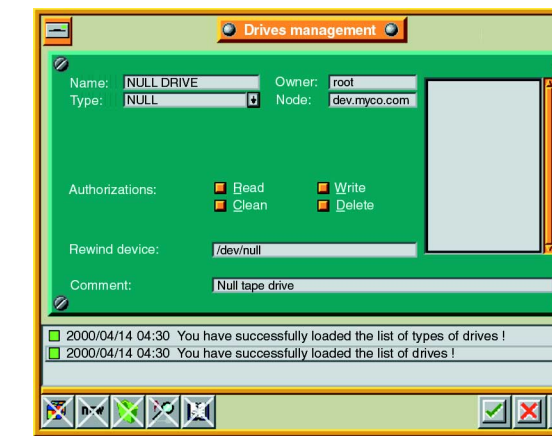
The main screen in Arkeia is the Server Administration screen. Instructions in the following steps refer to the menus and buttons on this screen:



Step 1: Define a Null Tape Drive

From the Devices menu, choose Drives Management, or click the Drives Management button (shown right) in the toolbar.

In the Drives Management screen, click **New** in the toolbar near the lower-left corner of the screen.

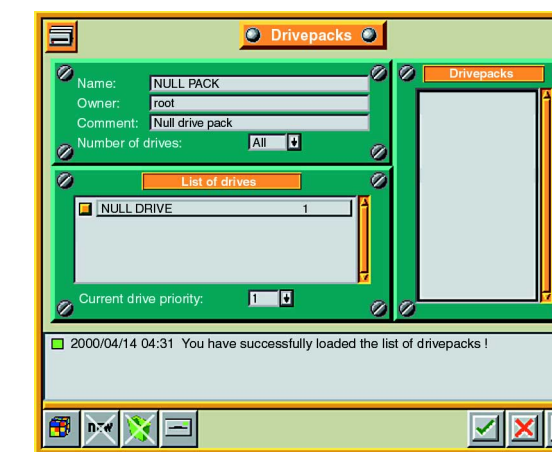


Fill in the fields as shown. (Note - If you forgot to click **New**, you won't be able to enter text in any of the fields.) Select NULL in the Type pulldown list.

Click the check box to record your changes, and again to close the Drives Management screen and return to the Server Administration screen.

Step 2: Define a Null Drivepack

From the Devices menu, choose Drivepacks, or click the Drivepacks button on the toolbar.



As before, click **New** and fill in the fields as shown.

Click the check box once to record your changes, and again to close the Drivepacks screen and return to the Server Administration screen.

Step 3. Define a Null Tape Pool

From the Tapes menu, choose Pools Management, or click the Pools Management button (right) in the toolbar.

Again, click **New**, and fill in the fields as shown:



Click the check box once to record your changes. Leave the Pools Management screen up - we'll be using it for the next step. If you already closed it, just open it as you did at the start of this step.

Step 4. Define a Null Tape

In the Pools Management screen, double-click on the NULL POOL to bring up the screen for that pool. Click New and fill in the fields as shown. Select NULL from the Type pulldown list.



Click the check box to record your changes.

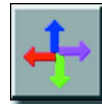
Arkeia will return to the Tapes In Pool "NULL POOL" screen, now showing your 5 null tapes. Click the check box to close this screen, and again on the Pools Management screen, to return to the Server Administration screen.

Step 5. Create a Test Savepack for The Server

From the Backup menu, choose Savepacks, or click the Savepacks button (shown right) on the toolbar.



Click New, and enter *TEST SAVEPACK* as the name of the savepack to create. Click the check box to save and return to the Savepacks Management screen.



Now click the Navigator button (four arrows) in the toolbar at the bottom of the Savepacks Management screen.

The navigator will display an icon for only one machine – your server.

Note - If no icons are displayed, check admin.cfg as described at the start of the configuration process. If admin.cfg is correct, then check your network. You should be able to ping the backup server (the machine you are working on) by its host name and get back its IP address.

Select the server by clicking the box outline to the left of the name so that it turns orange. Click the check box to record your changes.

The Savepacks Management screen will now show your server in the list of trees to backup and the TEST SAVEPACK you created in the list of savepacks. Click the checkbox to close this screen and return to Server Administration.

