Application Note

UDO Archive Appliance and C2C Archive One

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Version: 1.0
Creation Date: 21 December 2006
Revision Date: 22 December 2006
Status: Released
Distribution: Freely

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Revision History

Date	Who	Version	Comment
21/12/06	RM	1.0	First release

Contents

Introduction

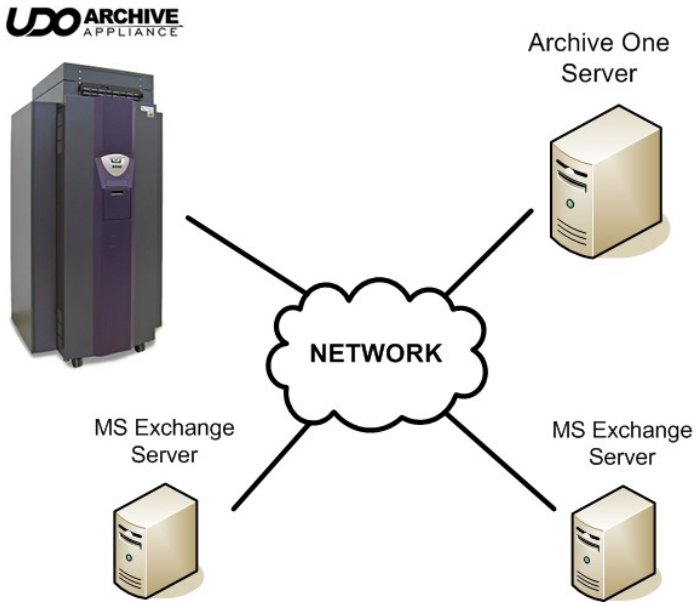
This document provides an overview of an email archive solution for Microsoft Exchange using C2C's Archive One and Plasmon's UDO Archive Appliance and gives system installers the information required to configure this solution.

Archive One helps organizations comply with industry regulations and minimize mailbox size. Archive One includes:

- Policy Manager - Manages email retention policies, reducing mailbox size, storage costs and improving email user productivity.

- Compliance Manager - Creates a secure, indexed email archive to assist meeting regulations. Its menu-driven admin, search and retrieval functions are intuitive for use and create fast, multi-criteria searches.

The UDO Archive Appliance combines the simplicity of network attached RAID with the longevity and authenticity of UDO. The Appliance is easy to install and configure. The NAS interface provides a standard network share to which data is written and accessed. All archive data is cached on the RAID for fast access and is immediately committed to UDO for long-term retention. The RAID is automatically managed by watermarks. Files are replaced with stub files as the cache fills, which to the application appear as the original files with the correct attributes and file size. Access to the stub files causes the data to be read back to the cache and to the application. It is possible to partition the Appliance into multiple independent archives that can be used for different email archive repositories or by different applications.



Multiple policies can be created in Archive One that determine when and how emails are archived from Exchange mailboxes. On each archiving run, Archive One will

containerise emails that match the policy into zip files and create one index file per 1GB of data archived. A master index file will also be updated. The archive data zip files are written directly to the Appliance for immediate archival to UDO. The index files must be on the Archive One server's local hard disk or on fast NAS storage; they will be regularly replicated to the Appliance. The fast NAS storage can be an unmanaged Appliance volume that does not have file commitment to UDO.

Emails can be retrieved using either Outlook message links, the search and retrieve web site or from the Archive One Manager search node. Archive One will retrieve the zip files containing the emails from the Appliance RAID cache. If the file is no longer in the cache it will be automatically retrieved from UDO and the emails will be returned to the specified mailbox.

