

1 PROTECTION

1.1 Introduction

This module discusses Excel's methods of protecting worksheets and workbooks. There are three basic sorts of protection. You may want to hide and protect some sheets containing sensitive data. Alternatively you may want to protect complete data sheets from being modified. Finally, you may want to make sure that another user cannot make changes to the formulas you've spent hours preparing and fine-tuning. That's when cell protection is useful.

You won't find an easy-to-use Protection button, because the designers of Excel intended cell protection to be difficult for inexperienced users to disable. Instead you have to follow certain logical steps.

In this module, you will learn about:

- Workbook Protection
- Worksheet Protection
- Selective Protection
- Access Passwords
- Additional Options

1.2 Objectives

After completing this module you will be able to:

- Identify, from a given scenario, the right reasons to protect a workbook
- Apply a worksheet password accurately
- Correctly specify a range from sample data to unlock

working with the materials provided.

1.3 Workbook Protection

You can protect a complete workbook against structural changes i.e. renaming, deleting or inserting sheets, and viewing hidden sheets. This is useful when you want, for example, for a user to only view parts of a workbook or to make sure they don't accidentally delete sheets you have created. Protecting a workbook does not protect the data in it.

- Select sheets that are to be hidden.
- Right-click on the sheet tab and choose **Hide**.

Alternatively, choose **Home, Cells, Format, Visibility** and select from that menu.

- Choose **Review Ribbon, Changes Group, Protect Workbook**. The Protect Structure and Windows dialog opens.



Figure 1-1 - The Protect Structure and Windows Dialog

- The default setting is to protect the structure. You can optionally – if you have additional windows into the workbook open – choose to protect those windows from closure or resizing.
- You can choose to password-protect the workbook.
- Protection is removed by choosing clicking on the same button, now highlighted to show it has been applied. If you set a password then you will need to supply it in order to unprotect.
- Alternatively, protection can be applied from the **File Tab**.

Choose **File, Info, Protect Workbook** and select the option to apply or remove workbook protection from there.

1.4 Worksheet Protection

When to use worksheet protection

There are three common uses of worksheet protection:

- When a worksheet is complete and you want to protect the data from revision by others.
- When you have set up a worksheet or template with headings and formulas that you want protected from inadvertent change when data is entered.
- When you want to hide some elements of the sheet from other users.

Cell Locking

- Protecting a worksheet's data is a two-stage process. First lock or unlock cells, depending on whether you want them to be editable or not. Next, switch on Protection.
- By default, all cells are locked. However, the locked property doesn't come into effect until you switch on protection.
- If you want to protect a whole sheet, just switch on Protection.
- If you want to protect part of a sheet (e.g. headings and formulas) you must first switch **off** the lock on all data entry cells before switching **on** protection. (Remember, you can view which cells contain formulas by choosing **Formulas, Show Formulas.**)
- The **Protection** tab in the **Format Cells** dialog box allows you to specify whether or not cells can be changed.

