

**note****The versions feature will not protect you from a hard drive failure**

Carnegie Mellon University conducted a study of 100,000 hard drives in 2007. They found that there's a probability of between 1 in 50 and 1 in 25 of your hard drive failing each year.

In an office of 100 workers that means that between two and four unlucky workers will suffer a hard drive failure every year.

To insure against drive failure, you need to back up your data to a different hard drive (or other media).

If your computer is part of an office network, the normal solution is to save your files to a shared network drive. The IT department are then responsible for backing this up every night.

For home users (or small companies that only have one computer) you should back up all of your data to an external hard drive (or a memory stick if your files are not very large).

Cloud computing offers an even better solution to prevent potential file loss after hard drive failure.

If you progress to the *Essential Skills* book in this series you'll learn how to use a OneDrive to store a workbook in the cloud.

## Lesson 1-10: Use the Versions feature to recover an unsaved Draft file

Excel 2010 introduced a major new feature called *Versions*. The Versions feature is fantastically useful as it finally solves two common problems that are as old as computing itself:

1. Your computer crashes, there's a power cut, or you close your work without saving, and then discover that you've lost all of your work since the last save.
2. You delete parts of your workbook and then save, only to realize that you deleted something important before saving. Because saving over-writes the old version of the file, you find that you've lost the deleted work forever.

Microsoft has finally figured out how to solve both problems. The Versions feature works like this:

1. Every so often Excel saves a backup of your workbook (called a *Version*) for you. The default time interval for these automatic backups is every 10 minutes (but you can change this to any interval). You'll see the Versions feature at work in the next lesson: *Lesson 1-11: Use the Versions feature to recover an earlier version of a workbook*.
2. If you create a new workbook and then close it without saving, Excel will still keep the last automatic backup it made. Excel calls this a *Draft* version. Draft versions are automatically deleted after four days. The Draft feature is the subject of this lesson.

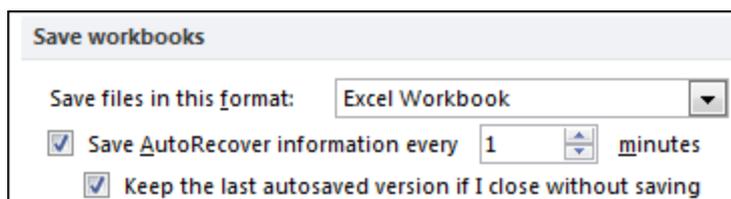
You'll need a watch or clock with a second hand for this lesson.

### 1 Open a new blank workbook.

You learned how to do this in: *Lesson 1-1: Start Excel and open a new blank workbook*.

### 2 Set the AutoSave interval to one minute and check that AutoSave features are enabled

1. Click: File→Options→Save.
2. Change the *Save AutoRecover information every* box to 1 minute.
3. Make sure that the other options are set in the same way as in this screen grab (the two check boxes will already be checked unless another user has changed them):



4. Click: OK and check the time on your clock or watch. The first AutoSave will happen one minute from now!

## note

### RAID arrays are a special super-reliable type of disk drive

Many years ago, I implemented an EDM (electronic document management system) for the world's largest car manufacturer.

It would have been a disaster for them to lose even one hours' work, so I specified a special drive called a RAID Array (Redundant Array of Independent Disks) to store the documents.

The simplest RAID array consists of two hard drives and automatically writes all data to both drives (this is called mirroring). If one drive fails, the other will still have the data meaning that any data loss is very unlikely.

RAID arrays don't stop workflow for even a moment. If a disk fails the users don't even notice as data continues to be available from the other disk (or disks).

When the faulty disk drive is replaced, the files automatically restore themselves from the good disk (or disks) restoring the reliability of the array.

## note

### The Versions feature isn't just for Excel

Microsoft has also included the Versions feature in Word and PowerPoint.

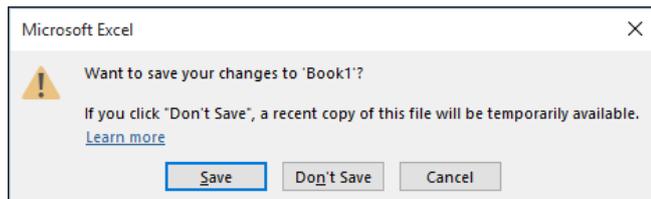
Now that you've learned how to use it in Excel, you should be able to figure out the small differences in the way it is implemented in the other Office applications.

5. Type the following into cells A1 and A2, pressing the <Enter> key after each line:

	A	B	C
1	Mary had a little lamb		
2	Its fleece was white as snow		
3			

6. Wait for at least one minute. (After one minute Excel will automatically save your workbook).

After a little over a minute try to close the workbook. The following dialog should appear:



Excel is telling you that it has already saved a draft copy of the workbook.

7. Click the *Don't Save* button.

Even though you told Excel not to save, a draft copy has been secretly saved just in case you made a mistake and may need the file later.

## 3 Recover the draft document.

1. Open Excel.
2. Click: *Open Other Workbooks* at the bottom of the menu bar.
3. Click: *Recover Unsaved Workbooks*.

You'll find this at the bottom center of the screen (you may need to scroll down).



4. A dialog appears showing the unsaved document that you were working on:

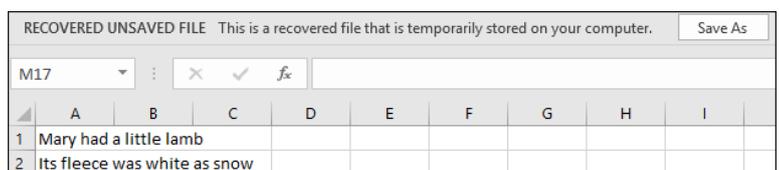
Name	Date modified
Book1((Unsaved-306056443257458486))	20/07/2017 11:38

5. Double-click the document to open it.

The document is now shown on screen (even though you have never saved it).

6. Recover the unsaved file.

Click the *Save As* button in the top information bar.



7. Save the file in your sample files folder with the name: **Mary**.