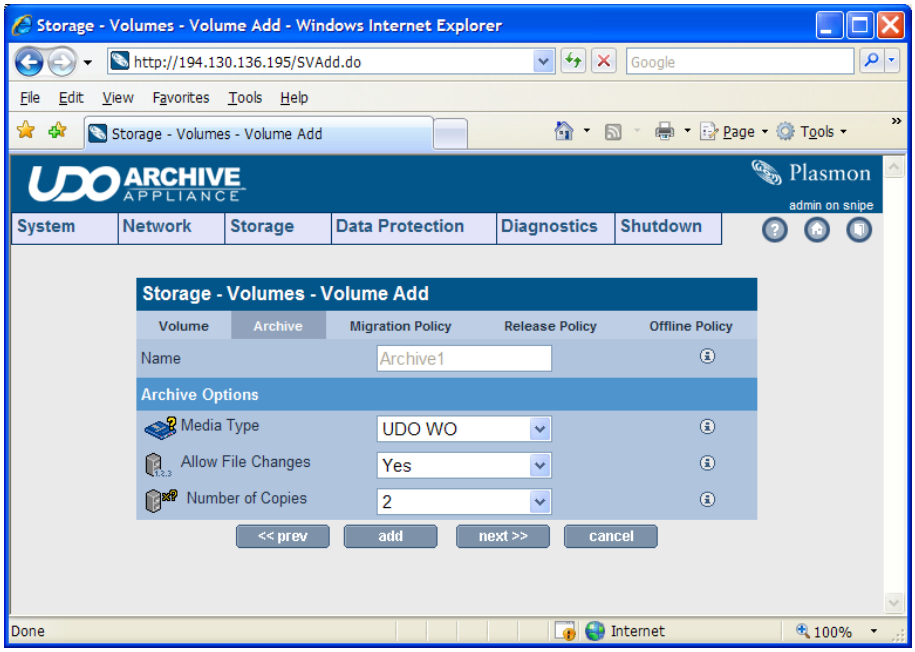
UDO Archive Appliance configuration

Active Directory
Configure the Appliance to join the domain Archive One is running in by selecting Services from the System Menu. Click on CIFS and select the security tab. Select Domain name, enter the domain name, domain administrator name and password, then click save. When prompted, click save again to confirm the changes.

Archive Volume configuration for Storing Email Data
The Appliance is shipped with one archive volume configured named “Archive1”. Verify the settings as follows:

Log into the Appliance GUI and select Volumes from the Storage menu. The default username is *admin* and the password is *admin*.

Click on Archive1 that is already configured, then click on the Archive tab (see the screen shot below).



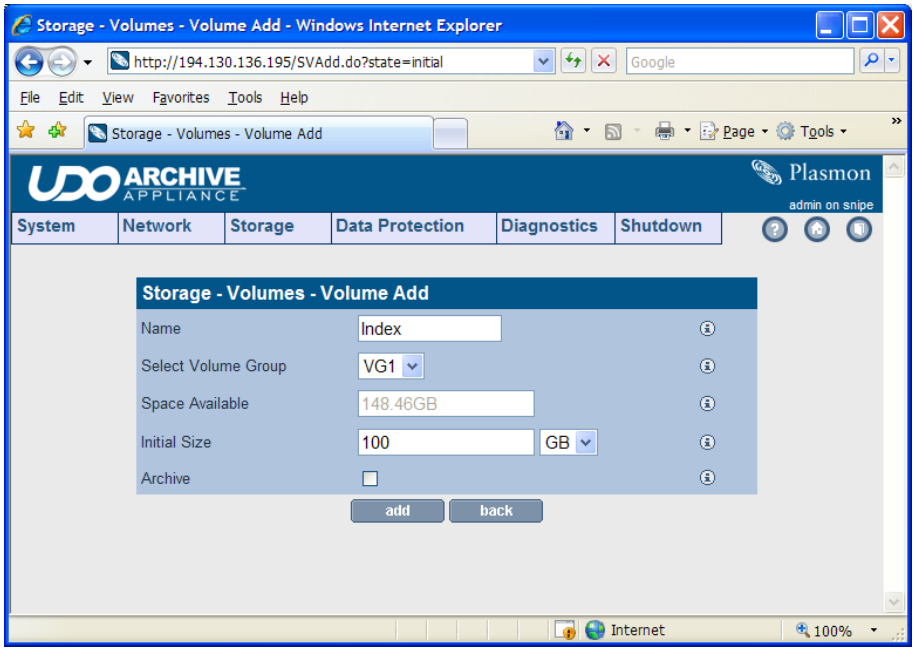
Check the following settings:

Media Type	Set to UDO WO.
Allow File Changes	Set to Yes. This allows the master index file to be regularly overwritten.
Number of Copies	Select the number of copies written to UDO. If two copies are chosen, one copy can be exported from the library for offsite storage.

The settings on the migration, release and offline policy tabs can be left on their default values.

Create a share named “Archive1” for this volume. Give the Archive One users group read and write permissions for the share. This is called “AOnePolUsers” by default.

