



Exchange Server Backups

A step by step guide to backing up and restoring Exchange Server 2000 and 2003

Requirements

- BackupAssist v2 or later
- Windows 2000, XP or 2003 Server
- Microsoft Exchange Server 5.5, 2000, 2003

Note: This white paper refers to Exchange 2000 and 2003 only. Screenshots shown are for BackupAssist v3.

Introduction

The Windows Backup program includes facilities to perform live, online backups of Exchange server. This means that the Exchange Server does not have to be stopped to perform the backup.

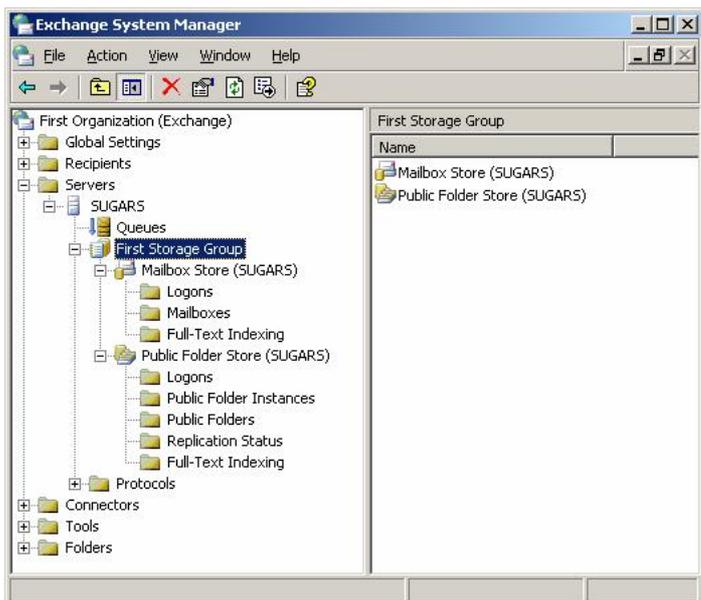
BackupAssist leverages this feature of Windows Backup, whilst also working around several bugs in Windows Backup to deliver a reliable solution.

Four Steps To Backing Up Exchange Server

In this example, we backup an Exchange Server named "SUGARS".

Step 1: Find your storage groups

Launch the Exchange System Manager from the Start menu, and expand the Servers tab as shown in the screenshot. You'll find one or more storage groups listed below the name of your server. In the example, there's one storage group called First Storage Group, under the server named SUGARS.



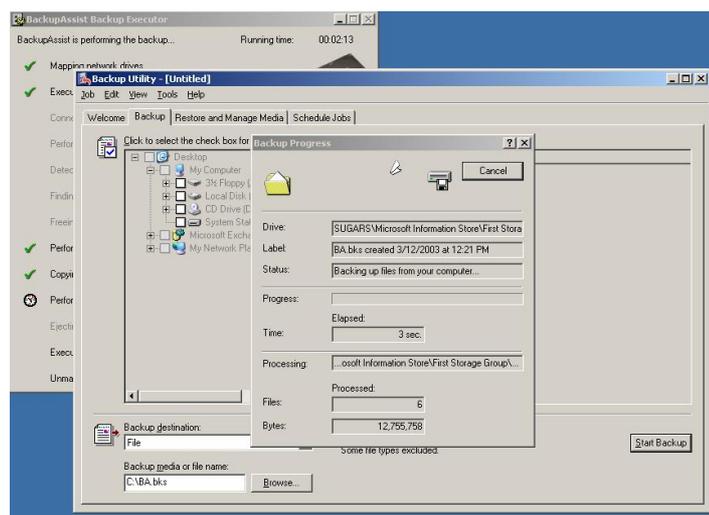
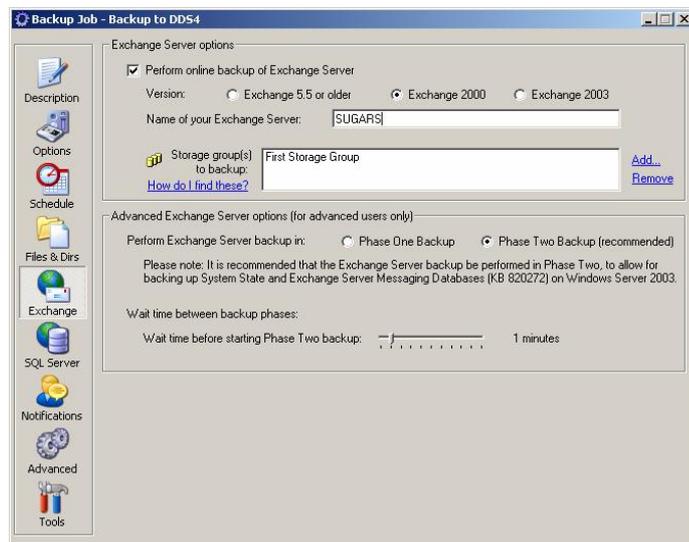
Step 2: Enter the details into BackupAssist

Run the BackupAssist Administration Console, and locate the Exchange tab on the left. Then check the Perform online backup of Exchange Server checkbox (as shown in the following screenshot), enter in the name of your Exchange Server, and add the storage groups you wish to backup.