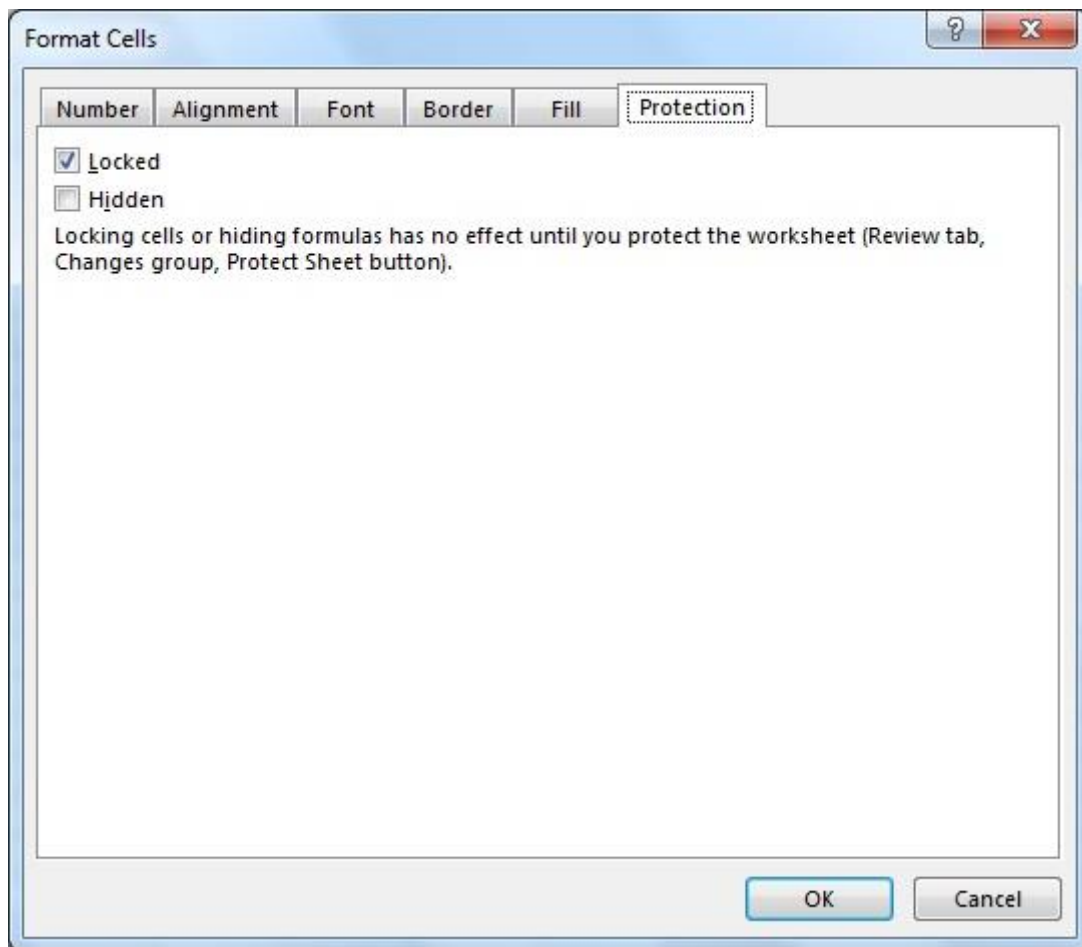


Figure 1-2 - The Format Cells Dialog

- Select cells then use the Locked option box in the Protection tab to choose whether the selected cells are formatted as locked or unlocked.
- Locked cells are protected from changes; unlocked cells can be changed.

Switching on worksheet protection

- Choose **Review Ribbon, Changes Group, Protect Sheet**. The Protect Sheet dialog opens.

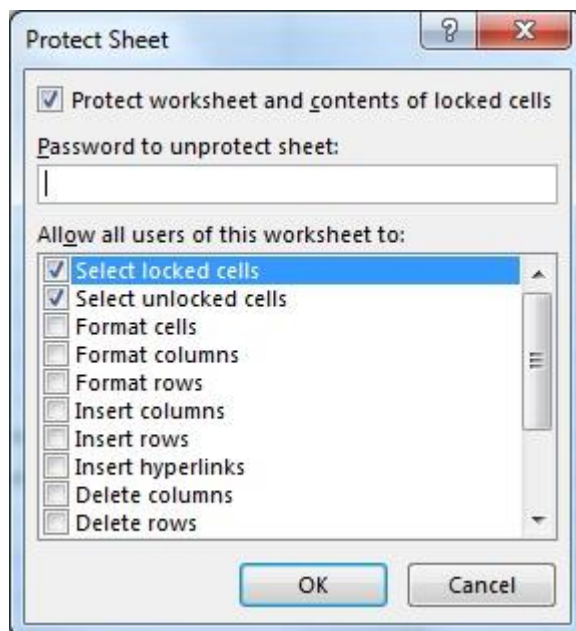


Figure 1-3 - The Protect Sheet Dialog

- By default all elements of the sheet are protected. However, you can make specific changes to the list to allow, for example, the insertion of new data whilst still protecting the old.
- Protection Passwords give you additional control over who can access locked cells.



If you lose the password, there's no way to recover it.

- As before, sheet protection can be applied using **FileTab, Info, Protect Workbook** and selecting from the menu there.

