

TD0170 - Data Management Server 2011 Backup

When running Autodesk Data Management Server, you should use the tools provided within the software to create a backup. The backup tools create a complete snapshot of the Vault database, filestore and customer Content Centre Libraries that can be archived to tape using your existing company backup software.

The backup tool provides a series of command line driven features that can be run on the server via a batch routine. The batch routine should be run every day after the Vault users have finished working and it should complete prior to the start of main company backup. As the amount of data in the Vault increases, you should re-check the timings to ensure the ADMS backup completes before the main backup begins. Automate the backup by configuring a Windows Scheduled Task to run the batch routine every day. Be aware that the Scheduled Task is authenticated by a Windows user. If the password for the Windows user is changed, the Scheduled Task and therefore the Vault backup will fail.

Do not assume that your IT Department are backing up the server and all data is recoverable. Archiving live SQL databases may not be possible with your backup software. Without the databases, the Vault filestore is not useable. Vault data restoration should be detailed specifically within your company disaster recovery plan. Test your backup and know that should the worst happen you can restore the data with the minimum of delay.

Example backup routine

The Data Management Server backup routine is detailed below. The paths to your files may be different so do not copy the following routine without checking and testing thoroughly.

```
Rem Autodesk Data Management Server backup routine
Rem Micro Concepts Ltd. 01223 716200
Rem This file should be run as a scheduled task daily and complete before the main tape backup begins

Rem Remove previous backup that should have been archived to tape
rd "c:\vault\Backup" /s /q
md "c:\vault\Backup"

Rem Initiate Vault backup
"C:\Program Files\Autodesk\ADMS 2011\ADMS Console\connectivity.admsconsole.exe" -Obakup -B"C:\vault\backup" -
L"C:\Vault\Backup\VaultBackup.txt" -DBSC -VAL -VU<backup user> -VP<password> -S
```

Explanation of backup routine

The batch routine begins by removing the previous backup. As the backup is contained in a folder with the time and date in the name we need to manually remove the previous backup daily.

- Remove directory silently and with sub folders: `rd <folder> /q /s`
- Recreate folder to contain backup: `md <folder>`

The main Vault backup options are:

- The command to run: `Connectivity.ADMSConsole.exe`
- The operation: `-Obakup`
- The backup location: `-B"path to backup folder"`
- Create a log file: `-L"path to log file.txt"`
- Read only libraries: `-DBSC` (Can replace `-Odetachlibrary` and `-Oattachlibrary` in previous versions)
- The Vault user to action command: `-VU<adminlogin>`
- The Vault user password: `-VP<password>`
- Optional backup validation: `-VAL`
- Perform silently: `-S`

Testing

We would recommend testing the batch routine with the –S option removed until you have proven the routine completes without errors. The silent option will suppress any dialogue boxes during unattended backups. All switches are case sensitive and should use a minus symbol followed by the option. Any paths or names with spaces should be contained within speech marks as “*path and name*”.

On a regular basis, check the backup script to ensure the backup is completing successfully. You may also check the scheduled task dialogue to see the ‘last run’ date and ‘status’ columns.

To test your backup, restore a Vault backup from tape and install ADMS on an available PC. Restore the backup on the new ADMS and check for errors. Do not restore the backup on the live ADMS server as this will replace the current Vaults.

User permissions

Any Vault user with administrator rights can be used to authenticate the backup within the batch file (-VU and -VP switches). We would suggest creating a specific backup user for this process as changing a user’s password without updating the batch routine would cause the backup to fail.

The batch routine should be run as a scheduled task on a daily basis. The scheduled task requires a Windows login to run the process. If the user details change, the scheduled task and therefore the Vault backup will fail. We would suggest creating a specific Windows user for this process that is less likely to have a password change than an active end user account.

As the backup routine creates a duplicate of the databases and the filestore, the hard disk space requirement is large. The backup should be created on a local drive. This includes internal drives, USB drives and some network allocated storage. It *is* possible to create the backup on another server if the correct user permissions are set. Refer to the ADMS Advanced Configuration Guide for further details. The Advanced Configuration Guide is available from support.autodesk.com

Vault version purging

Autodesk Vault maintains every version of every file checked in providing a rich engineering history of how every part, assembly and drawing has been developed. Some users find this information extremely useful to refer to and begin new designs from earlier versions. In other companies, this history is less useful. In this case, the history can be removed from the server using the purge routine to free disk space and speed up the backup process.

Purge can be run from the ADMS Console on the server as a one off process or from a command line. This document focuses on the command line use of the purge utility.

The command line purge can be added at the end of the backup script above. Purge uses the same executable as the backup routine with different switches. An example of a command line purge is:

```
Rem Initiate Vault purge
"C:\Program Files\Autodesk\ADMS 2011\ADMS Console\connectivity.admsconsole.exe" -Opurge -N"Vault"
-KEEPVERS5 -VU<backup user> -VP<password> -S
```

This line should be repeated for each Vault hosted on the server.

Purge command line switch definitions

- The command to run: Connectivity.ADMSConsole.exe
- The operation: -Opurge
- The Vault name to purge: -N<Vault Name>
- Number of versions to keep: -KEEPVERS<number> (KEEPVERS used for Vault installations)
-UNCONTROLLED (Use in place of KEEPVERS if using Vault Workgroup, Collaboration or Professional for document release).
- Age of files to purge: -MINAGE<ndays> (optional)
- Comments to exclude from purge: -EXCLCMT<comment> (optional)
- The Vault user to action command: -VU<adminlogin>
- The Vault user password: -VP<password>
- Perform silently: -S

Purge should only be run after discussing the requirements with the Vault users. Once purged, the old vault versions will be permanently deleted. Old versions that are referenced in the Vault by Labels or Vault Professional Items will not be purged.

Vault Collaboration and Vault Professional backup additions

Using the Vault Collaboration or Vault Professional data management server allow hot backups and incremental backups. Hot backups allow the backup process to take place while users are accessing the Vault. There are no switches or settings to enable the hot backup function. Incremental backup reduces the time taken to create a backup. This is especially useful for multi site Vault implementations where the maintenance window between sites is minimal.

The incremental backup uses a -INC switch in the ADMS backup to initiate an incremental backup. This can only be done after a full backup has been undertaken. The full backup must include all of the read only databases. Typically, a full backup will take place during a weekend followed by incremental backups Monday to Thursday. This requires two batch routines with scheduled tasks. Incremental backup archives only new or modified files in the file store as well as any changes to user accounts. Files and libraries that have not changed are not included in an incremental backup. You are not able to use the -DBSC or -DetachLibrary switches when utilising incremental backup.

Restoring documents

The Vault is backed up as a package and individual files are not identifiable to be restored. The restore process should be to restore a backup into a new installation of ADMS on a temporary server or workstation. The user can login to this Vault and extract the required files.