In the example screenshot, the server name SUGARS and storage group *First Storage Group* have been entered in.

Step 3: Perform a backup

The next step is to either perform a test backup, or to wait for your scheduled daily backup. BackupAssist will backup your Exchange Server during the second phase of the backup. During the backup process you'll see a screen like this:





In the example, the drive called SUGARS\Microsoft Information Store\First Storage Group is being processed. This corresponds to a live backup of your Exchange Server.

Step 4: Examine your backup logs

The final step to ensuring your Exchange Server was backed up is to examine the backup logs.



As shown above, the backup of SUGARS\Microsoft Information Store\First Storage Group resulted in 21,013,392 bytes from 4 directories and 6 files being backed up.

The subsequent verify shows the same number of bytes and directories, but as a "quirk" with ntbakup, the file count is 0. Your restoration should still work - this appears to be a problem with ntbakup's report log, rather than the backup itself.

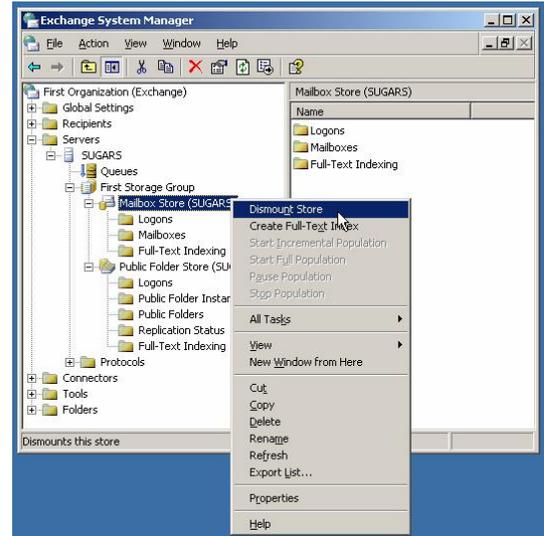
Three Steps To Restoring Exchange Server

In this example we go through three steps to perform the restoration. This example follows on from the backup process earlier.

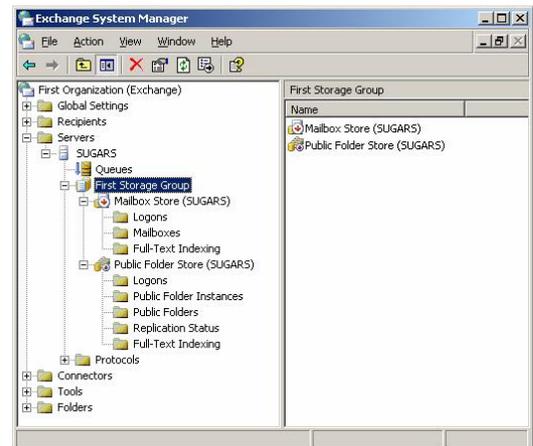
We assume that your system is functioning properly - that all your files and registry have been restored where needed - and you need to get your Exchange Server Information Store working again.

Step 1: Dismount your Exchange Server Stores

Run the Exchange System Manager from the Start menu, and navigate down to find your server and storage group (as shown in the screenshot). Then on your Mailbox Store and Public Folder Store (and any other stores that may be listed), right click and select "Dismount Store".

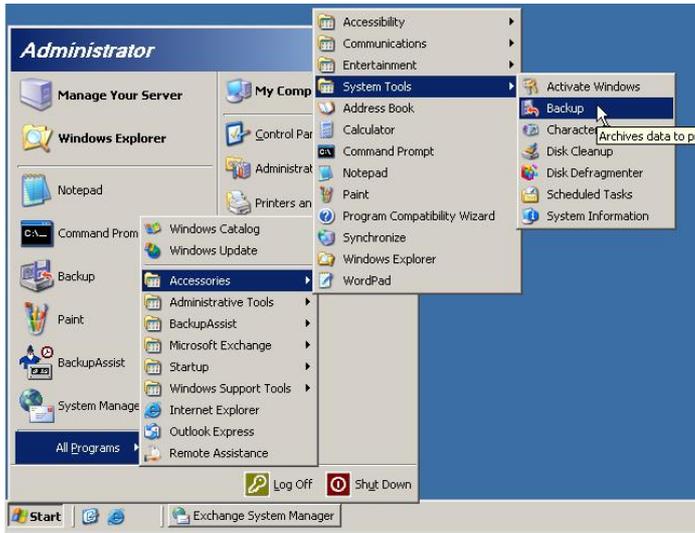


Once dismounted, your stores will have an icon with a red arrow pointing down, as shown in the screenshot below. This indicates that they have been dismounted.



