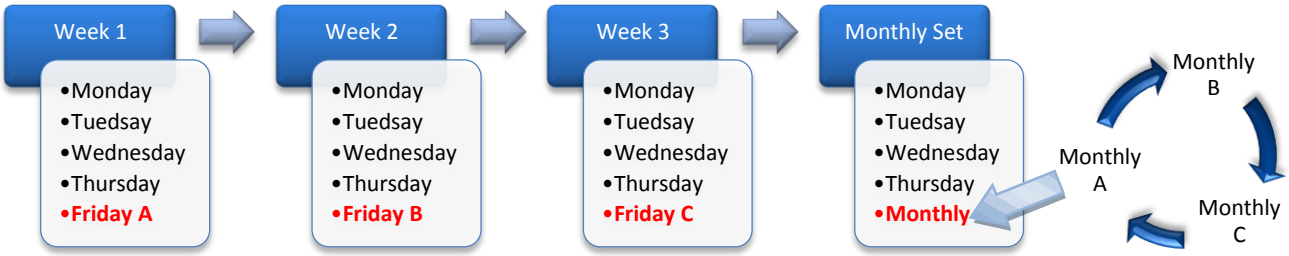
Windows 2000/2003 Backups

GENERAL BACKUP INSTRUCTIONS

You must backup your system on a timely basis. We recommend that you backup your system at least once a day. You should also backup prior to running any major update programs such as any month-end or year-end updates. The system should also be backed up again any time hardware field service is to be performed on the machine, immediately prior to such service.

Backing up data files on a regular basis is the only way to prevent loss of data. In the event of hardware failure or operator error the data files may have to be restored from the backup media. If a data restoration from backups becomes necessary, the most recent backup media will be used. The data which is on that media will be put back onto the system. **This means that if a backup has not been done for a week and if a restoration of data is necessary, all work done during that week will be lost.**

We recommend keeping at least ten sets of media for your backups (a set is the number of tapes or other media needed to contain all the information from the system – usually one tape or external drive). The first four sets should be labeled 'Monday', 'Tuesday', 'Wednesday' and 'Thursday'. You would also have three sets labeled 'Friday A', 'Friday B' and 'Friday C'. Use the Monday through Thursday sets for the corresponding days of the week, then rotate the Friday sets on a weekly basis. One of these Friday sets should be kept off site.



In addition, you should keep three sets of media for your MONTHLY backup, one to be kept off site. Again, the media should be labeled sets 'MONTHLY A', 'MONTHLY B', and 'MONTHLY C'. At the end of each month run a backup using one of these sets. Alternate the sets so that one month you use the 'MONTHLY A', the next month you use the 'MONTHLY B' set, and then the 'MONTHLY C' set. This will provide a backup of data and system files before any month end processing has been performed that can be restored in case of problems.

If you have fewer than 10 media sets then another rotation scheme can be defined.

In all cases please keep a log of which media you use for each backup. You may want to just make a note of the media label and the date. In this way we should be able to quickly find the media set with the most recent backup on it if ever needed.

We will schedule backups for Monday through Friday (probably on a two week schedule). We recommend changing the media each day so that if something happens to one of them you would only loose one day's backup. If you are using external USB Disk drives, rotating any number of drives other than five each day during a week would give you an odd rotation so that each device will end up with several backups on them. This will allow you to restore from back farther than a week if ever needed. Again, please keep a log of what media set was used each night.

Backup media should not be exposed to extreme temperatures, especially heat. Don't take the extra set of backup media off the premises and leave them sitting in a car in the hot sun!! Also, the media should not come into contact with anything magnetic (magnets, stereo speakers, electrical generating equipment, or X-ray machines).

It cannot be stressed how important it is to perform daily backups of your system. Remember that your business is running on this computer, so you want to guard your data just as you would guard your business.

Please train more than one person to check the backups and rotate media so that if the main person responsible is not available the other person can perform this critical task.

