

Power Utility Pak

Version 7

Add-in Tools for Microsoft® Excel 2007

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OVERVIEW

What is the Power Utility Pak?

Power Utility Pak Version 7, or PUP v7, is a collection of add-ins for Microsoft Excel 2007 for Windows. These add-ins are designed to save time, make your job easier, and enable you to perform actions that might otherwise be impossible.

PUP v7 consists of several components:

- **General-Purpose Excel Utilities:** A set of 60 general purpose utilities that add new features to Excel. Access these utilities from the ribbon when you click the **PUP v7** tab. Note that the PUP v7 tab is present only when PUP v7 is installed.
- **New worksheet functions:** A set of 54 new functions, for use in your formulas. These functions are written in VBA, and you can add the function code to your workbook using the [PUP Worksheet Function Library](#) utility. (VBA programming knowledge is not required).
- **Enhanced shortcut menus:** (optional). When this option is in effect, many of Excel's shortcut menus display additional commands.
- **PUP v7 Bookmarks:** (optional). This feature gives you quick access to frequently used workbooks, sheets, or ranges.
- **PUP v7 Amusements:** Several games and amusements that you can check out when you need a break from number crunching. Guaranteed to reduce your productivity.

Requirements

PUP v7 works with Microsoft Excel 2007 for Windows. PUP v7 does not work with earlier versions, and it does not work with *any* version of Excel for Macintosh.

Installing PUP v7

You can choose to have the PUP v7 add-in loaded automatically whenever you start Excel. Or, you can simply load it when you need it. To install the Power Utility Pak:

1. Display the Add-ins dialog box:
 - Click the **Office** button, and choose **Excel Options**
 - In the Excel Options dialog box, click the **Add-Ins** tab
 - In the drop-down labeled **Manage**, choose Excel Add-ins
 - Click Go
2. In the Add-Ins dialog box, place a checkmark next to **Power Utility Pak v7**.
3. Click **OK**.

The Power Utility Pak will be installed, and Excel will display a new menu: **PUP v7**.

Tips:

- If **Power Utility Pak v7** does not appear as one of your choices in the Add-Ins dialog box, use the **Browse** button to locate pup7.xlam. By default, the pup7.xlam add-in file is in a directory named C:\Program Files\pup7. However, the product can be installed in any directory.
- A quick way to display Excel's add-ins dialog box is to press **Alt+Tl**.

- You can also load Power Utility Pak by using the **Open** command on the **Office Button** menu (open the file named pup7.xlam). However, if you use this method there is no direct way to unload the Power Utility Pak. Therefore, it's best to open it using the Add-In dialog box, described above.

Removing PUP v7

To remove the entire Power Utility Pak add-in from memory:

1. Display the Add-ins dialog box:
 - Click the **Office** button, and choose **Excel Options**
 - In the Excel Options dialog box, click the **Add-Ins** tab
 - In the drop-down labeled **Manage**, choose Excel Add-ins
 - Click Go
2. In the Add-Ins dialog box, remove the checkmark from the **Power Utility Pak v7** item.
3. Click **OK**.

The preceding steps unload the pup7.xlam add-in file, and all of the utilities that are currently loaded. If you exit Excel without reinstalling the add-in, Power Utility Pak will not be loaded automatically the next time you start Excel.

Removing PUP v7's file

All of the PUP v7 files are stored in a single directory on your computer. After uninstalling the pup7.xlam add-in (as described above), you can delete the entire PUP v7 directory. By default, this directory is:

```
c:\program files\pup7\
```

Removing PUP v7's Registry entries

PUP v7 stores its settings in the Windows Registry. You can remove these setting at any time:

1. Choose **About PUP v7** from the **PUP v7 - Power Utility Pak - PUP** menu.
2. Click the **Registry Entries** button.
3. Click the **No** button in response to the message box.

After performing these steps, PUP v7 will be returned to its default settings.

You can also delete the registry settings manually, using the Windows regedit.exe program. The registry key is:

```
HKEY_CURRENT_USER\Software\VB and VBA Program Settings\Power Utility Pak\
```

PUP v7 Options

To display the Options dialog box for Power Utility, choose **PUP Options** from the **PUP v7 - Power Utility Pak - PUP** menu. The PUP v7 Options dialog box contains four tabs, described below.

Utility Management

- **Maximum number of utility files to keep in memory:** The various utilities that make up the Power Utility Pak are stored in number of separate files. These files are loaded on an "as needed" basis. To conserve memory, you can specify the maximum number of PUP utility files to keep in memory. The default setting is three (3) utility files, but you can specify any number between 1 and 12 (or "no limit").
- **List:** Click this button to display a list of PUP utilities that are currently open.

- **Unload All:** Click this button to unload all of the PUP utility files. This will unload the utility files, but the PUP v7 add-in will remain in memory. When a utility file is unloaded, it will be opened again if needed.

Notes:

- The utility files are unloaded on a "first in, first out" basis.
- The PUP Shortcut Menus file not included in the count of utility files. This file is not unloaded when you click Unload All. Use the **PUP Shortcuts** checkbox in the **PUP v7 - Power Utility Pak** group to toggle Shortcuts on and off.

Remember Settings

- **Remember the last-used settings in PUP dialog boxes:** If checked, PUP's dialog boxes will be displayed with the settings you used most recently. This setting is turned on by default.
- **Use Ctrl+Shift+R to display the most recently used PUP dialog box:** If checked, the Ctrl+Shift+R key combination will display the dialog box for the PUP utility that you used most recently. Note that pressing this key combination this will not actually repeat the operation automatically -- it will only display the dialog box. This setting is turned on by default.
- **Use Ctrl+Shift+B to display bookmarks:** If checked, pressing Ctrl+Shift+B displays the list of PUP bookmarks. This setting is turned on by default.

Progress Indicators

- **Show progress indicators for lengthy operations:** Many of the PUP utilities process cells within a loop. If you would like to see a progress indicator while the cells are being processed, choose this option. This setting is turned on by default.
- **Progress indicator threshold:** You can also specify a "threshold," which is the minimum number of cells to process that will trigger the progress indicator display. There is some overhead involved in showing a progress indicator, so the operations may take a bit more time. The optimal **Progress indicator threshold** setting will depend on the speed of your system.

Quick Access

- This tab simply describes how to add a PUP v7 command to your Quick Access Toolbar.

General Usage Tips

- To access the PUP commands in the Ribbon using your keyboard, press Alt (or slash), and you'll see boxes that contain letters. Press the letters or use the arrow keys to access the controls. For example, to display the **PUP InfoBox**, press Alt, followed by U and I.
- You can work with the PUP dialog boxes using a mouse or the keyboard. The dialog boxes adhere to common keyboard standards: Use Tab to cycle among controls, and use Alt+underlined keys to access a particular control.
- The main PUP add-in file, pup7.xlam, uses very little memory. Additional memory is not used unless you invoke one of the utilities. You can control how many PUP utility files are kept in memory by using the **PUP Options dialog box**.
- If you're working with a very large or complex workbook with lots of formulas, you may find that the performance of some utilities is slow because the workbook is recalculated frequently. For example, when selecting a PUP utility, you may experience a delay before the dialog box is even displayed. Or, generating reports may take an unnecessarily long time. To speed things up try setting Excel's calculation mode to **Manual** (use the **Formulas -**

Calculation - Calculation Options command). When you're finished with the operation, return the Calculation setting to **Automatic** to ensure that your formulas return the correct result.

- Many of the PUP utilities do not work if the worksheet is protected. If that's the case, you will see a warning when you attempt the operation.
- Some of the PUP utilities modify a range of cells. Be aware that these operations also affect cells that are in hidden rows or columns.
- In most cases, the effects of using a PUP utility are reversible. If the results of an operation are not what you expected, choose **Undo** (or press **Ctrl+Z**).
- In some cases, you'll want to use a utility repeatedly. For a few of the utilities ([Text Tools](#), [Calculator](#), and [Insert Sequence Number](#)), the dialog box remains onscreen after you perform the operation. Identify the stay-on-top dialog boxes by their smaller title bars. For other utilities, you can use the **Ctrl+Shift+R** key combination to display the PUP dialog box that was most recently used. In addition, PUP dialog boxes (by default) "remember" the last settings used. These features are enabled and disabled in the [PUP Options dialog box](#).
- When a PUP utility is running, it's possible to "break out" of the procedure by pressing **Ctrl+Break**. Therefore, if your system appears to hang during a lengthy operation, you can press **Ctrl+Break** to stop the procedure. This will result in a "Code execution has been interrupted" dialog box. Choose **Continue** to keep the procedure running, or **End** to stop the procedure.
- Keep in mind that PUP v7 was thoroughly tested, using a wide variety of hardware. It was also tested with several non-English language versions of Excel. It was impossible, of course, to test this product under all possible scenarios, so it is quite likely that there will be situations in which the product does not perform as it should. If you discover a problem with a PUP utility, consult the [technical support](#) section of this help file for information on getting the problem resolved.

GROUP: CELLS AND RANGES

The Cells and Ranges group contains command that work with data in cells.

Exact Formula Copy

Normally, when you copy and paste a cell that contains a formula, the relative cell references are adjusted in the copied formula. The Exact Formula Copy utility makes an exact copy of a range. Relative references in the copied formulas are not adjusted.

Using Exact Formula Copy

Before using Exact Formula Copy, select the range of cells that contain the information that you want to copy. The selection can include formula cells and non-formula cells. All cells will be copied.

1. Choose **Exact Formula Copy** from the **PUP v7 - Cells and Ranges - Formula Tools** menu.
2. Verify that the **Copy from** box contains the desired range. Or, change the range if desired.
3. Specify the **Copy to** location (a single cell, which represents the upper left cell of the destination range).
4. If you also want to copy the cell formatting, place a checkmark next to **Copy formatting**.
5. Click **OK**.