Unmanaged Volume for Index File Storage (optional)
Create an unmanaged volume if the index is to be stored on the Appliance. To do this select Volumes for the Storage menu, then click add. Deselect the Archive check box (see the screen shot below). Ensure it is large enough by reading the sizing section of the Archive One administrator’s guide.



Create a share named “Index” for this volume. Give the Archive One users group read and write permissions for the share. This is called “AOnePolUsers” by default.

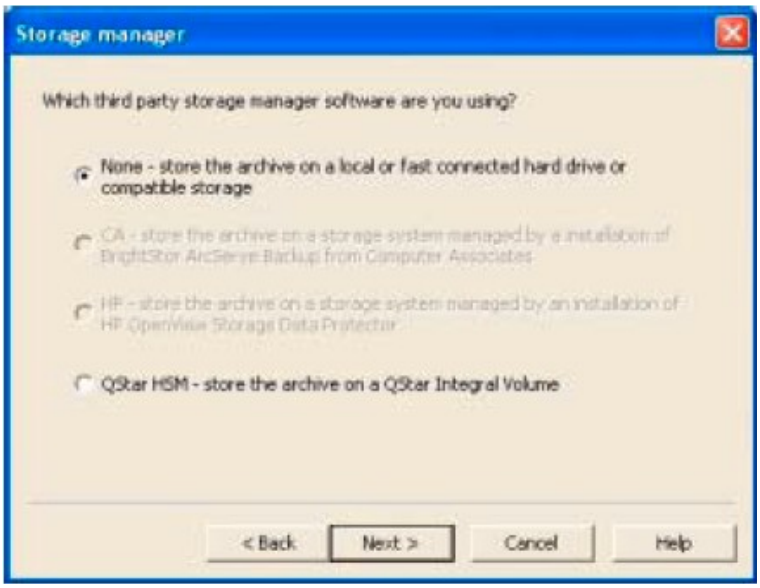
Backup

To ensure the new settings are backed up, select Backup from the Data Protection menu and click the start button.

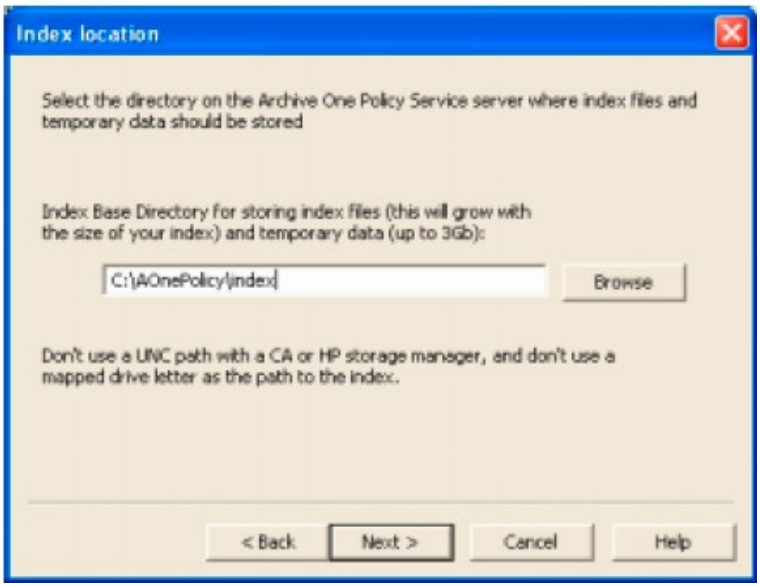
Archive One repository configuration

During repository configuration and while referring to the Archive One Quick Start Guide or Administrator Guide, configure the settings below to use the Appliance.

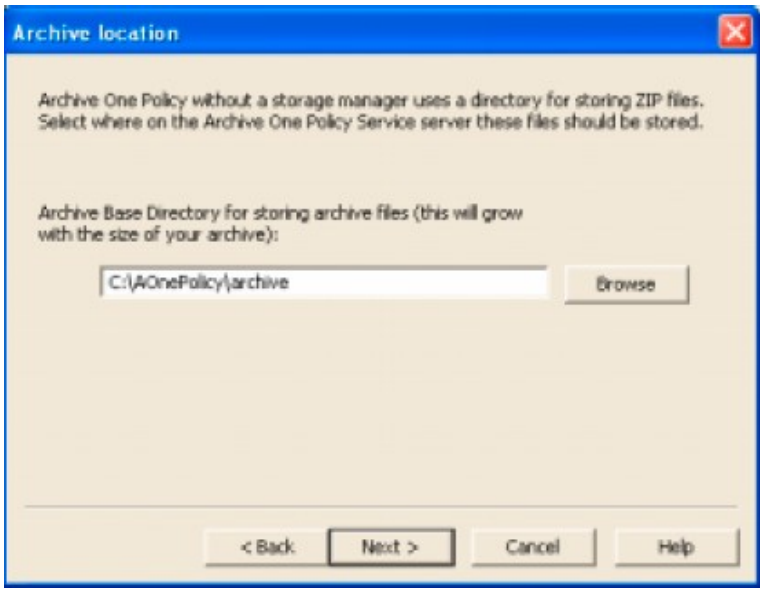
Select Storage Manager
Select none for the Storage manager.