Using a protected worksheet

- In general you can view and amend a protected worksheet in the normal way, provided that you don't attempt to alter locked cells. If you do, the following warning is displayed:

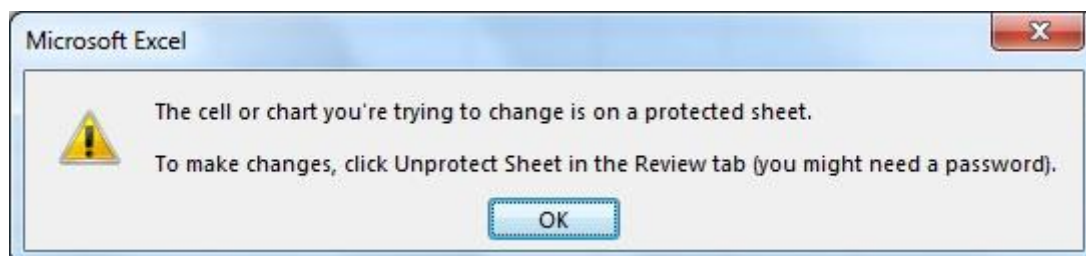


Figure 1-4 - The Protection Warning

- Certain facilities such as Data filtering and subtotaling are switched off by default when a worksheet is protected.

Removing Protection

- Click on the same button, now labeled **Unprotect sheet**, to remove protection.
- If you password-protected the sheet you will need to supply the correct password to unprotect it.

To restrict what is publicly viewable

- Select rows or columns with sensitive information.
- Right-click on the selected rows and columns and choose **Hide** before switching on protection.

Alternatively, choose **Home, Cells, Format, Visibility** and select from that menu.

1.5 Selective Protection

Excel 2013 allows you to protect a sheet generally, whilst still allowing specified users to modify it in ways you choose.

- First, lock or unlock cells as before.
- From the **Changes Group** of the **Review Ribbon** choose **Allow Users to Edit Ranges**. The following dialog opens.



Figure 1-5 - The Allow Users to Edit Dialog

- Click on **New . . .** The **New Range** dialog opens.

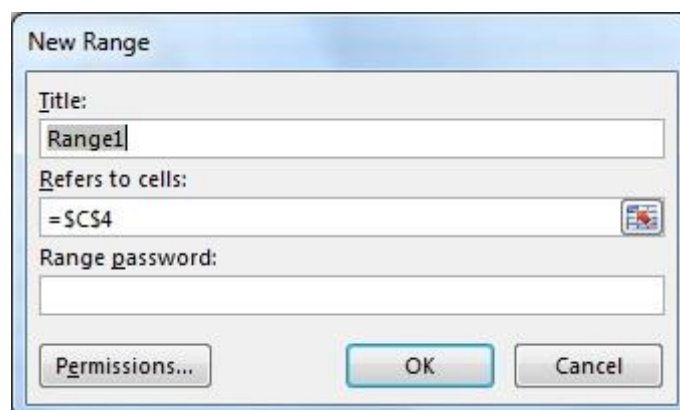


Figure 1-6 - The New Range Dialog

- If you have pre-selected the range its extents will be shown (as in the example above). Enter a name for it.
- If not, enter the range values or click-and-drag over the range. If wanted, apply a password.

- To restrict who can edit this range, click on **Permissions**. The **Permissions Dialog** opens.