Exact Formula Copy Tips

- If the results of this utility are not what you expected, choose **Undo** (or press Ctrl+Z).
- The **Copy from** and **Copy to** ranges need not be in the same worksheet or in the same workbook.
- If you specify a range that contains a multi-cell array formula -- and the range does not include the entire array -- the copied formulas will result in an error.

Convert Relative and Absolute References

The Convert Relative & Absolute References utility works with formulas, and converts the cell references in the formulas to one of the following reference types:

- Absolute references (for example, \$A\$1)
- Relative references (for example, A1)
- Column absolute references (for example, \$A1)
- Row absolute references (for example, A\$1)

The formula listed below, for example contains relative references:

```
=SUM(A16:D124)
```

If you convert these to absolute references, the formula will appear as:

```
=SUM($A$16:$D$124)
```

Relative and absolute referencing is a factor only if the cells are copied. If a formula that uses absolute referencing is copied, the cell references do not change.

Using Convert Relative and Absolute References

Before using Convert Relative and Absolute References, select the range of cells that contain formulas that you want to convert. The selection can include formula cells and non-formula cells. Only the formula cells will be affected.

1. Choose Convert Relative and Absolute References from the PUP v7 - Cells and Ranges - Formula Tools menu.
2. Verify that the Range box contains the desired range. Or, change the range if necessary.
3. Select the appropriate Convert option.
4. Click OK.

Convert Relative and Absolute References Tips

- If the results of this utility are not what you expected, choose **Undo** (or press Ctrl+Z).

Unapply Names

The Unapply Name utility works with formula cells, and converts named references to their actual cell addresses -- something that (surprisingly) Excel is not able to do.

This utility has a limitation, however. It will not work if the workbook has any duplicated names. For example, if the workbook contains two sheet level names (such as Sheet1!Total and Sheet2!Total) you cannot use the Unapply Names utility. In addition, it will not work if the workbook has a sheet-level name that's the same as a workbook-level name. In either case, you will see a message when you attempt to use this utility.

Using Unapply Names

Before using Unapply Names, select the range of cells that contain formulas that you want to convert. The selection can include formula cells and non-formula cells. Only the formula cells that contain the names you specify will be modified.

1. Choose **Unapply Names** from the **PUP v7 - Cells and Ranges - Formula Tools** menu.
2. Verify that the **Range** box contains the desired range. Or, change the range if desired.
3. Select the names to be replaced in the **Name(s) to replace** box. Use the **All** button to select all names in the **Name(s) to replace** list box, or use the **None** button to deselect all names.
4. Specify the type of reference (**Absolute references** or **Relative references**) to be used for the substituted cell or range addresses.
5. Click **OK**.

A message box will tell you the number of formulas that were modified.

Unapply Names Tips

- If the results of this utility are not what you expected, choose **Undo** (or press Ctrl+Z).
- In some cases, it's not possible to unapply names, so check the results carefully. It's always a good idea to save your workbook before using this utility.
- When you create a formula by pointing to a cell or range, Excel always inserts the name for a named cell or range reference, whether you like it or not. In some situation, this can cause a problem if you later copy the formula. The Unapply Names utility can convert these names to cell references.
- For every formula in your selection, this utility checks every name that's selected in the **Name(s) to replace** list box. If your workbook has many names, this can be a very slow process. For faster processing, select only the names that you know are used in the formulas in the selected range.
- The Unapply Names utility will not work if your worksheet uses "Transition Formula Entry" (i.e., a 1-2-3 compatible mode). To change this setting, access the Excel Options dialog box, and select the Advanced tab. Scroll down and remove the checkmark from **Transition formula entry**. Note, however, that changing this mode will also convert all of the names used in your formulas to standard references -- so you don't even need to use this utility.

Error Condition Wizard

The Error Condition Wizard makes it easy to modify existing formulas so they don't display errors. For example, consider the following formula, which calculates a percentage change:

```
= (D4-C4) / C4
```

If cell C4 is empty or contains 0, the formula will display a #DIV/0 error. Use the Error Condition Wizard to convert the formula to the following (which displays a blank when C4 contains 0):

```
=IF (ISERROR ( (D4-C4) / C4 ) , "" , (D4-C4) / C4)
```

As an option, you can choose to convert the formula so it uses the Excel 2007 IFERROR function:

```
=IFERROR ( (D4-C4) / C4 , "" )
```

Using Error Condition Wizard

Before using the Error Condition Wizard, select the range of cells that contains the formulas you want to convert. The selection can include formula cells and non-formula cells. Only the formula cells will be affected.

1. Choose **Error Condition Wizard** from the **PUP v7 - Cells and Ranges - Formula Tools** menu.
2. In Step 1, verify that the range is correct.
3. If you would like the formula to use the Excel 2007 IFERROR function, choose the **Use the Excel 2007 IFERROR function** option.
4. Click **Next**.
5. In Step 2, specify the type of error that you want to trap.
6. Click **Next**.
7. In Step 3, specify what you would like to display instead of the error. Click **Finish**.

Error Condition Wizard Tips

- If the results of this utility are not what you expected, choose **Undo** (or press Ctrl+Z).
- In Step 3, the information at the bottom of the dialog box changes, depending on the option you select. For example, if you choose to display text, the dialog box displays a text box so you can enter the text to display.
- This utility does not attempt to determine if your formulas already have an error condition.
- If you choose the **Use the Excel 2007 IFERROR function** option in step 1, you cannot specify the type of error in Step 2.
- If you choose the **Use the Excel 2007 IFERROR function** option in Step 1, your workbook will not be compatible with versions prior to Excel 2007.

Cell Comment Tools

The Cell Comment Tools utility provides several ways to work with comments attached to cells. You can:

- Change the way comments are displayed.
- Generate a listing of all comments.
- Change the formatting of all comments, so the formatting matches a specified comment.
- Find and replace text contained in comments.
- Add or remove the user name from all comments.

Using Cell Comment Tools

Before using the Cell Comment Tools utility, activate a worksheet that contains at least one cell comment.

1. Choose **Cell Comment Tools** from the **PUP v7 -Cells and Ranges - Formula Tools Tools** menu.
2. Select the appropriate tab in the Cell Comment Tools dialog box.
3. Select the Scope for the operation: Choose **Active sheet** to work with comments on the active sheet only. Choose **All sheets** to work with all comments in the active workbook.
4. If you would like to see a summary of the comments that were changed for each operation, select **Show summary**.
5. Make the desired changes (see descriptions, below).
6. Click **Close** to close the Cell Comment Tools dialog box.

Note: Changes made by this utility cannot be undone.

View or listing comments

1. In the Cell Comment Tools dialog box, select the View/List tab.
2. Select the appropriate viewing option in the **View comments** frame. This affects all comments, regardless of the Scope setting.
3. To create a list of comments, choose the location of the comment list by selecting **In a new workbook** or **In a new sheet**. Then click **Create comment list** to create a list of all cell comments.

Formatting comments

1. In the Cell Comment Tools dialog box, select the Format tab.
2. Click **Specify the comment cell** to select a cell that contains a comment. A range selection dialog box will appear.
3. Select a comment cell and click **OK**. This will apply the formatting of the selected cell to all other comments. The formatting that is copied includes font, font size, text color, background color, and comment size and shape.
4. In many cases the user name portion of a comment are bold. Copying the formatting will make the entire comment bold. To ensure that bold formatting is not applied to the entire comment text, choose the **Force non-bold formatting** option.

Finding and replacing text within comments

1. In the Cell Comment Tools dialog box, select the Find/Replace tab.
2. Enter the text to be replaced in the **Find text in comments** box.
3. Enter the replacement text in the **Replace with** box.
4. Click **Apply**.

Adding or removing a user name

1. In the Cell Comment Tools dialog box, select the User Name tab.
2. Enter (or edit) the name in the **User name** box.
3. Choose an option (either **Remove user name from comments**, or **Add user name to comments**).
4. If you are adding a user name and you would like the name to be in bold type, select **Make name bold**. If you are removing a user name and you don't want the remaining text of the comment to be bold, choose **Force non-bold formatting**.
5. Click **Apply**.

Cell Comment Tools Tips

- The Cell Comment Tools dialog box will not be displayed if the active workbook contains no cell comments.
- Finding and replacing text within comments is not case-sensitive.
- You can also specify how comments are viewed by using commands in the **Review - Comments** group.
- If your comments contain individual character formatting, this formatting may be lost when using the Format, Find/Replace, or User Name tabs.

Calculator

The Calculator utility displays a simple four-function calculator in a "stay on top" dialog box. The calculator can be accessed using the mouse or keyboard, and the result can be pasted into a cell. In addition, the value of a cell can be retrieved and used in a calculation.

Using Calculator

1. Access the Calculator by choosing **Calculator** from the **PUP v7 - Cells and Range - Formula Tools** menu.
2. Use the mouse or keyboard to perform your calculation.
3. To use a value stored in a cell, activate the cell and click **Get**.
4. Click **Paste** to paste the result to the selected cell.

The Calculator remains onscreen after pasting, and you can continue to work in Excel while it is displayed.

Calculator Tips

- The "C" key clears the calculator display. The "CE" key clears the current entry.
- If you use the calculator from the keyboard, use the asterisk key (*) for multiplication.
- If a range of cells is selected, clicking **Paste** inserts the result into the active cell in the range.
- If the active worksheet is protected, you will not be able to paste the results.
- If you accidentally paste a value, choose **Undo** (or press Ctrl+Z) to restore the previous value.
- The colors used in the calculator are from the active workbook's document theme.

PUP Worksheet Function Library

This utility adds one or more VBA macros to your workbook. These macros provide you with new worksheet functions that you can use in your formulas.