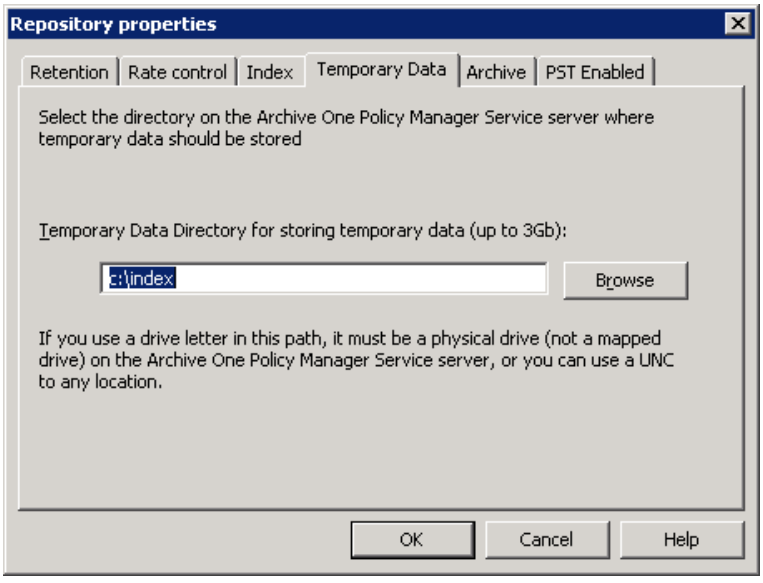
Set the Index Storage Location
This index location should either be a directory on the server's local hard disk or fast network attached storage such as an unmanaged volume on the Appliance. Enter a UNC path for network attached storage.



Set the Email Data Archive Location
For the archive location enter the UNC path of the share for the Archive Appliance managed volume, for example, \\192.168.192.1\Archive1.

