

Lesson 7-11: Restrict the cells users are allowed to change

- 1 Open *Human Resources-3* from your sample files folder (if it isn't already open).
- 2 Display the *Hours Worked* custom view.
This was covered in: *Lesson 7-8: Create custom views.*
- 3 Hide the *Headcount and Salaries* worksheet.
This was covered in: *Lesson 7-7: Hide and unhide worksheets, columns and rows.*
- 4 Re-size columns B:O so that they are just wide enough to display their contents:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Payroll														
2															
3															
4															
5															
6															
7															
8		Johnny Caine	George Marley	Betty Anan	Paris Winfrey	Ozzy Dickens	Johnny Roberts	Charles Monroe	Ronnie Bush	Michal Jolie	JK Spears	Ozzy Rowling	Oprah Hilton	Bill Biggs	Angelina Osbourne
9															
10															
11	Hours Worked														
12	Monday	9	10	10	10	7	7	7	7	7	7	7	10	8	6
13	Tuesday	8	9	8	6	10	10	10	7	6	10	7	8	7	9
14	Wednesday	10	9	8	7	9	8	6	8	7	8	8	6	6	8
15	Thursday	6	8	6	10	9	7	6	6	7	8	8	6	6	9
16	Friday	10	7	10	7	9	10	9	8	8	10	8	9	10	6
17	Total	43	43	42	40	44	42	38	36	35	43	38	39	37	38

tip

Use cell locking to make forms more user-friendly

Excel is often used to create forms (such as booking forms). The form is sent to the user by e-mail and the user completes and returns it.

This type of form becomes much easier to use if you do the following:

1. Unlock the cells that the user should type data into.
2. Protect the worksheet making sure that only the *Select unlocked cells* option is checked.

When this is done, the user can use the <Tab> key to navigate through all of the cells in the form that need to be completed.

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The challenge this time will be to prevent the user from changing any value other than those in the yellow shaded cells (cells B12:O16).

You will solve this problem by *unlocking* these cells and then *protecting* the worksheet. This will only allow the user to enter values into the *unlocked* cells.

- 5 Unlock cells B12:O16.

All cells on a worksheet are (by default) *locked*. You are able to type values into them because the worksheet is not yet *protected*.

In order to prevent the user from changing any cell except cells B12:O16 you need to do two things:

- Unlock the cells that you want the user to be able to change.
- Protect the worksheet.

Here's how to unlock the cells:

1. Select cells B12:O16.
2. Right click anywhere in the selected area.

note

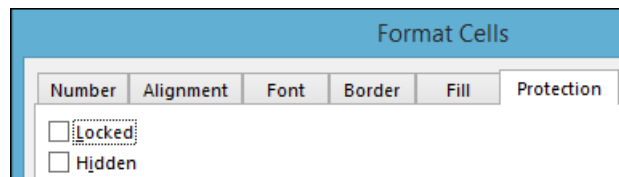
You can keep your formulas secret with the Hidden attribute

If you set the *Hidden* attribute on the *Format Cells Protection* tab, users cannot see any of your formulas.

Even if a cell is unlocked, the formula does not display on the formula bar when the cell is selected. This could be used if the formula used to calculate a value was a “trade secret”.

This will only take effect when the worksheet is protected.

3. Click *Format Cells...* from the shortcut menu.
4. Click the *Protection* tab.
5. Uncheck the *Locked* check box.



See sidebar for more about the *Hidden* attribute.

6. Click the OK button.
- 6 Protect the *Payroll* worksheet so that the user is unable to change or select any of the locked cells.

When you protect a worksheet, it is no longer possible to change the contents of a *locked* cell.

1. Click: Review→Changes→Protect Sheet.

The *Protect Sheet* dialog appears

The default settings allow the user to select (but not change) the contents of locked cells. This normally makes sense as you want the user to be able to copy and paste any part of the worksheet.

In this case, however, it creates a huge security problem as the user can easily copy the entire worksheet, paste it into a new worksheet, and then unhide the hidden rows.

For this reason, you want to prevent the user from selecting locked cells.

2. Uncheck the *Select locked cells* check box.

Notice that by default, the user is prevented from doing many more things to the worksheet (such as formatting cells). You can selectively allow these actions by checking the appropriate check box.

3. Enter a password.
4. Click the OK button, Confirm the password and then click the OK button once more.

- 7 Test the protected worksheet.

You are unable to change (or even select) any of the locked cells but you can select and change any of the unlocked cells.

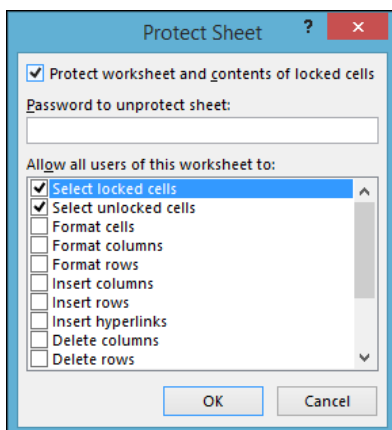
- 8 Unprotect the worksheet.

1. Click: Review→Changes→Unprotect Sheet.
2. If you set a password, enter it, and then click OK.

- 9 Lock cells B12:O16.

Do this in the same way that you unlocked the cells, but this time check the *Locked* check box (instead of un-checking it).

- 10 Save your work as *Human Resources-4*.



tip

Leave all cells locked to distribute a read-only workbook

If you protect a workbook without unlocking any cells, you have effectively created a read-only workbook.

To prevent the user from copying and pasting the contents, you should also uncheck the *Select locked cells* check box. Note that the user will still be able to click:

Insert→Illustrations→Screenshot

... from any another Office application to copy an image of the worksheet.