The 53 PUP worksheet functions are arranged into five categories:

Date & Time	Information	Lookup & Reference	Stat & Math	Text
DAYSINMONTH	CELLCOLOR	CREDITCARD	COUNTAVISIBLE	CHAR2
MONTHWEEK	CELLHASFORMULA	HINTERPOLATE	COUNTBETWEEN	CODE2
TIMEXX	CELLTYPE	LASTINCOLUMN	MAXALLSHEETS	CONTAINS
TIMEXX_ADD	EXCELDIR	LASTINROW	MINALLSHEETS	DOLLARTEXT
TIMEXX_SUBTRACT	FILEEXISTS	SHEETOFFSET	SELECTONE	EXTRACTELEMENT
TIMEXX_SUM	FILENAME	UNIQUEITEMS	STATICRAND	INSERTSTRING
WHICHDAY	FontColor	VINTERPOLATE	SUMALLSHEETS	ISLIKE
XDATE	NUMBERFORMAT		SUMVISIBLE	PARSENAME
XDATEADD	SHEETCOUNT		TOPAVERAGE	REMOVESPACES
XDATEDAY	SHEETNAME			SAYIT

Date & Time	Information	Lookup & Reference	Stat & Math	Text
XDATEDIF	USER			SCRAMBLE
XDATEDOW				
XDATEMONTH				
XDATEYEAR				
XDATEYEARDIF				

When you use Excel's Insert Function dialog box, these new functions appear in the 'User Defined' category.

Notes:

- If you add one or more function to an XLSX workbook, you will need to re-save the file using an XLSM extension (which indicates a macro-enabled workbook).
- Depending on your security setting, you may receive a warning when your workbook is opened after you've added one or more PUP worksheet functions. This warning appears for all workbooks that contain macros. If you choose to disable macros when you see the warning, you will not be able to use the PUP worksheet functions in your formulas.
- Keep in mind that the functions are available only within the workbook that was active when you added the functions. If you need to use the same functions in a different workbook, you'll need to add the functions to that workbook as well.

Using the PUP Worksheet Function Library

The PUP Worksheet Function library allows you to add and remove PUP functions from your workbook. In order to use this feature, you may need to change a security setting. If this change is required, you will see a message when you attempt to insert a PUP function.

To change your security setting:

1. Click the **Office Button**, and choose **Excel Options**.
2. In the Excel Options dialog box, select the **Trust Center** tab.
3. Click the **Trust Center Settings** button.
4. In the Trust Center dialog box, click the **Macro Settings** tab.
5. Add a checkmark next to **Trust access to the VBA project object model**.
6. Click **OK** twice to return to your workbook.

Adding PUP functions to your workbook

1. Activate the workbook in which you want to use the functions.
2. Select **PUP Function Library** from the **PUP v7 - Cells and Ranges - Formula Tools** menu.
3. Choose the **Add Functions** tab of the PUP Worksheet Function Library dialog box.
4. Choose an item from the **Function category** list, and the available functions in that category are displayed in the list box. If you choose **All** from the **Function category** list, the list box displays all of the functions.
5. Select one or more functions from the list. To select multiple functions, press Ctrl and click the function names. To select all of the functions, click the **All** button. To clear the selection in the list box, click **None**.
6. Click **Add Selected**. The VBA code that defines the selected function(s) is added to your workbook.
7. When you're finished adding functions, click **Close**.

The functions are now available for use in that workbook.

Removing PUP functions from your workbook

1. Activate the worksheet that contains the PUP functions you want to remove.
2. Select **PUP Function Library** from the **PUP v7 - Cells and Ranges - Formula Tools** menu.
3. Choose the **Remove Functions** tab of the PUP Worksheet Function Library dialog box.
4. Select one or more functions from the list and click OK. The VBA code that defines the selected functions is removed from your workbook. If the list box is empty, no PUP worksheet functions are defined in your workbook.
5. When you're finished removing functions, click **Close**.

Note: You can also remove the functions manually by accessing the Visual Basic Editor window.

Usage Example

Assume that your worksheet contains a list of names, and you would like to be able to extract the last name (e.g., extract "Smith" from "John Q. Smith"). PUP's PARSENAME worksheet function will do just that.

1. Select **PUP Function Library** from the **PUP v7 - Cells and Ranges - Formula Tools** menu.
2. Choose the **Add Functions** tab of the PUP Function Worksheet Library dialog box.
3. You're looking for a function that manipulates text, so choose **Text** from the **Function category** list.
4. Click the **PARSENAME** item to select it. At this stage, you could select additional functions from the list by pressing Ctrl and then clicking the other function names.
5. Click the **Add Selected** button to add the VBA macro to your workbook.
6. Click **Close** to close the PUP Function Library dialog box.
7. You can then insert a formula such as the following:

```
=PARSENAME (A1, 3)
```

The PARSENAME function definition is stored in your workbook file, and is saved when you save your workbook. If your workbook uses an XLSX extension, you will need to save it with an XLSM extension. If you need to use the PARSENAME function in a different workbook, you'll need to re-run the PUP Worksheet Library utility.

PUP Worksheet Function Library Tips

- When adding functions to your workbook, you can select multiple functions in the list box by pressing the Ctrl key while you click the function names. To select a group, Shift-Click the first function, scroll down, and then Shift-Click the last function. These techniques also work when removing functions using the **Remove Functions** tab.
- To get more information about a particular function, select the function in the list and click the **Function help** hyperlink.
- After you've added PUP worksheet functions to your workbook, you can use the functions in your formulas. The easiest way to insert a function is to use Excel's Insert Function dialog box (click the **fx** icon to the left of the formula bar). Although the PUP functions are arranged into categories, they will always be listed in the 'User Defined' category in Excel's Insert Function dialog box.
- When using Excel's Insert Function dialog box to insert a PUP worksheet function, you can get help on the function by clicking the **Help on this function** hyperlink. The help is contained in a file named pupfunctions.chm, and this file should be located in your PUP v7 directory.
- Some of the functions do not update automatically. For example, the functions that return color information about a cell do not update when you change the color of the cell used as the argument. To update these functions, press Ctrl+Alt+F9.
- Keep in mind that the functions are available only within the workbook that was active when you added the functions. If you need to use the same functions in a different workbook, you'll need to add the functions to that workbook as well.

Text Tools

The Text Tools utility provides several ways to manipulate text in selected cells without using formulas. You can:

- Change the case of the text (UPPER CASE, lower case, Proper Case, Sentence case., and TOGGLE cASE).
- Add new characters to the text (at the beginning, at the end, or at a specified position).
- Remove characters from the text by position (from the beginning, from the end, or beginning at a specified position).
- Remove spaces from the text (all extra spaces, leading spaces, trailing spaces, or all spaces).
- Remove characters of a particular type from the text (non-printing characters, alpha characters, non-numeric characters, non-numeric and non-alpha characters, or numeric characters).

Note: This utility will not preserve individual character formatting in your cells (e.g., superscript formatting). Formatting applied to entire cells is not affected.

Using Text Tools

To display the Text Tools dialog box, choose **Text Tools** from the **PUP v7 - Cells and Ranges - Modify Cells and Ranges** menu.

The Text Tools utility always works with the current range selection. The Text Tools dialog box is a "stay on top" dialog box. This means that you can easily select different cells to work with, and continue working in Excel while the dialog box remains on screen. The cell selection can consist of a discrete range, entire rows or columns, a multiple selection, or even the entire worksheet.

When you are finished using Text Tools, click **Close**.

Changing the case of text

1. In the Text Tools dialog box, select the **Change case** operation.
2. Select the appropriate **Change to** option to convert the selected text.
3. Click **Apply** to modify the selected cells.

Adding text

1. Select the cells that you want to modify.
2. In the Text Tools dialog box, select the **Add text** operation.
3. Enter the text you want to add in the **Text to add** box.
4. In the **Character position** drop-down, select the option that corresponds to the position where you want the text to be added.
5. If you want to limit the operations to selected cell that contain text, select **Skip non-text cells**. If this option is not checked, cells that contain values will also be modified.
6. Click **Apply** to modify the selected cells.

Removing text by position

1. Select the cells that you want to modify.
2. In the Text Tools dialog box, select the **Remove by position** option.
3. In the **Characters to remove** drop-down, choose the number of characters to be deleted.
4. In the **Character position** drop-down, choose the position from which you want the characters removed.
5. If you want to limit the operation to selected cells that contain text, select **Skip non-text cells**. If this option is not checked, cells that contain values will also be modified.

6. Click **Apply** to modify the selected cells.

Removing spaces

1. Select the cells that you want to modify.
2. In the Text Tools dialog box, select the **Remove spaces** option.
3. In the **Remove** drop-down, select the option that corresponds to the spaces that you want to remove.
4. Click **Apply** to modify the selected cells.

Note: Selecting **All Excess Spaces** is equivalent to applying Excel's TRIM function to the cells.

Deleting characters by type

1. Select the cells that you want to modify
2. In the Text Tools dialog box, select the **Delete characters** option.
3. In the **Remove all** drop-down, select the option that corresponds to the type of characters that you want to remove.
4. Click **Apply** to modify the selected cells.

Note: Selecting **Non-printing characters** is equivalent to applying Excel's CLEAN function to the cells.