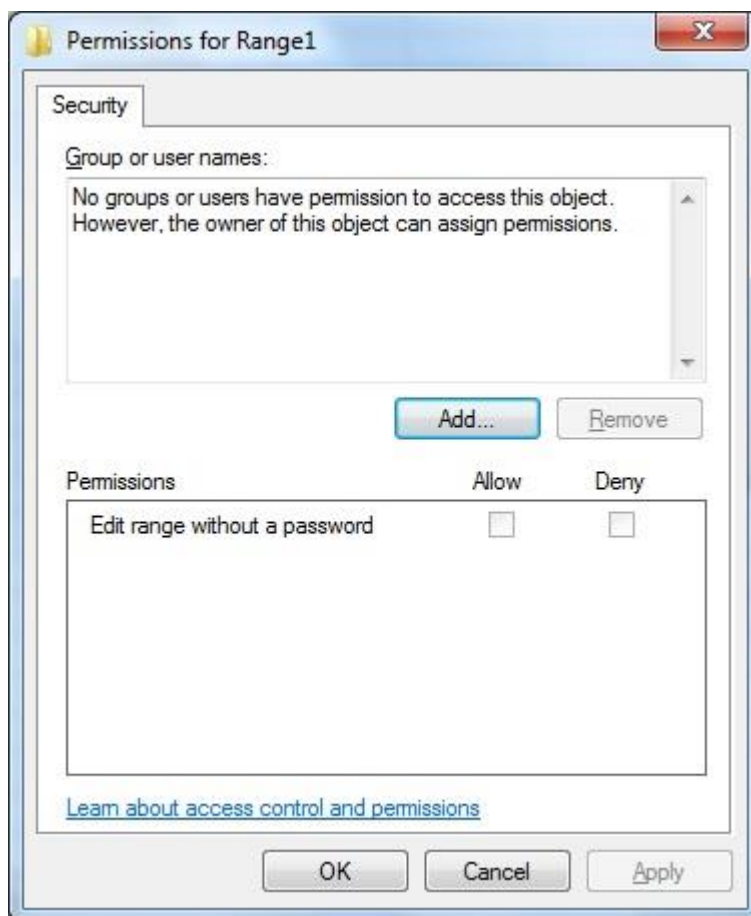


Figure 1-7 - The Permissions Dialog

- Click on **Add** to enter a user name. The **Select Users Dialog** opens.

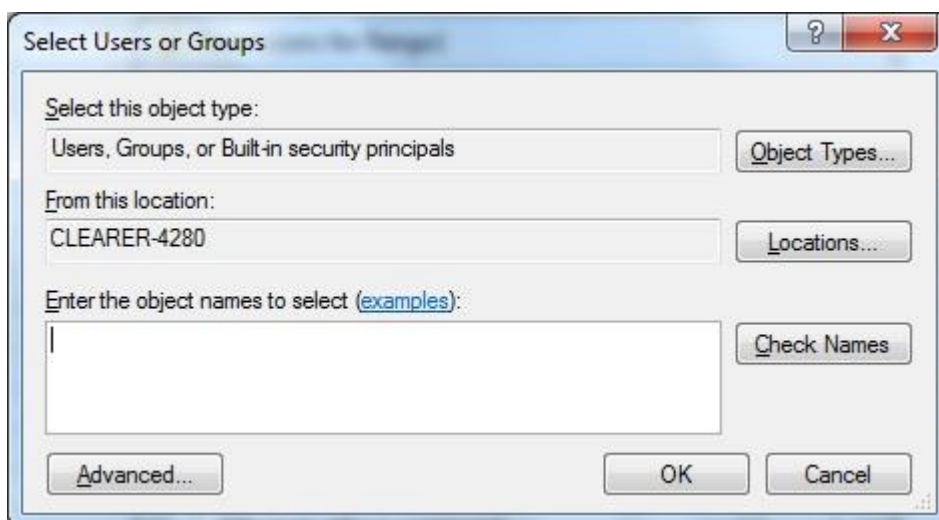


Figure 1-8 - The Select Users Dialog

- Click on the **Object Types** or **Locations** buttons to see lists of availability in each type.
- Enter the name of the user who is to have access to the range then click on **Check names**.
- Once Excel has checked that you have specified a valid user, click on **OK**. You are returned to the Permissions dialog which has now been updated to show the changes you have made.
- Click on **OK** to return to the **Allow Users to Edit Dialog**.
- Click on the **Protect Sheet** button. The worksheet is now protected from everyone except the named user or group in the specified range.

1.6 Access Passwords

If a workbook is to be shared, you may choose to restrict its use. You can do this by requiring passwords to be entered for access and update.

- Choose **File, Save As**.
- Choose where you want to save the file.
- The **Save As** dialog opens.
- Click onto the **Tools . . .** button then choose **General Options**.

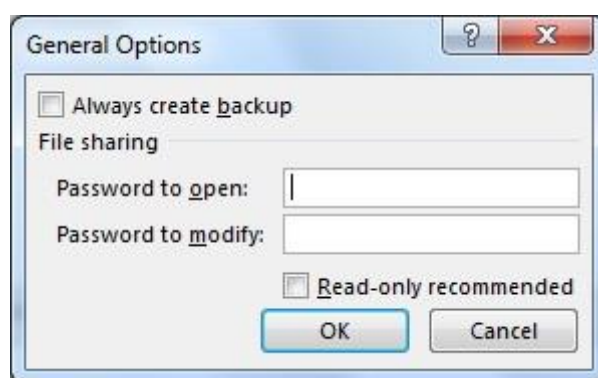


Figure 1-9 - The General Options Dialog

- If wanted, enter passwords for Open and/or Modification.
- If using both, make sure that you choose separate passwords for each function.

1.7 Additional Options

The **File, Info, Protect workbook** menu offers you some additional security options.