If you are using external USB Disk drives for backups, please follow the included setup instructions to connect one of the devices to one of the USB ports on your server. You will need to connect the USB cable to the server and to the external hard drive device, and then connect the power cord to it. Once connected to the server and powered on the server should automatically recognize and configure it.

When the backups are running as scheduled you will need to rotate the USB drives. Please follow this process to do so:

1. Left click once on "Safely Remove Hardware" icon  on the system tray of your server. It should show an entry for "Safely remove USB Mass Storage Device – Drive:*X*".
2. Click on this entry to select it. The server should display a bubble prompt that indicates "Safe to Remove Hardware".
3. At this point press the power button on the USB drive to turn it off. Disconnect the power and the USB cable from the drive.
4. Connect the USB cable and then the power cable to the next drive in the rotation. Press the power button to turn the drive on if necessary. The server should automatically see the drive.

Scheduled Microsoft Backups

If you purchased your Windows 2003 Server from Compusource, our systems engineers will have set up a scheduled backup on your server. You can check the results of the automated backups by following the instructions in this document.

To begin, log in as an *Administrator* on the Windows 2003 Server. Next, start the *Microsoft Backup* utility. If it is not listed on the desktop, access *Backup* by going through the following menus: *START > Accessories > System Tools > Backup*.

Figure 1: Accessing Backup

TIP: If you do not see the Accessories group, click on the down arrow at the bottom of the main *Programs* group to display rarely used menus.

You will be presented with the following screen. Click on the *Tools* menu, and select the *Reports* option to read the report.

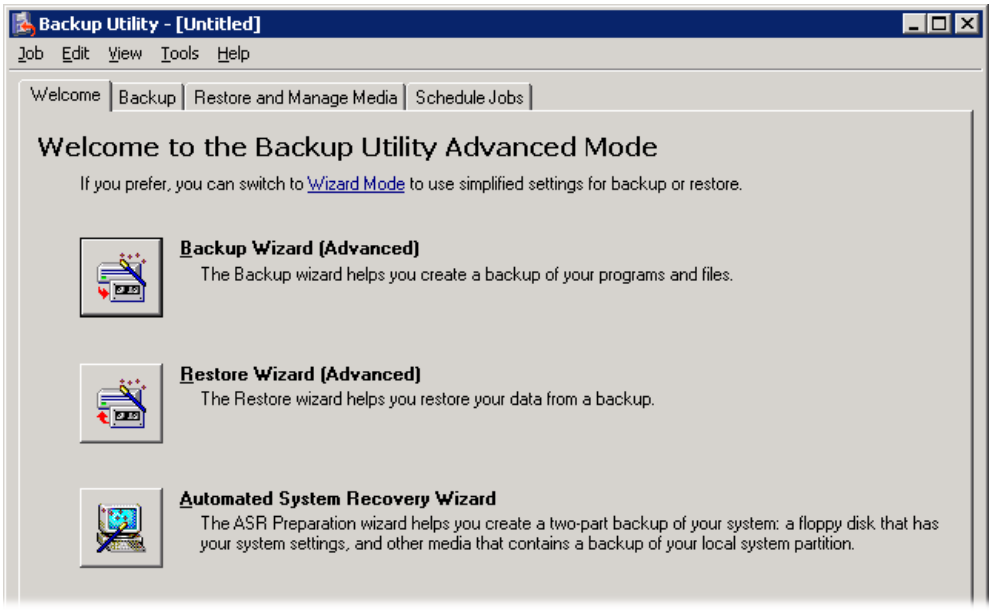


Figure 2: Windows 2003 Backup Welcome Screen

You will see a box appear, which will show up to 10 dates. Select the line dated from last night. This will be your most recent backup, and should be the top line.