Text Tools Tips

- The Text Tools dialog box remains open when you click **Apply**, so you can make other modifications to the selected cells. Or, you can select another range of cells to work with.
- After you click **Apply**, you can choose **Undo** (or press Ctrl+Z) to reverse the effects. Note that only one level of undo is available.
- Text Tools works only with non-empty cells. Therefore, you can select entire rows or columns. Note, however, that you cannot use Text Tools to add text to empty cells.
- If **Skip non-text cells** is checked, the utility works only on cells in the selection that contain text (as opposed to values). If left unchecked, the utility works with cells that contain either text or values. Blank cells and cells that contain formulas are always skipped.
- When removing spaces from text, the **All excess spaces** option converts multiple spaces to a single space, and removes all spaces from the beginning and end of the text.
- The Text Tools utility is appropriate only for text in worksheet cells. For example, you cannot use the Text Tools utility to make a chart label upper case.
- The Text Tools utility works only with text entered directly into cells, and formulas are ignored. For example, the Text Tools utility will have no effect on a cell that has a formula such as =UPPER(A1), even though that formula displays text in its cell.
- If you're using PUP's [Enhanced Shortcut Menus](#) option, the shortcut menu for a range selection includes a command to change the case of text.
- To modify value and formula cells, you can use the [Math Without Formulas](#) utility.

Change Sign of Values

This utility makes it easy to change the sign (positive or negative) of values within a range. It allows the following operations:

Operation	Description
Fix trailing negative signs	Data imported from other sources sometimes displays negative signs to the right of a value (e.g., 143.44-). This option converts those cells to normal negative values (e.g.,

-143.44).

Change all negative values to positive	This option makes all negative values positive.
Change all positive values to negative	This option makes all positive values negative.
Reverse the sign of all values	This option makes all negative values positive, and makes all positive values negative.

Using Force Values In Cells

To force Excel to recognize number values as numbers:

1. Start by selecting the range.
2. Choose **Force Values In Cells** from the **PUP v7 - Cells and Range - Modify Cells and Range** menu.
3. Verify that the **Range** box displays the correct range (or change it, if necessary).
4. Click **OK**.

Force Values In Cells Tips

- If the results aren't what you expected, choose **Undo** (or press Ctrl+Z) immediately. This will restore the previous formatting of the selected cells.
- This utility will also convert values in cells that are preceded by an apostrophe.

Math Without Formulas

This utility enables you to change values in cells without using formulas. You can apply any of the following mathematical operations to each cell in a range:

- Addition
- Subtraction
- Multiplication
- Division
- Exponentiation
- Rounding
- Apply an Excel function
- Apply a custom expression

The mathematical operation is performed using a value, function, or custom expression you specify. Depending on the option you choose, the cells values are either changed, or replaced by formulas.

Using Math Without Formulas

Start by selecting the range of cells that you want to modify. The selection can consist of a single cell, a range, a discontinuous range, entire rows or columns, or the entire worksheet.

1. Select the cells that you want to work with.
2. Choose **Math Without Formulas** from the **PUP v7 - Cells and Ranges - Modify Cells and Ranges** menu.
3. Verify that the range displayed is the range you intend to modify.
4. To choose a mathematical operation, select the appropriate item from the **Operation** list.

- Depending on the Operation selected, you then enter an operand, select a function, or enter an expression. The Operations are:

Operation	Description
Addition	Adds the operand to each cell in the range.
Subtraction	Subtracts the operand from each cell in the range.
Multiplication	Multiplies each cell in the range by the operand.
Division	Divides each cell in the range by the operand.
Exponentiation	Raises each cell in the range to the power specified as the operand.
Rounding	Rounds each cell in the range to the number of decimal places specified as the operand.
Function	Lets you choose a function to apply to each cell in the range. Only single-argument functions are available.
Custom	Lets you create a formula-like expression, which is evaluated for each of the selected cells. The expression can include multi-argument Excel functions.

- If **Create formulas** is checked, the selected cells will be converted to formulas. If a cell already contains a formula (and **Skip formula cells** is not checked), the formula will be modified to perform the specified operation.
- To ignore cells that contain formulas, select **Skip formula cells**. Normally, you will want to keep this option checked.
- Click **OK**

Math Without Formulas: Additional Details

Specifying an operand

The operand is the value used in the mathematical operation. The operand can consist of any of the following: a simple value, an expression, a single cell reference, a name defined for a single cell.

The operand value may consist of any valid number. Following are examples of valid operands:

- 146
- .0125
- -899
- 105%
- 1E+05

If you enter an expression for the operand, the expression is evaluated, and the resulting value is used as the operand for the selected operation. The expression must result in a numeric value. Following are examples of valid expressions:

- $1/3$
- $24*60*60$
- $(154+97)*11$

You can also use a single cell address or name for the operand, or in an expression. If the cell contains a non-numerical value, you'll get an error message. If you use a name, the name must refer to a single cell only. Using a multi-cell range name will generate an error. Following are examples of valid expressions that use cell addresses and named cells:

- C4 (uses the contents of C4 on the active sheet)
- Interest (uses the contents of a cell named Interest)
- C4*2 (uses the contents of C4 multiplied by 2)
- Sheet1!C4 (uses the contents of C4 on Sheet1)

Rounding

To round values in the selected cells, choose **Rounding** from the 'Operation' list. Then specify the number of decimal places.

For example, to round values to two decimal places, use an operand of 2.

Negative decimal places are allowed. If you specify a negative decimal place, rounding will occur to the left of the decimal point. For example, 15,469.87 rounded to -2 decimal places is 15,500.

Using Functions

If you choose **Function** from the Operation list, you will be able to choose from a list of 35 worksheet functions.

The functions listed are standard Excel functions that take a single numeric argument. For example, to calculate the square root of all selected cells, choose the SQRT function from the list.

Using Custom Expressions

If you choose **Custom** from the Operation list, you will be able to enter an expression to be applied to each cell in the selection. This option provides more flexibility, and enables you to perform calculations not possible using simple operands and functions.

When you enter your expression, use a question mark (?) to represent the cell. The expression can contain values, single-cell address, single-cell range names, operators (such as +, -, * and /), parentheses, and Excel worksheet functions.

For example, to divide the number 12 by each cell in the selected range, enter the following expression:

12/?

The expression below uses Excel's ROUNDUP function to round each cell (up) to two decimal places:

ROUNDUP(?,2)

Math Without Formulas Tips

- If the results of the operation are not what you expected, choose **Undo** or press Ctrl+Z.
- This utility is also useful for converting "non-number" values to actual values. The phenomenon of non-number values is common when importing data from another source. For some reason, Excel might consider the imported values to be text, not numbers. To convert these values to actual numbers, use the **Multiply** operation, and specify 1 as the operand. This will effectively force Excel to treat the contents of these cells as numeric values.
- In some case, performing a mathematical operation may result in an error. An error may occur when working with very large numbers, or using a function with an inappropriate argument. If an error occurs, the cell may display #VALUE or some other error message.
- Some of the functionality of Math Without Formulas is available through Excel's **Paste Special** dialog box (with the Add, Subtract, Multiply, or Divide option), but Math Without Formulas is much more versatile and easier to use.

Delete Hyperlinks

The Delete Hyperlinks utility converts hyperlinks in cells to plain text. With this utility you can delete the hyperlinks in:

- An entire workbook
- The active worksheet
- A specified range of cells

Using Delete Hyperlinks

Before using Delete Hyperlinks, select the range or worksheet that you want to operate on.

1. Choose **Delete Hyperlinks** from the **PUP v7 - Cells and Ranges - Modify Cells and Ranges** menu.
2. Specify the scope: Entire workbook, Active worksheet, or the specified Range.
3. Click **OK** to delete the specified hyperlinks.

Delete Hyperlinks Tips

- If the results aren't what you expected, choose **Undo** (or press Ctrl+Z) immediately. This will restore the deleted hyperlinks.
- To prevent Excel from creating automatic hyperlinks, display the Excel Options dialog box. Click the **Proofing** tab, and then click the **AutoCorrect Options** button. Then select the **AutoFormat As You Type** tab, and clear the checkmark from **Internet and network paths with hyperlinks**.
- You can also prevent Excel from creating a hyperlink by preceding your cell entry with an apostrophe.
- If Excel creates an unwanted hyperlink, press Ctrl+Z and the hyperlink will be removed.

Range Randomize Utilities

The Range Randomize Utilities has the following features:

- Rearrange a range of cells in random order.
- Randomly select one or more cells from a range (you choose the number of cells to select).
- Insert a sequence of integers into a range, in random order. You choose the beginning value and the increment.

Using Range Randomize Utilities

Before using the Range Randomize utilities, select the range of cells that you want to work with. Or, you can select the range when the Range Randomize Utilities dialog box is displayed.

Rearranging cells

1. Choose **Range Randomize Utilities** from the **PUP v7 - Cells and Ranges - Formula Tools** menu.
2. Select the **Rearrange the selected cells in random order** option.
3. Click **OK**.

Note: This option will not work if any of the selected cells contain a formula.

Selecting cells at random

1. Choose **Range Randomize Utilities** from the **PUP v7 - Cells and Ranges - Formula Tools** menu.

2. Choose the **Select cell(s) at random** option.
3. Specify the **No. of cells to select** value.
4. Click **OK**.

Inserting a sequence of integers in random order

1. Choose **Range Randomize Utilities** from the **PUP v7 - Cells and Ranges - Formula Tools** menu.
2. Select the **Insert a sequence of integers in random order** option.
3. Specify a **Beginning with** value and an **Increment value**.
4. Click **OK**.

Range Randomize Utilities Tips

- If the results of this utility are not what you expected, choose **Undo** (or press Ctrl+Z)
- This utility is useful for randomizing the rows in a list:
 1. Select the cells in a blank column to the left or right of your list.
 2. Insert a sequence of integers (use the **Insert a sequence of integers in random order** option).
 3. Sort the database using this new column as the sort key.

Swap Ranges

The Swap Ranges utility makes it easy to swap the contents of two cells or two ranges. If swapping ranges, the ranges must be of identical size (i.e., the same number of rows and columns).

Using Swap Ranges

Start by selecting one of the ranges to swap. Or, you can make a multiple selection and select both ranges.

