



ArchiverFS v3.4x Quick Setup Guide

This guide will take you through the easiest route to get ArchiverFS up and running. ArchiverFS is very flexible, but because of this it can also be more challenging to deploy than a more rigid solution.

As stated the steps below will get you up and running, however we do strongly recommend that you read the full user guide and experiment with ArchiverFS before you set it off archiving your live file system.

If you need any assistance please don't hesitate to contact Support@MltekSoftware.com. We would love to hear from you and we appreciate all of your feedback.

If you are upgrading from an earlier version please see the full User Guide.

Supported Operating Systems:

ArchiverFS is supported for installation on all versions of Windows that support the .Net Framework v4.6.2. However, if you wish to use the 'Seamless Hard Link' option for seamless links to migrated files, then ArchiverFS must be installed on Windows Server 2008 R2\Windows 7 or later.

In addition, if you wish to use the Seamless Hard Link functionality then the following criteria must also be met:

- a) Your live file servers (the ones you will move content from) must be running Windows Server 2008 R2 or later.
- b) The server you will be moving content too must be running Windows Server 2008 R2 or later.
- c) Any workstations that will be accessing migrated files via ArchiverFS Hard Links must be running Windows 7 or later.

Prerequisites

ArchiverFS requires the pre-installation of the following components before you run the ArchiverFS setup:

- a) SQL Express 2008 R2 or later ([Download Here](#))
- b) Microsoft .Net Framework v4.6.2
- c) SAP Crystal Reports runtime engine for .NET Framework v4.0 if you want to use the reporting function. (Download the 64 bit version [here](#))

SQL Express must be installed using it's default settings (thus creating a named instance called 'SQLEXPRESS'). We strongly recommend adding the local 'Administrators' group to the SQL admin users list when installing SQL Express to simplify the setup of the ArchiverFS service account.

Service User Account:

Before you run the install you need to create a user account that the ArchiverFS Service will use. The user account must:-

- Have 'Full Control' permissions over all the files you will be archiving.
- Have 'Full Control' permissions over the location(s) you will be archiving too.
- Have the 'Create Symbolic Links' right on the machine ArchiverFS is installed on, any machines it will move content from and any machines it will move content too.
- Have the 'Manage Auditing and Security Log' right on the machine ArchiverFS is installed on, any machines it will archive content from and any machines it will move content too.

The easiest way to accomplish this is to make the account a member of the Domain Administrators group.

If the account you are using to run the ArchiverFS Service is not a member of the Domain Administrators group then in addition to requiring suitable NTFS rights to be set up so it can access the required shares with Full Control permissions, it needs to have the two extra rights granted to it.

It must have these specified on a) the machine it is running on b) any machines it will move files from c) and machines it will move files too. You can grant these rights by either adjusting the Local Security Policy on the relevant machines, or by using Active Directory Group policies.

Create Symbolic Links = Computer Configuration -> Policies -> Windows Settings -> Security Settings -> Local Policies -> User Rights Assignment-> Create Symbolic Links

Open 'Local Security Policy' on the machine ArchiverFS is installed on and edit the 'Create Symbolic Links' entry, adding add the account you are using for ArchiverFS. Now repeat this on a) any machines you are archiving files from and b) any machines you are archiving files too.

Manage Auditing and Security Log = Computer Configuration -> Policies -> Windows Settings -> Security Settings -> Local Policies -> Manage Auditing and Security Log

When ArchiverFS migrates a file it copies all attributes and security access options on it, and then compares the copy to the original file before deleting the original file. The security access options not only include the NTFS Access Control Lists, but also the auditing options as well. To replicate the auditing settings the account you are using for ArchiverFS needs the 'Manage Auditing and Security Log' right.

Open 'Local Security Policy' on the machine ArchiverFS is installed on and edit the 'Manage Auditing and Security Log entry' adding the account you are using for ArchiverFS. Repeat this on a) any machines you are archiving files from and b) any machines you are archiving files too.

Disable 'User Account Control' on the Machine ArchiverFS is installed on.

The user rights that are granted to the account you want ArchiverFS to use count as elevated privileges. With User Account Control enabled Windows will prompt you before you use an elevated privilege, asking you to confirm if you want to perform the action in question.

Unfortunately, if a service wants to use an elevated privilege, there is no way for User Account Control to prompt for confirmation in the same way it would do for a user. Instead of letting the action go through, it blocks it.

The only way around this is to disable User Account Control on the Machine in question. Click on the Windows 'Start' button, and then click on 'Run'. Type 'MSCONFIG' and press return. MSCONFIG will now open.

Click on the 'Tools' tab, then click on 'Disable UAC', click on the 'Launch' button, then once the command has executed reboot the machine when it is convenient.

Archive Share

Set up an empty share on your network in the location that you would like to store your old files. The share should ideally be hosted on a computer running on Windows Server 2008 R2\Windows 7 or later. If this is not possible then it should be hosted on a machine running at least Windows 2003 Server.

Set the share permissions on the share to allow 'Full Control' to 'Administrators', and grant 'Change' and 'Read' to the 'Domain Users' group. Then ensure the NTFS permissions will allow normal users 'modify' rights and the ArchiverFS Service Account created previously 'Full Control'.

If there are entries for 'System', 'Administrator', 'Administrators' or 'Domain Administrators' they should not be removed/changed.

When ArchiverFS runs it will align the permissions on the subfolders it creates with those in the live file system, thus ensuring content stays secure.

When calculating share permissions vs NTFS permissions the most restrictive wins, so granting 'Domain Users' change\read to the share will NOT automatically grant the group modify\read permissions to all of the files in the share.

If you want to make your old files 'Read Only' to normal users simply remove the 'Change' permission from the 'Domain Users' group on the list of share permissions (assuming no other groups grant them access, if so amend these too).

Each archive job that you create will require its own empty destination to archive too. The easiest way to achieve this is to create a dedicated share for each archive job to use. This is ideal as it keeps the destination paths as short as possible.

Alternatively you can use a single destination share for all archive jobs and create a dedicated folder in the share for each job.

Running the Install

Once you have carried out the above steps, you are ready to install ArchiverFS. Run the installation routine on the machine you want to install ArchiverFS on, following the instructions on screen.

ArchiverFS doesn't require the use of 'agents' or client software. The machine you install the software on will be the machine that 'reaches out' and inspects the live files, then moves them to the archive storage. As such you should ideally ensure that (unless you have fast WAN links) the live file server, the ArchiverFS machine and the archive server are all on the same LAN.

That said, there is no requirement to install ArchiverFS on a dedicated machine, you can put it on the live file server or even create a dedicated archive machine that hosts both the ArchiverFS software and the archive share.

Configuring Your Machines

If you intend to use Hard Links (aka Symbolic Links) then you need to enable support for them on your workstations, the machine ArchiverFS is installed on and any Web Servers you intend to move content from.

Even though every Windows OS since Vista supports them, the Hard Link functionality is disabled by default.

To enable the functionality you need to set the following registry keys on each machine specified above.

To ease deployment you can copy and paste the text below into a .reg file which can be imported at logon by logon scripts, or the settings can be distributed via group policies.

Windows Registry Editor Version 5.00

```
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\FileSystem]
"SymLinkLocalToLocalEvaluation"=dword:00000001
"SymLinkLocalToRemoteEvaluation"=dword:00000001
"SymLinkRemoteToRemoteEvaluation"=dword:00000001
"SymLinkRemoteToLocalEvaluation"=dword:00000001
```