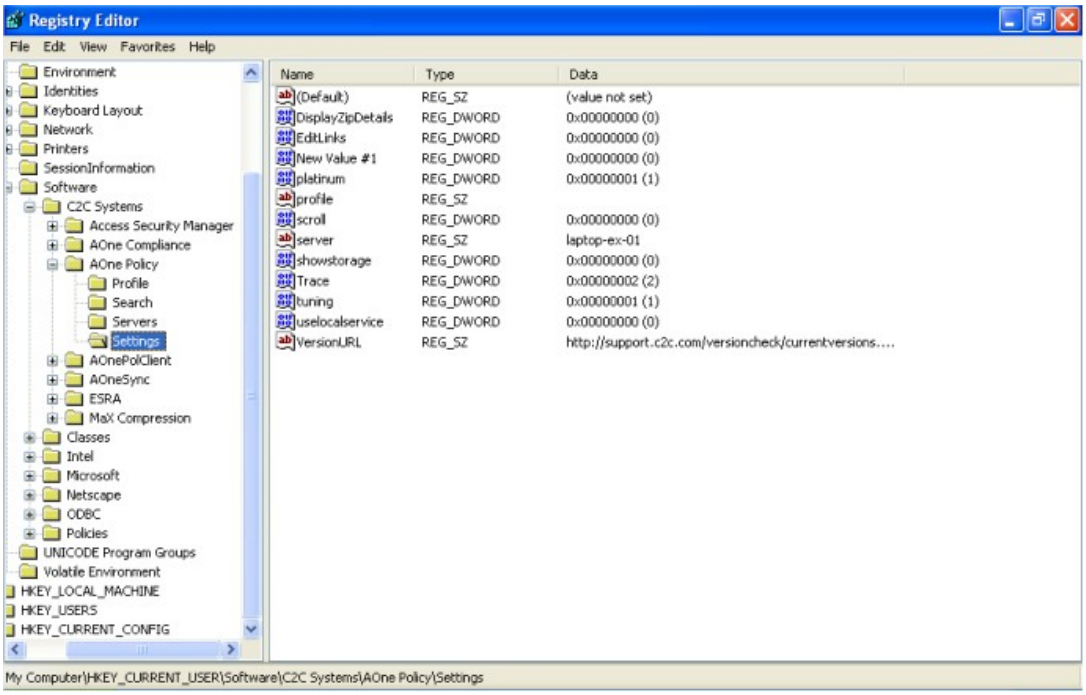


Set the Temporary Data Location
Go to the Archive One Repository Properties and select the Temporary Data tab. Change the temporary data path so it is not a subdirectory of the index directory, for example, c:\index.

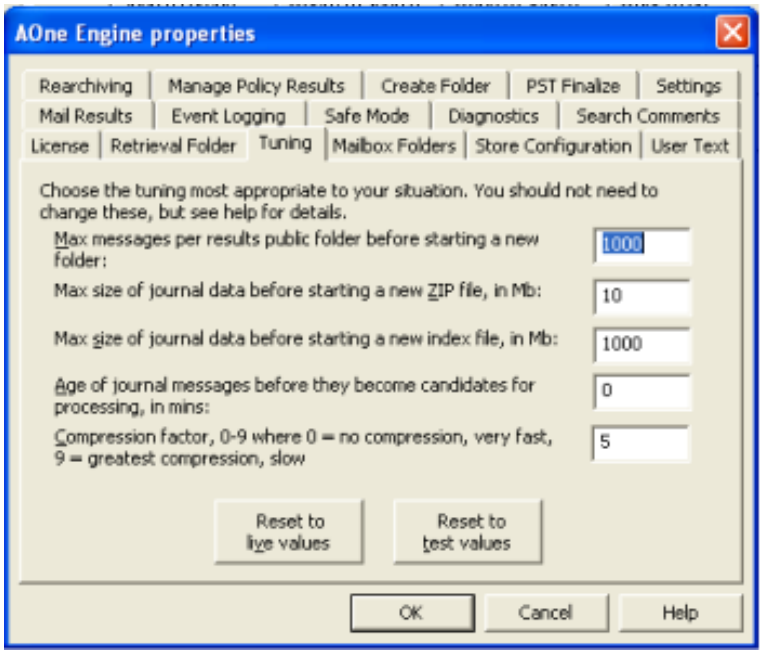


Container ZIP File Size

Reducing the size of the archived container file will reduce the recall time from UDO media. To make this setting available edit the registry key HKEY_CURRENT_USER\Software\C2C Systems\Aone Policy\Settings\ and edit the DWORD value of tuning to be 1.



Now go to the Archive One Engine Properties and click on the Tuning tab that is now available. Set the Max size of journal data before starting a new ZIP file to 10 (MB).



Index file replication

The index should be regularly replicated to the Appliance archive volume. Robocopy.exe (version XP010) can be used, which is included in the Windows Server 2003 Resource Kit Tools that can be downloaded from www.microsoft.com.

Use Scheduled Task to create a daily task that will run the following command:

ROBOCOPY.EXE *index_dir aa_archive_volume* /S /FFT

Where:

index_dir	Path to index directory. For example, C:\AonePolicy\Index
aa_archive_volume	Path to destination directory on the Appliance. For example, \\192.168.192.1\Archive1\Index

The task should be run as a user that has access permissions to the Appliance share.

Configuration Test

To verify the configuration is correct run though the following steps:

1. Create and run a policy that will archive emails.
2. Verify that a zip file is created on the Appliance share named Archive1.
3. Verify that an index file is created in the index storage location.
4. Run the index replication scheduled task and verify the index file is copied to the Index directory on the Archive1 share.
5. Retrieve the email to verify it is accessible from the Appliance.

Useful Checks

Archive Appliance

- Ensure that Write Once media has been loaded into the Appliance.
- Ensure backup media has been inserted.
- Check that the self test and archive tests complete successfully. These are run by selecting Self Test from the Diagnostics menu.

Archive One

- Carry out a test run by creating a policy that will only archive a few items (when using Archive One Policy Manager).
- Do occasionally look at the log files to verify on-going smooth operation.