1. Select **Swap Ranges** from the **PUP v7 - Cells and Ranges - Modify Cells and Ranges** menu.
2. Verify that the two range selection boxes contain the addresses of the ranges you want to swap. Note that labels indicate the number of rows and columns for each range selection box (the number of rows and columns for the two ranges must be identical).
3. Click **OK** to swap the two ranges.

Swap Ranges Tips

- If the results of this operation are not what you expected, choose **Undo** (or press Ctrl+Z).
- The formatting is also swapped.
- Formulas in the two ranges remain intact, and continue to refer to the original cells.
- The cells or ranges can reside on the same sheet, on different sheets, or in different workbooks. Swapping entire rows or columns is also supported. The only restriction is that the two ranges may not have any cells in common.
- If you make a two-area multiple selection before invoking the Swap Ranges utility, both of the range address will appear in the Swap Ranges dialog box. To make a multiple selection:
 1. Select the first range.
 2. Press and hold down the Ctrl key.
 3. Select the second range.

Transform Vertical Range

The Transform Vertical Range utility converts a single-column range into a multiple column range. For example, you may have a single column of data in the form of mailing labels, and each label consists of five rows of information. This utility can convert the single-column of data into a five-column database table.

Using Transform Vertical Range

Before using Transform Vertical range, select the data to be transformed. It must be in a single column.

1. Choose **Transform Vertical Range** from the **PUP v7 - Cells and Ranges - Modify Cells and Ranges** menu.
2. Verify that the **Data to be transformed** range box contains the address of the input data (or, change it if necessary).
3. In the **Output range** field, specify a cell for the upper left cell of the transformed data. This cell can be on the same worksheet, in a different worksheet, or in a different workbook.
4. If the records in the input column are delimited by a blank cell, choose **Blank cell delimits records**. If the records are not delimited by a blank cell, use the spinner to specify the number of rows per record as displayed in the **rows per record** option..
5. Click **OK**.

Transform Vertical Range Tips

- If the results of this utility are not what you expected, choose **Undo** (or press Ctrl+Z).
- The original column of data remains intact.
- The **Data to be transformed** range and the **Output range** need not be in the same worksheet or in the same workbook.
- The minimum number of rows per record is 2, and the maximum is 256.

Combine Columns or Rows

The Combine Columns or Rows utility combines data in multiple columns (or multiple rows) into a single cell.

For example, you can combine the data in columns A-F, and put it all into column A. You decide what to do with the data that has been combined: Keep it, delete it, or create merged cells. As an option, you can specify one or more characters to insert between the combined data (for example, a space).

Using Combine Columns or Rows

Start by selecting the data that you want to combine. If you're combining columns, the selection should be at least two columns wide. If you're combining rows, the selection should be at least two rows high. This utility does not work with a multiple selection.

1. Select **Combine Columns or Rows** from the **PUP v7 - Cells and Ranges - Modify Cells and Ranges** menu.
2. Verify that the correct range is selected. If not, you can change it while the Combine Columns or Rows dialog box is displayed.
3. Specify an option: **Combine columns** or **Combine rows**.
4. Specify an option for the **With the data in...** section.
5. Specify an option for the **Data separator** section. If you choose **Insert this text**, you can enter any number of characters in the text box.
6. If you would like to use the formatted values for the cells, check **Use formatted values**.
7. Click **OK** to combine the columns or rows.

Note:

When you choose the **Combine columns** or **Combine rows** option, the dialog box displays a graphic that illustrates the type of combining that will take place. This graphic does not reflect your actual data, and it does not reflect the options you've selected.

Combine Columns or Rows Tips

- If the results of this operation are not what you expected, choose **Undo** (or press Ctrl+Z).
- When you choose **Merge the combined cells**, the cells in each row (if you chose the **Combine columns** option) or the cells in each column (if you chose the **Combine rows** option) are merged together into a single cell.

Superscript / Subscript Formatting

The Superscript / Subscript Formatting utility simplifies the task of applying superscript or subscript formatting to individual characters in a cell. The utility works with the active cell, which must contain a text string (not a value or a formula).

In addition to superscript and subscript formatting, this utility can apply the following changes to individual characters in a cell:

- Toggle the case of alpha characters
- Toggle font Bold attribute
- Toggle font Italic attribute
- Change the font size

Using Superscript / Subscript Formatting

Before using Superscript / Subscript Formatting, select the cell that you want to format. The cell must not contain a formula or a value.

1. Choose **Superscript / Subscript Formatting** from the **PUP v7 -Cells and Ranges - Formatting** menu.
2. The Superscript / Subscript Formatting dialog box displays the contents of the cell. Use the arrow buttons to select a character. The selected character has a red border around it.
3. Use the other controls to change the formatting of the selected character. You can specify the selected character's vertical position (**Superscript**, **Normal**, or **Subscript**), toggle the case of using the **Upper case** checkbox (for alpha characters only), toggle the **Bold** and **Italic** font attribute, and change the font's **Size**.
4. Repeat Steps 2-3 to change the formatting of other characters.
5. If **In-cell preview** is checked, the cell will display the formatting changes as you make them.
6. Click **OK** to apply the formatting to the selected cell.

Superscript / Subscript Formatting Tips

- If the results of this utility are not what you expected, choose **Undo** (or press Ctrl+Z).
- If the active cell contains a value, you will be asked if you want to convert the value to text. If you reply **Yes**, a single apostrophe will be inserted as a prefix and the cell will no longer function as a numeric value.

Alternate Row Shading

The Alternate Row Shading utility applies cell shading to every nth row in the selection, similar to the effect of printing on computer forms. This type of shading may make it easier to read printed output.

The formatting can be done using either of two techniques:

- **Conditional Formatting:** This option uses Excel's Conditional Formatting feature. The advantage is that the shading is dynamic. If you insert new rows within the shaded range, the alternate row shading will be applied automatically.
- **Standard Formatting:** This option use standard formatting. If you insert new rows within the shaded range, you will need to re-apply the alternate row shading.

Using Alternate Row Shading

Before using the Alternate Row Shading utility, select the range of cells to which you want to apply the formatting.

1. Choose **Alternate Row Shading** from the **PUP v7 - Cells and Range - Format** menu.
2. In the Operation tab of the Alternate Row Shading dialog box, verify that the **Range** box displays the range to be formatted. Or, change it if desired.
3. Select the option that represents the operation to be performed.
4. Click the Options tab, and select the desired color for the shading. The color choices represent the colors in the active workbook's document theme.
5. Specify a value for the **Shade every** setting.
6. To keep existing background colors for non-shaded rows, select the **Leave existing color for non-shaded row** option. If this box is unchecked, non-shaded rows will have the standard white background.
7. Click **OK**.

Removing alternate row shading

To remove alternate row shading:

1. Select the range that contains alternate row shading.
2. Choose **Alternate Row Shading** from the **PUP v7 - Cells and Ranges - Format** menu.
3. In the Operation tab of the Alternate Row Shading dialog box, verify that the **Range** box displays the correct range. Or, change it if desired.
4. Choose the **Remove existing alternate row shading option**.
5. If the range contains any conditional formatting, you will be asked if you want to remove only the conditional formatting, or the conditional formatting and other standard background shading.
6. Click **OK**.

Notes:

- If you choose the **Conditional formatting** option, the range may not contain any other conditional formatting. If any cells in the selected range contain conditional formatting, you will be asked if you want to delete the conditional formatting.
- If you select the **Remove existing alternate row shading option**, the Options tab is not available.

Alternate Row Shading Tips

- If the results aren't what you expected, choose **Undo** (or press Ctrl+Z) immediately. This will restore the previous formatting of the selected cells.
- Using Excel 2007's table feature is an alternate way to apply alternate row shading. This alternate row shading style in a table is completely independent of the method used by PUP.
- Generally, the **Conditional formatting** option is a better choice because the alternate row shading will be applied automatically if you insert new rows into the range. If the range already has some type of conditional formatting applied, you should choose the **Standard formatting** option -- otherwise, your conditional formatting criteria will

be deleted. You can, however, add additional conditional formatting criteria after you've applied alternate row shading.

- The **Conditional formatting** option cannot be used if the workbook is shared.
- When you choose the **Remove existing alternate row shading** option, the following operations occur:
 1. If the range does not contain any conditional formatting, all background shading from the selected range will be removed. This includes background shading that was not applied by the Alternate Row Shading utility.
 2. If the range contains conditional formatting, you will be asked if you want to remove the conditional formatting only, or the conditional formatting and any other standard background shading. In either case, only the conditional formatting applied by the Alternate Row Shading utility will be deleted. Other conditional formatting information that is contained in the range will remain intact.

3D Cell Shading

The 3D Cell Shading utility adds a three-dimensional "button-like" look to a cell or range of cells. You can choose from a raised look or a depressed look, and you can also select the line thickness.

Using 3D Cell Shading

1. Before using the 3-D Cell Shading utility, select the range of cells to which you want to apply the formatting. This can consist of a single range or a multiple selection.
2. Choose **3D Cell Shading** from the **PUP v7 - Cells and Ranges - Format** menu.
3. Select the desired type of shading using the Shading type and Lines options (a preview appears in the center of the dialog box).
4. To erase any existing border in the selection, select **Erase existing borders**.
5. To keep the existing background color, select **don't apply gray shading**. If this option is not selected, the cells will be formatted with a gray background color.
6. Choose **OK**.

The selected cells are formatted with borders of the specified type.

3D Cell Shading Tips

- If the results aren't what you expected, choose **Undo** (or press Ctrl+Z) immediately. This will restore the previous formatting of the selected cells.
- 3D Cell Shading also works with multiple selections. For example, you can select a noncontiguous group of cells, and the formatting will be applied to each group separately.
- Usually, applying the same color shading to all of the surrounding cells will maximize the 3D effect.
- You can change the interior color of the cells after the special formatting has been applied. The 3D effect will remain, but the background will be a different color.