Step 6. Perform a Test Backup of The Server

Now we are ready to do a test backup using the virtual (NULL) tapes, drives, etc. we just created.



From the Backup menu, choose Interactive Backup, or click the Interactive Backup button on the toolbar.

Check the Savepack (TEST SAVEPACK), Drivepack (NULL PACK), and Pool (NULL POOL) to be sure they are the ones you just defined. If they are not, just select the correct ones from each drop-down list.

To start your interactive backup, click the green check box.

Arkeia will begin simulating a backup of your system, writing the data to a null drive (into thin air). When you see the “speedometer” needles moving you will know that everything is working properly. Cancel the backup at this point by pressing the Stop Sign icon near the lower-left corner of the screen. You will be asked to confirm your request. Close the screen with the “speedometers” by clicking the green check box.

We have completed checking the installation of Arkeia on the backup server machine. The next step is to do the first backup to tape. After that we will go through the process of installing Arkeia on your client machines.

Do Your First Actual Backup

This process is very similar to the previous test backup. We will use the same savepack here. As before, we start out at the Server Administration screen:

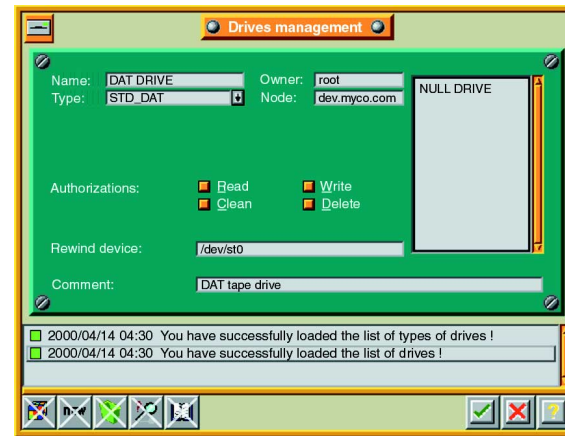


Step 1: Define the Tape Drive

From the Devices menu, choose Drives Management, or click the Drives Management button in the toolbar.



In the Drives Management screen, click **New** in the toolbar at the bottom of the screen.

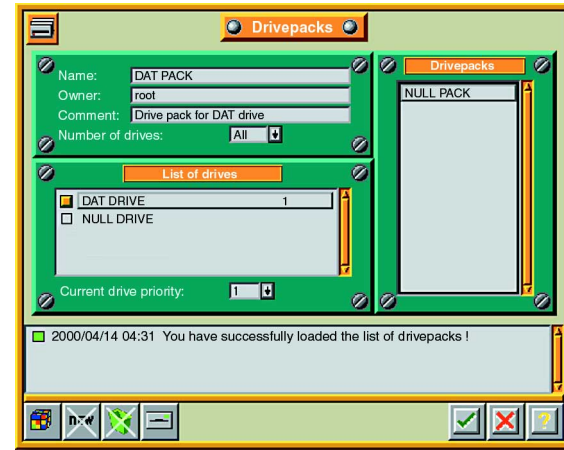


Fill in the fields as shown. (Note – If you forgot to click **New**, you won't be able to enter text in any of the fields.) Select STD_DAT from the Type pulldown list.

Click the check box to record your changes. Click the checkbox in the Drives Management screen to close it and return to Server Administration.

Step 2. Define a Drivepack

From the Devices menu, choose Drivepacks, or click the Drivepacks button on the toolbar.



As before, click **New** and fill in the fields as shown. Select the DAT DRIVE in the List of drives.

Click the check box once to add the new drivepack to the list, and again to close the Drivepacks screen and return to the Server Administration screen.

Step 3. Define the Tape Pool

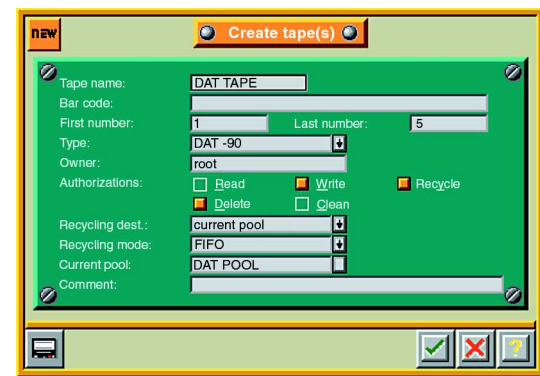
From the Tapes menu, choose Pools Management, or click the Pools Management button on the toolbar.