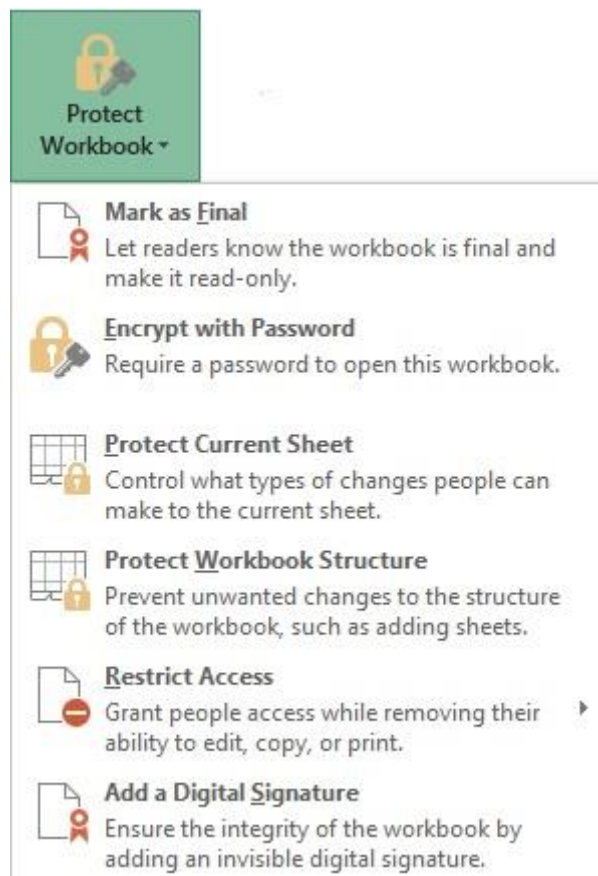


Figure 1-10 - The Protect Workbook Menu

Mark as Final

Once a book is marked as final when it opens it defaults to read only and users are shown a warning message.

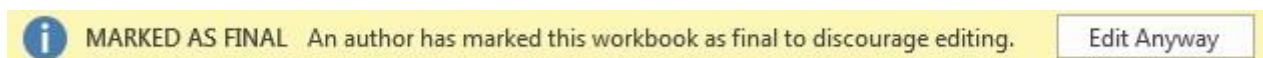


Figure 1-11 - The Marked as Final Warning



Figure 1-12 - The Final Status Icon on the Status Bar

Encrypt with Password

This adds another layer of security to the General Save password, causing the file itself to be encrypted as well as the user needing to know the password before opening.

Restrict Permission by People

This method of restriction is associated with a subsidiary product called Rights Management and should only be used as part of a corporate decision to install and use it.

Check with your IT department.

Add a Digital Signature

This feature allows you to digitally “sign” a document to improve confidence in it by those who open it. Details of how to do it were covered in a different module.

1.8 Summary

In this module, you have learned about:

Workbook Protection	Use Workbook protection to protect a workbook against structural changes i.e. renaming, deleting or inserting sheets, and viewing hidden sheets.
Worksheet Protection	Use Worksheet protection to protect your worksheets from revision by others. You may choose to unlock some areas before applying protection.
Selective Protection	Choose Allow Users to Edit Ranges to specify who can alter data within selected ranges.
Access Passwords	If a workbook is to be shared, you may choose to restrict its use. You can do this by requiring passwords to be entered for access and update when saving the file.
Additional Options	The options to Mark as Final , Encrypt with Password , Restrict Permission by People and Add a Digital Signature are all available from the File Info, Protect Workbook menu.

1.9 Your Summary

Use this page to make your own notes of any memory aids or special things you will use from this module.

1.10 Module Review

Module Objectives

After completing this module you will be able to:

- Identify, from a given scenario, the right reasons to protect a workbook
- Apply a worksheet password accurately
- Correctly specify a range from sample data to unlock

working with the materials provided.

Files Needed

Review Protection.xls

Steps

- Open the file **Review Protection**.
- Identify reasons to apply the following type of protection in this file:

Protect a Hidden Sheet

(Hint: You should first hide confidential data sheets before applying protection.)

Protect a Whole Sheet

(Hint: Such a sheet would contain values that are normally static and can only be changed by specific people.)

Protect a Sheet after unlocking particular ranges

(Hint: You normally leave labels and formulas locked but unlock data entry areas.)

- Apply all these different sorts of protection to the file using the password “protect” at any stage where a password is requested.
- Save the file so that you additionally need the password “password” to modify it.

Compare your results with the file **Review Exercise Completed – Protection**