Unit Conversion

The Unit Conversion utility makes it easy to convert values between common measurement units without using formulas or functions. You can enter a value directly, or you can quickly convert a range of cells from one unit to another. For example, you might have a range of cells that contain values millimeters. You can use the Unit Conversion utility to convert these values to inches.

When working with a range of data, the converted values can:

- Replace the existing values

- Be inserted into a new range as values
- Be inserted into a new range as formulas which refer to cells in the original range

The Unit Conversion utility supports the following measurement units:

Angle	Bits & Bytes	Distance	Energy	Force	Liquid	Mass	Surface	Temperature	Time	Volume
Degree	Bit	Foot	BTU	Dyne	Cup	Caret	Acre	Celsius	Day	Cubic Foot
Grad	Kilobit	Inch	Calorie (IT)	Newton	Gallon	Grain	Hectare	Fahrenheit	Hour	Cubic Inch
Minute	Megabit	Meter	Calorie (Th'mic)	Pound force	Gallon (Imp)	Gram	Sq Foot	Kelvin	Leap Year	Cubic Meter
Radian	Gigabit	Nautical mile	Electron volt		Liter	Ounce (Avdp)	Sq Inch		Minute	Cubic Yard
Revolution	Terabit	Statute mile	Erg		Ounce (Imp)	Ounce (Troy)	Sq Meter		Second	
Second	Petabit	Yard	Foot-pound		Ounce (Imp)	Pound (Avdp)	Sq Mile		Year	
	Exabit		H'powr-hr		Pint	Pound (Troy)	Sq Yard			
	BYTE		Joule		Pint (Imp)	Stone				
	KILOBYTE		Watt-hour		Quart	Ton				
	MEGABYTE				Quart (Imp)					
	GIGABYTE				Tablespoon					
	TERABYTE				Teaspoon					
	PETABYTE									
	EXABYTE									

Notes:

- Metric units can be scaled by specifying a prefix. For example decimeter, millimeter, kilometer, etc.
- In some cases, minor rounding errors will be apparent

Using Unit Conversion

The Unit Conversion utility can be used in either of two modes:

- Convert a single value
- Convert a range of cells. You can either overwrite the original data, or specify a range for the converted values.

Converting a single value

1. Choose **Unit Conversion** from the **PUP v7 - Cells and Ranges - Convert** menu.
2. In the Unit Conversion dialog box, select the **Convert a Single Value** tab.
3. Use the **Units category** drop-down to select the unit category.
4. Use the **From** list box to select the measurement unit that you are converting from.
5. Use the **To** list box to select the measurement unit that you are converting to.
6. If either of the units selected in Step 4 or Step 5 are metric units, you can specify a **Metric prefix** by using the drop-down lists below the **From** and **To** list boxes.
7. Enter the value to be converted in **Input** box on the left side of the dialog box.

The converted value will appear in the **Converted value** box. The information is updated automatically, whenever you change the value, or make a change in any of the other drop-down lists or list boxes.

Click **Cancel** to close the dialog box.

Converting a range of values

Before using the Unit Conversion utility, select the range of cells that contains the value to be converted.

1. Choose **Unit Conversion** from the **PUP v7 - Cells and Ranges - Convert** menu.
2. In the Unit Conversion dialog box, select the **Convert a Range** tab.
3. Verify that the **Source range** is correct, and change it if necessary.
4. If you select **Overwrite source data**, the data in **Source range** will be replaced by the converted data.
5. To put the results into a different range, uncheck **Overwrite source data** and specify the **Results range** (a single cell is sufficient).
6. If you would like the result in the form of formulas, select **Create conversion formulas**. This option is not available when the **Overwrite source data** option is specified.
7. Select the **Unit category**.
8. Select the **From** unit, and the **To** unit. If working with metric units, you can also choose a **Metric prefix**. The conversion factor for the two units will be displayed on the lower left of the dialog box.
9. Click **OK**.

Unit Conversion Tips

- If the results of this operation are not what you expected, choose **Undo** (or press Ctrl+Z).
- In some cases, Excel CONVERT function is a better alternative to using this utility.
- The **Results range** can be on the same worksheet, a different worksheet, or in a different workbook.
- If the measurement unit is a metric unit (Meter, Gram, or Liter), you can select a metric prefix for the **From** or **To** units. For example to convert miles to kilometers, choose Miles as the From unit, then chose Meter as the **To** unit and select Kilo as the **Metric prefix**.
- The Bits & Bytes category does not use the Metric prefix boxes (e.g., a kilobyte is 1,024 bytes, not 1,000 bytes).
- To convert between world currencies, see [Currency Conversion](#).

Currency Conversion

The Currency Conversion utility makes it easy to convert between dozens of world currencies, using current exchange rates downloaded from the Internet. You can convert a single value directly, or you can quickly convert a range of cells from one currency to another. For example, you might have a range of cells that contain values in U.S. Dollar. You can use the Currency Conversion utility to convert these values to the EURO currency and display the results in another range.

Notes:

- The first time you use this utility, you will be prompted to create a workbook file that will hold the currency exchange ranges. Your system must be connected to the Internet in order to retrieve the current currency exchange rates and create this file.
- The exchange rate data is obtained from the [Currency Source](#) web site. Their disclaimer:

The values on this site are gathered from the International Monetary Fund and/or the Federal Reserve Bank of New York (according to their availability). Values and dates are believed to be reliable but this site makes no warranties regarding these values, fitness for a particular purpose, accuracy or availability.

Using Currency Conversion

The Currency Conversion utility can be used in either of two modes:

- Convert a single amount
- Convert a range of cells. You can either overwrite the original data, or specify a range for the converted values.

Converting a single value

1. Choose **Currency Conversion** from the **PUP v7 - Cells and Ranges - Convert** menu.
2. In the Currency Conversion dialog box, Select the **Convert a Single Value** tab.
3. Use the **Convert from** list box to select the currency that you are converting from.
4. Use the **To** list box to select the currency that you are converting to.
5. Enter the value in the upper text box on the left side of the dialog box. This box will be labeled with the currency that's selected in the **Convert from** list box.

The converted value will appear in the lower text box, which is labeled with the currency that's selected in the **To** list box. The information is updated automatically, whenever you change the value, or make a currency change in either of the list boxes.

Converting a range of values

Before using the Currency Conversion utility, select the range of cells that contains the value to be converted.

1. Choose **Currency Conversion** from the **PUP v7 - Cells and Ranges - Convert** menu.
2. In the Currency Conversion dialog box, Select the **Convert a Range** tab.
3. Verify that the **Source range** is correct, and change it if necessary.
4. If you select **Overwrite source data**, the data in **Source range** will be replaced by the converted data.
5. To put the results into a different range, uncheck **Overwrite source data** and specify the **Results range** (a single cell is sufficient).
6. If you would like the result in the form of formulas, select **Create formulas**. This option is not available when the **Overwrite source data** option is specified.
7. Use the **Convert from** list box to select the currency that you are converting from.
8. Use the **To** list box to select the currency that you are converting to.
9. Click **OK**.

Updating the exchange rates

The Currency Conversion dialog box displays the date and time that the currency data was last updated. To update the exchange rate data:

1. Click **Get latest rates**.
2. Another confirmation dialog box will appear. If your system is connected to the Internet, click the **Refresh** button.

The new data will be retrieved.

Notes:

- If you've created formulas for a range of values, these formulas will not be updated automatically.
- If your system is always connected to the Internet, you can choose the **My PC is always connected to the Internet** option in Step #2. If this option is in effect, the confirmation dialog box will no longer appear.

Currency Conversion Tips

- If you're converting a range of data and the results of this operation are not what you expected, choose **Undo** (or press Ctrl+Z).
- The **Results range** can be on the same worksheet, a different worksheet, or in a different workbook.
- When you start a new Excel session, there will be a slight delay the first time you use the Currency Conversion utility as the data is read from the local workbook file that stores the exchange rate data.
- The exchange rates are not updated automatically. Unless you specifically request updated rates, the rates used are those stored in the local **currency rates.xlsx** workbook. The date and time of this data is displayed in the Currency Conversion dialog box.
- If you retrieve new currency exchange rates, be aware that these rates may be delayed. In general, consider these rates to be approximate rather than exact.
- For other types of conversions, see [Unit Conversion](#).

How it works

The Currency Conversion utility makes use of a workbook named **currency rates.xlsx**, which is located in your \pup7 directory. This workbook contains a Web Query that retrieves the exchange rate information from the [Currency Source](#) web site. The Currency Conversion utility always uses the data stored in the **currency rates.xlsx** file. When you update the exchange rate data, that workbook is opened, the query is refreshed, and the file is saved with the new data.

If you're curious, you can open the **currency rates.xlsx** workbook and examine the rate information, but you should not make any changes to it. Doing so may cause the Currency Conversion utility to return incorrect information or even crash your system.

Select by Value

The Select by Value utility selects cells (or entire rows) based on criteria you specify. After the cells or rows are selected, you can work with them as a group. For example, you can apply formatting to the cells, or delete the selected rows.