Click new and enter the pool name as “DAT POOL”. Fill in the comment field with “Pool for DAT tapes”. Click the check box once to record your changes. Leave the Pools Management screen up - we'll be using it for the next step.

Step 4. Define the Tape

In the Pools Management screen, double-click on the new DAT POOL to bring up the screen for that pool.



Click New, then fill in the fields as shown. Choose the tape for your drive from the pulldown list. Click the check box to record your changes.

Click the check box to close this screen, and again to close the Pools Management screen.

Step 5. Perform the Backup

Now we are ready to do an actual backup to tape using the settings we just defined. This is a good time to label your tape(s) so they will be easy for you to find when you need them.

Insert a new, blank tape into your tape drive.



From the Backup menu, choose Interactive Backup, or click the Interactive Backup button on the toolbar.

Check the Tape Drive (DAT DRIVE), Drivepack (DAT PACK), and Pool (DAT POOL) to be sure they are the ones you just defined. You can select these from the appropriate pulldown lists. The Savepack will be the same as we used for the previous test (TEST SAVEPACK).

To start the backup, click the green check box.

Arkeia will begin a backup of your system, writing the data to the tape. When you see the “speedometer” needles moving you will know that everything is working properly. The light on the tape drive will be blinking while the backup is running. You can cancel the backup, if needed, by clicking the Stop Sign button near the lower-left corner of the screen. When the backup is complete you can remove the tape for safe storage.

Where To Go from Here...

Arkeia is now installed and set up on your backup server machine. This is the time to install Arkeia on any client machines, following the instructions on the next panel. Install and configure the client component on each machine before moving on to the next.

Once Arkeia is running on the intended machines you can set up scheduled backups to automatically back the machines, directories, and/or files you specify.

For complete instructions on backing up data over your network, and scheduling automatic backups, refer to the full Arkeia manual on the CD. The manual is an Adobe Acrobat file called admmanual.pdf.

Thank you for choosing Arkeia!

Copyright © Knox Software 2000 - All rights reserved. Arkeia and its logo are registered trademarks of Knox Software Corporation. Linux is a trademark of Linus Torvalds.

Setting Up Client Machines

Arkeia needs to be running on the server machine while you set up the client machines. If it is not, start Arkeia on the server machine now.

Install the client component of Arkeia on the client machine, following the same procedure as for the server machine.

The name of the server machine needs to be saved in the admin.cfg file, on the client machine, in /usr/knox/nlp/. Use your editor program to open admin.cfg now. Edit the file so that it contains only one line - the name of your backup server (for example: main.mycompany.com). Save the file, then restart the Arkeia daemon (NLSEVRD) on the client machine.

Now **go back to your server machine** and start Arkeia from the command line, as before: ARKEIA &

Make sure the Login name is “root”. Leave the password field empty.

Step 1. Create a Test Savepack for The Client

From the Server Administration screen, choose Savepacks.

Click New, and enter *CLIENT TEST* as the name of the savepack to create. Click the check box to save and return to the Savepacks Management screen.

Now click the Navigator button at the bottom of the Savepacks Management screen. This time the navigator will show two machines – your server and the client. Select the client. Click the check box to record your changes.

The screen will now show your client machine in the list of trees to backup and the CLIENT TEST you created will be selected in the list of savepacks. Click the checkbox to close this screen and return to Server Administration.

Step 2. Perform a Test Backup of The Client

From the Server Administration screen, choose Interactive Backup.

Check the Savepack (CLIENT TEST), Drivepack (NULL PACK), and Pool (NULL POOL) to be sure they are the ones you defined for testing. If they are not, just select the correct ones from each drop-down list.

To start your interactive backup, click the check box.

Arkeia will begin simulating a backup of your client machine. When you see the “speedometer” needles moving you will know that everything is working properly. Cancel the backup by clicking the Stop button.

That's all there is to it. Just repeat the process on each client machine.

Arkeia 4.2 Quick Start Guide

This guide takes you step-by-step through installing Arkeia on your Linux computer, and running the first backup to your tape drive.



enterprise network backup