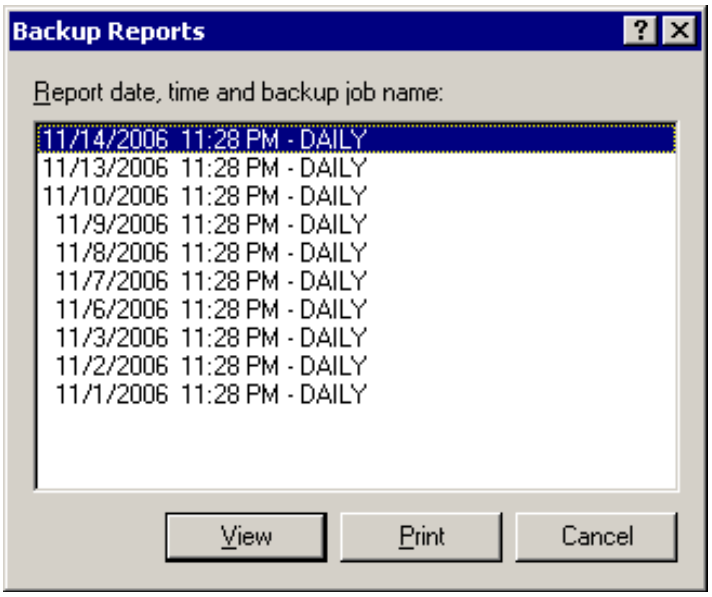


Figure 3: Windows 2000/2003 Backup Reports window

Once you have selected the most recent backup report, click on the *View* button. The backup report has two sections... *Backup* and *Verify*. In the top section, look for the lines that read

`Backup of "C:"` and

`Backup of "System State"`

We want to make sure that the backup started ***and*** completed OK. Look for the lines that read:

```
Backup started on 11/14/2006 at 11:00 PM.
Backup completed on 11/14/2006 at 11:10 PM.
```

For every drive that is backed up, there will also be a corresponding *Verify* section. Repeat the process in the Verify section, looking for the lines that read:

`Verify of "C:"` and

`Verify of "System State"`

Then, find the lines that read:

```
Verify started on 11/14/2006 at 11:13 PM.
Verify completed on 11/14/2006 at 11:22 AM.
```

If you see both the words *started* and *completed* for *C:* and *System State*, then your backup was generally good. You may have additional drives (e.g. *D:*), as well. You'll also want to look for messages indicating skipped files. These would typically be files that were open at the time of the backup.

Please advise the Compusource Hotline of any problems you see or questions you may have with your backup. It is extremely important to your business that your backups are successful regularly.

On the next page you will find an example of a backup report, and the lines to look for which indicate a good backup.

Sample Backup Report

Backup Status
Operation: Backup
Active backup destination: 4mm DDS
Media name: "Media created 11/14/2006 at 11:00 PM"

Backup of "C: "
Backup set #1 on media #1
Backup description: "Set created 11/14/2006 at 11:00 PM"
Backup Type: Normal

Backup started on 11/14/2006 at 11:00 PM.
Backup completed on 11/14/2006 at 11:10 PM.
Directories: 459
Files: 12600
Bytes: 911,659,394
Time: 9 minutes and 32 seconds
Media name: "Media created 11/14/2006 at 11:00 PM"

Backup of "System State"
Backup set #2 on media #1
Backup description: "Set created 11/14/2006 at 11:00 PM"
Backup Type: Copy

Backup started on 11/14/2006 at 11:10 PM.
Backup completed on 11/14/2006 at 11:12 PM.
Directories: 121
Files: 1899
Bytes: 246,754,708
Time: 2 minutes and 18 seconds

Verify Status
Operation: Verify After Backup
Active backup destination: 4mm DDS

Verify of "C:"
Backup set #1 on media #1
Backup description: "Set created 11/14/2006 at 11:00 PM"
Verify started on 11/14/2006 at 11:13 PM.
Verify completed on 11/14/2006 at 11:22 PM.
Directories: 459
Files: 12600
Different: 0
Bytes: 911,659,394
Time: 9 minutes and 5 seconds

Verify of "System State"
Backup set #2 on media #1
Backup description: "Set created 11/14/2006 at 11:00 PM"
Verify started on 11/14/2006 at 11:22 PM.
Verify completed on 11/14/2006 at 11:24 PM.
Directories: 121
Files: 1899
Different: 0
Bytes: 246,754,708
Time: 2 minutes and 21 seconds