The types of comparison criteria are:

Comparison	What it selects
Empty	Empty cells
Between	Cells that contain a value that is between two specified values
Not Between	Cells that contain a value that is not between two specified values
Equal to	Cells that contain a value equal to a specified value
Not equal to	Cells that contain a value not equal to a specified value
Greater than	Cells that contain a value greater than a specified value
Less than	Cells that contain a value less than a specified value
Greater than or equal to	Cells that contain a value greater than or equal to a specified value
Less than or equal to	Cells that contain a value less than or equal to a specified value
Logical TRUE	Cells that contain TRUE
Logical FALSE	Cells that contain FALSE
Similar to pattern	Cells that match a specified pattern, designated using wildcard characters
Not similar to pattern	Cells that do not match a specified pattern, designated using wildcard characters

Using Select by Value

Before using the Select Value utility, select the range that you want to operate on. If you select a single cell:

- The entire used area of the worksheet will be examined if you choose the **Select Cells** option
- The entire column of the cell will be examined if you choose the **Select Rows based on a single column** option

After selecting the range:

1. Choose **Select by Value** from the **PUP v7 - Cells and Ranges - Select** menu.
2. Make your choice from the **Selection type** options
3. Ensure that the correct range is specified. You can change the range while the Select by Value dialog box is displayed.
4. Specify your criteria type in the **Comparison** dropdown.
5. Enter the value or values that describe your criteria
6. Click **OK** to select the matching cells or rows.

Pattern Matching

If you choose the **Similar to pattern** option, you can make use of wildcard characters. The following table shows the characters allowed, and what they match.

Character	Matches
?	Any single character.
*	Zero or more characters.
#	Any single digit (0–9).

Examples of pattern matching:

- To select all cells or rows in which the cell contains text that begins with the letter J, choose the **Similar to pattern** option, and enter J* in the **This pattern** box.
- To select all cells or rows in which the cell contains values that end in 4, choose **Similar to pattern** and enter *4 in the **This pattern** box.
- To select all cells or rows in which the cell contains the letter Z, choose **Similar to pattern** and enter *Z* in the **This pattern** box.

Select by Value Tips

- Selections made using the **Similar to pattern** option are not case-sensitive. Therefore, using *A* in the **This pattern** box selects the same cells as using *a*.

Select Cells by Format

The Select Cells by Format utility selects a group of cells based on their formatting. In most cases, the result is a noncontiguous selection of cells.

A common use for Select Cells by Format is to identify other cells that are formatted like a particular cell. Once the cells are selected, you can work with them as a group. For example, you can apply different formatting to the selected cells.

Using Select Cells by Format

1. Before using the Select Cells by Format utility, select the range that you want to work with. If you want to work with all cells on the worksheet, select a single cell that contains formatting attributes that you want to search for. This is considered the "base cell."
2. Choose **Select Cells by Format** from the **PUP v7 - Cells and Ranges - Select** menu.
3. If necessary, change the **Range** or the **Base Cell** settings.
4. The checkboxes in the Select Cells by Format dialog box show formatting attributes for the base cell. If you change the base cell (using the **Base Cell** range selector), the checkboxes display information for the new base cell.
5. Place a checkmark next to each formatting attribute that you want to match. In order to be selected, cells must meet all of the formatting criteria that are checked.
6. To avoid selecting blank cells, choose **Don't select empty cells**.
7. If you would like to see a summary of the number of cells selected, choose **Display summary**.
8. Click **OK** to select the matching cells.

Select Cells by Format Tips

- Remember: In order to be selected, a cell must match all of the formatting criteria that are checked.
- If **Don't select empty cells** is checked, blank cells will not be selected even if they match the specified formatting attributes.
- You may prefer to use Excel's built-in command to identify cells that contain a particular format (press **Ctrl+F** to display the Find and Replace dialog box).

Usage Example 1:

Your worksheet has many cells that display percentage with no decimal places. You want to change all cells that have a percentage format to display two decimal places.

1. Select any cell that has percentage formatting with no decimal places.
2. Choose **Select Cells by Format** from the **PUP v7 - Cells and Ranges - Select** menu.
3. Because only a single cell was selected, the **Range** box shows the address for the entire used area of the worksheet.
4. The **Base Cell** box shows the address of the selected cell.
5. Place a checkmark next to **Format**, and remove any other checkmarks. In other words, the utility will select all cells that match the base cell's number formatting attribute.
6. Click **OK**.
7. If **Display Summary** is selected, a message box will tell you how many cells qualify. Click **OK** to select the cells.
8. When the dialog box closes, all of the cells that contain the base cell's number format will be selected. You can then change the number format for the selected cells.

Usage Example 2:

Your worksheet has many title cells that contain the following formatting attributes: Arial font, size 14, Bold, center aligned. You would like to change the formatting of all such cells.

1. Select any cell that has the formatting described above.
2. Choose **Select Cells by Format** from the **PUP v7 - Cells and Ranges - Select** menu.
3. Because only a single cell was selected, the **Range** box shows the address of the entire used area of the worksheet.
4. The **Base Cell** box shows the address of the selected cell.

5. Place a checkmark next to the following items: **Size**, **Name**, **Bold**, and **Color Index**. Remove the checkmark from all other items. In other words, the utility will select all cells that match the base cell in these four formatting attributes.
6. Click **OK**.
7. If **Display Summary** is selected, a message box will tell you how many cells qualify. Click **OK** to select the cells
8. When the dialog box closes, you can then apply other formatting to the selected cells.

Go To Min or Max Value

This utility selects the minimum or maximum value in a selected range of cells. You can use Excel's MIN or MAX function to identify these values, but this utility helps you locate the cells that contain these values.

As an option, you can search in formula cells, value cells, or both.

Using Go To Min or Max Value

Start by selecting the range to search. To search the entire worksheet, select a single cell.

1. Choose **Go To Min or Max Value** from the **PUP v7 - Cells and Ranges - Select** menu.
2. In the Go To Min or Max Value dialog box, select **Minimum value** or **Maximum value**.
3. To select only the first matching cell, choose **First cell only**. To select all matching cells, choose **All cells**.
4. Specify the type of cells to search (formulas, values, or both) in the **Look in** box.
5. Click **OK**.

The qualifying cell(s) will be selected. If you selected **All cells** and more than one cell is found, you'll see a message that tells you how many cells were found.

Go To Min or Max Value Tips

- If more than one cell is found, they are all selected (that is, a multiple selection). To identify the selected cells, use the sheet's scroll bars. Look for the highlighted row and column borders to identify the selected cells.

GROUP: WORKBOOKS AND SHEETS

The Workbooks and Sheets group contains command that work with workbooks or worksheets.

Synchronize Sheets

The Synchronize Sheet utility forces all sheets in workbook to have the same range selection and upper left cell as the active sheet.

For example, if cell D32 is in the upper left corner of the active worksheet's window, the Synchronize Sheets utility will loop through all other worksheets in the workbook, and place cell D32 in the upper left corner. In addition, each sheet will have the same active cell (or range selection) as in the original worksheet.

Using Synchronize Sheets

- Activate a worksheet and select a cell or range.
- Choose **Synchronize Sheets** from the **PUP v7 - Workbooks and Sheets - Workbook Tools** menu.
- A dialog box will appear that tells you the how many worksheets were synchronized.

Synchronize Sheets Tips

- This operation cannot be undone.
- If you're using the [Enhanced Shortcut Menus](#) option, the **Synchronize Sheets** command also appears on the shortcut menu that appears when you right-click a cell or a sheet tab.

Interactive Hide / Unhide

The Interactive Hide / Unhide utility provides a variety of tools that make it easy to hide workbook windows and sheets. The utility has following features:

Workbook Operations

- Change the hidden status of any open workbook
- Save workbooks
- Rename workbooks
- Close workbooks
- Activate a workbook

Sheet Operations

- Change the hidden status of any sheet in any open workbooks
- Delete sheets
- Rename sheets
- Activate a sheet

Using Interactive Hide / Unhide

1. Select **Interactive Hide / Unhide** from the **PUP v7 - Workbooks and Sheets - Worksheet Tools** menu.
2. Use the controls in the dialog box to work with various items (see below).
3. Click **Close** to close the dialog box

4. Click **Activate** to activate the selected workbook (and, optionally, the selected worksheet)

Hiding and unhiding workbooks

- Use **Hide** or **Unhide** to change the hidden status of the selected workbook.
- Use **Hide all** to hide all workbooks.
- Use **Hide all but** to hide all workbooks except the selected workbook.

Closing workbooks

- Use Close File to close the selected workbook.

Saving workbooks

- Use **Save** to save the selected workbook.
- Use **Save As** to save the selected workbook with a different filename.

Hiding and unhiding sheets

- Click **Sheets>>** to expand the dialog box and display a list of sheets for the selected workbook.
- Use **Hide** or **Unhide** to change the hidden status of the selected sheet.
- Use **Unhide all** to unhide all sheets in the selected workbook.
- Use **Hide all but** to hide all sheets except the selected sheet.

Deleting and renaming sheets

- Use **Delete** to delete the selected sheet.
- Use **Rename** to change the name of the selected sheet.

Note: These operations cannot be undone.

Activating a workbook or sheet

- Use **Activate** to activate the selected workbook.
- If the dialog box is expanded to show sheets, **Activate** will also activate the selected sheet.

Interactive Hide / Unhide Tips

- Double-click a workbook name to change its hidden status.
- Double-click a sheet name to change its hidden status.
- You cannot hide all sheets in a workbook. You can, however, hide an entire workbook.

Cell Lock / Sheet Protect Utilities

The Cell Lock / Sheet Protect Utilities contains a number of tools to make it easier to work with locked cells, hidden cells, and sheet protection. The utility performs the following functions:

- Lock/unlock or hide/unhide cells based on their contents (formula cells, cells that contain a value, cells that contain text, or blank cells).

- Change the protection status of one sheet or a number of sheets.

Note: The Hide property does not actually hide the cell. Rather, a hidden cell's content is not displayed in the formula bar.

Using Cell Lock / Sheet Protect Utilities

Choose **Cell Lock / Sheet Protect Utilities** from the **PUP v7 - Workbooks and Sheets - Worksheet Tools** menu.

The Cell Lock / Sheet Protect dialog box has two tabs:

- Cell Lock / Unlock: Contains commands to lock/unlock or hide/unhide cells.
- Sheet Protect / Unprotect: Contains commands to protect/unprotect worksheets.