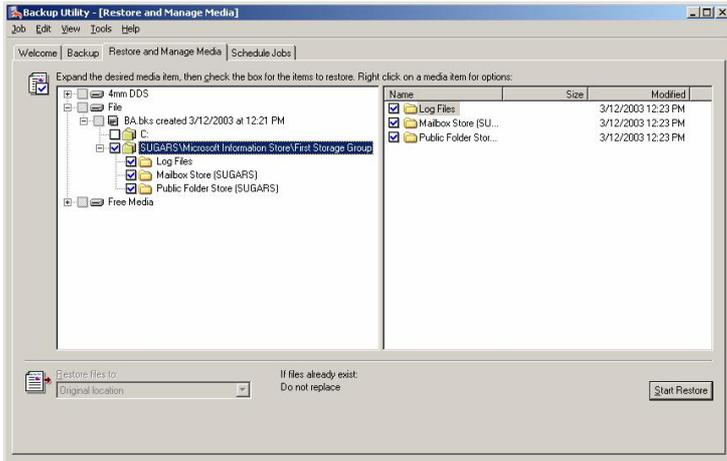
Step 2: Run Windows Backup, and perform the restoration

Start Windows Backup as shown in the screenshot below.

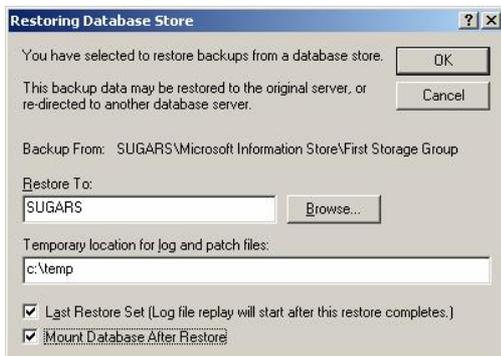


You should then click the **Restore and Manage Media** tab, and locate the file or tape that you wish to restore from. Expand the tree under that media until you find the Exchange Server Information Store listed, and select it.

In the example screenshot, we are restoring from a file called "BA.bkf" and the Exchange Server is SUGARS.



Click the **Start Restore** button. You'll be asked to make several choices, as shown in the following screenshots. As we are restoring to the same Exchange Server, the Restore To field is filled with "SUGARS".



The temporary location for log and patch files should be any directory with enough free space to perform the restore to (*Windows Backup will create the directory if it doesn't already exist*).

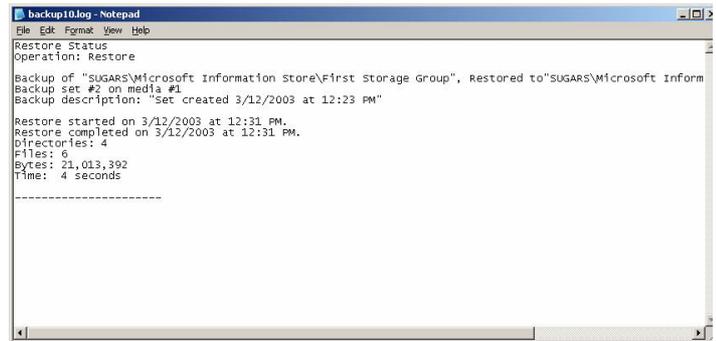
Since we are restoring from a full backup, we also check the last two checkboxes on the window, and then click OK. If you are restoring an incremental or differential backup, you should refer to the *Additional Resources* listed at the end of this white paper.

Step 3: Check the logs

Once the restore is complete, you should see the following window. Click on the Report button to view the logs. The backup log will show the results of the restore process, as shown below:



At this stage, you may also choose to reboot your server.



Your Information Store should now be restored, mounted and operational. Congratulations!



Additional Resources

Microsoft Technet has some very detailed articles on Exchange Server. These are very technical in nature, and are suitable for system administrators.

Resource	Web Address URL
Exchange 5.5 Disaster Recovery	http://www.microsoft.com/technet/prodtechnol/exchange/55/support/exdisrec.aspx
Exchange 2000 Server Database Recovery	http://www.microsoft.com/technet/prodtechnol/exchange/2000/support/dbrecovr.aspx
Exchange Server 2003 Administration Guide	http://www.microsoft.com/downloads/details.aspx?FamilyId=98E45481-1458-4809-97D6-50D8AEFBD8A1&displaylang=en

From time to time, we discover additional useful resources, and publish this information on our website:

<http://www.BackupAssist.com/resources>