The Select Worksheets box lets you select any number of worksheets. The operation that you perform is applied to all selected worksheets.

After performing an operation, the Cell Lock / Sheet Protect dialog box remains open so you can perform additional tasks. When you are finished, click **Close**.

Changing the Locked or Hidden status of cells

1. In the Cell Lock / Sheet Protect Utilities dialog box, click the **Cell Lock / Hide** tab.
2. In the **Select worksheets** box, select the worksheets that you want to modify. Sheet names preceded by an asterisk denote protected sheets. You must unprotect these sheets before you can change the Locked or Hidden status of cells.
3. Specify the type of cells that you want to modify by making one or more selections in the **Cell Type** section.
4. Select a **Locked Status** option. If you don't want to change the Locked status, choose **No change**.
5. Select a **Hidden Status** option. If you don't want to change the Hidden status, choose **No change**.
6. If you would like to see a message that displays the number of cells affected, choose **Show summary message**.
7. Click **Apply**.

Note: Refer to [Cell Lock / Sheet Protect Tips](#) for more information about Locked and Hidden cells.

Protecting worksheets

1. In the Cell Lock / Sheet Protect Utilities dialog box, click the **Sheet Protect / Unprotect** tab.
2. In the **Select worksheets** box, select the worksheets that you want to protect. Sheet names preceded by an asterisk denote protected sheets.
3. Select the options that denote actions that will be allowed when the worksheet is protected. If you're using Excel 2000 most of these options will not be available.
4. If you want to protect the selected sheet(s) with a password, check the **Use password** checkbox.
5. Click **Protect**.
6. If you chose **Use password**, you will be prompted for the password. You will need to type the password two times.

Unprotecting worksheets

1. In the Cell Lock / Sheet Protect Utilities dialog box, click the **Sheet Protect / Unprotect** tab.
2. In the **Select worksheets** box, select the worksheets that you want to unprotect. Sheet names preceded by an asterisk denote protected sheets.
3. Click **Unprotect**.
4. If a password is required to unprotect the sheet(s), you will be prompted to enter the password.

Cell Lock / Sheet Protect Utilities Tips

- This utility works only with worksheets. To protect or unprotect Chart sheets, activate the chart sheet and choose **Review - Protect Sheet**.
- By default, all cells are Locked and not Hidden. The status of the Hidden and Locked attributes can be viewed or changed in the Format Cells dialog box (right-click the range selection and choose **Format Cells** from the shortcut menu, and click the **Protection** tab).
- Locking or hiding cells has no effect unless the sheet is protected.
- When the sheet is protected, a locked cell cannot be changed, and the contents of a hidden cell cannot be viewed in the Formula bar.
- A typical scenario is to unlock all "input" cells, and lock all other cells before protecting a worksheet. This allows the user to enter data, but formulas and text cannot be changed.
- This utility affects only the "used area" of the worksheet. Therefore, empty cells outside of the used area are never changed.
- If you select the **Go to selected sheet**, the selected sheet will be activated so you can see its contents. If more than one sheet is selected in the **Select worksheets** list, the last (lower in the list) selected sheet in the list is activated.
- Password-protection is not a security feature. Worksheet password are easily cracked.

Insert Sequence Number

The Insert Sequence Number utility makes it easy to insert a unique (consecutive) value into a cell. This utility may be useful for preparing invoices, in which you need a new identifying number for each invoice.

Using Insert Sequence Number

1. Select the cell that will contain the sequence number.
2. Choose **Insert Sequence Number** from the **PUP v7 - Workbooks and Sheets - Workbook Tools** menu.
3. The dialog box displays a list of all sequences that you have added. Select the desired sequence from the list . When you select a sequence in the list, you will see a preview of the data that will be inserted. This preview includes the specified (optional) prefix and suffix for the sequence.
4. Click **Insert Next** to insert the sequence number into the active cell. The Insert Sequence Number dialog box remains open, so you can insert the next sequence number into a different cell.
5. Click **Close** to close the dialog box.

Sequence Data

The Insert Sequence Number dialog box displays a list of all defined sequences. For each sequence, the following information is listed:

- **Sequence:** The name of the sequence
- **Inc:** The value by which each sequence number will be incremented
- **Previous:** The sequence number that was last inserted
- **Date Used:** The date on which the last sequence number was inserted

Creating a New Sequence

When the Insert Sequence Number dialog box first appears, it will display "(none defined)". You must define a sequence before you can use it. To define a new sequence, click **New Sequence** to display the Create New Sequence dialog box. This dialog box contains five fields:

Field Name	Description
------------	-------------

Sequence name	A descriptive name to help you identify the sequence
Start number	The value for the first number in the sequence
Increment	The value by which each sequence number will be incremented
No. of digits	The number of digits to use for the number. If the number uses fewer digits, it will be preceded by leading zeros.
Prefix (optional)	Text that will appear before the sequence number
Suffix (optional)	Text that will appear after the sequence number

After you've specified the fields for your sequence, click **OK** to return to the Insert Sequence Number dialog box.

Insert Sequence Number Tips

- If you change your mind after inserting a sequence number, select **Undo** (or press Ctrl+Z). This will restore the previous contents of the active cell, and will not affect the next sequence number.
- You can create as many sequence definitions as you need.
- In most cases, you will use 1 as the Increment value. You can, however, specify any number you like (including a negative number).
- If you've defined a sequence that you no longer use, select it in the Insert Sequence Number dialog box, and click **Delete**.
- If you need to change the parameters for a sequence, delete the existing sequence and create a new sequence with the same name. You'll probably want to use the current sequence number as the **Start number** for the new sequence.
- The data used by this utility is stored in the Windows Registry.
- When creating a sequence, specify 0 as the **No. of digits** if you don't want any leading zeros. Note that the full sequence number will always be displayed, even if it exceeds the **No. of digits** setting.
- Use the **Prefix** and **Suffix** fields to add text information to your sequence numbers. For example, you can create a sequence that appears as:

INVOICE:0098-2008

In this example, the sequence number is 98. The **No. of digits** is 4. The **Prefix** is defined as "INVOICE: " and the **Suffix** is defined as "-2008". The next number in this sequence would appear as

INVOICE:0099-2008

Toggle Settings

The Toggle Settings utility makes it easy to adjust a variety of worksheet and application settings interactively. You can change any of the following settings, and see the effect immediately:

Sheet Settings	Other Settings	Comments and Objects
Cell grid lines	Sheet tabs	Comment display
Vertical scrollbar	Status bar	Object display
Horizontal scrollbar	Formula bar	
Row and column headers	Full Screen mode	
Page Breaks	Windows in taskbar	
Formula View	Selection Pane	
Display Zeros		

Using Toggle Settings

1. Choose **Toggle Settings** from the **PUP v7 - Workbooks and Sheets - Worksheet Tools** menu.
2. In the Toggle Settings dialog box, adjust the settings as desired. You will see the result immediately.
3. Choose **Close** to close the dialog box.

Toggle Settings Tips

- The Selection Pane toggles the display of a task pane that lets you select and hide objects on a worksheet.
- Click **Apply to all sheets** to apply the selected worksheet settings to all worksheets in the active workbook. These settings are:
 - Grid Lines
 - Vertical Scrollbar
 - Horizontal Scrollbar
 - Row & Column Headers
 - Page Breaks
 - Formula View
 - Display Zeros
- Click **Defaults** to change the settings to Excel's default settings.

Note:

These settings can also be changed in the Excel Options dialog box.. However, changes made in the Options dialog box are not visible until you close the dialog box.

Set Scroll Area

The Set Scroll Area utility makes it easy to hide all rows and columns except those in a specific range. Hiding unused rows and columns is useful if you want to limit scrolling to a specific range of cells.

Using Set Scroll Area

Setting a scroll area

To specify a scroll area for a worksheet:

1. Select the range of cells for the scroll area.
2. Choose **Set Scroll Area** from the **PUP v7 - Workbooks and Sheets - Workbook Tools** menu.
3. Verify that the **Scroll area range** box displays the desired scroll area range. Or, change it if desired.
4. Choose **OK**.

Removing a scroll area

To remove a scroll area that was applied with this utility:

1. Choose **Set Scroll Area** from the **PUP v7 - Workbooks and Sheets - Workbook Tools** menu.
2. Choose **Yes** to unhide all rows and columns in the worksheet.

Set Scroll Area Tips

- The Set Scroll Area utility help prevent users from scrolling away from the active area of a worksheet.

- You can select entire rows or columns for the scroll area.
- A scroll area cannot consist of multiple noncontiguous ranges.
- This utility does not use VBA's ScrollArea property. Rather, it works by hiding rows and columns.
- To remove a scroll area manually (i.e., unhide the rows and columns):
 1. Click the "select all" button, located at the intersection of the row and column headers.
 2. Right-click any row number and choose Unhide to unhide all rows.
 3. Right-click any column letter and choose Unhide to unhide all columns.

Reset the Last Cell

The Reset the Last Cell utility resets the last cell in a worksheet. The last cell is defined as the cell at the intersection of the last row and last column that contains data or formatting. To activate the last cell, press Ctrl+End.

Note: If you delete information from a worksheet, Excel does not always automatically update the last cell.

Using Reset the Last Cell

- Activate a worksheet and choose **Reset the Last Cell** from the **PUP v7 - Workbooks and Sheets - Worksheet Tools** menu.
- The last cell is reset, and you see a dialog box that tells you the location of the last cell.

Reset the Last Cell Tips

- If the last cell doesn't seem to be correct, the problem could be blank cells that are formatted. Select entire rows or entire columns beyond your data area, and delete the rows or columns. Then use the Reset Last Cell utility again.

Sort Sheets

The Sort Sheets utility provides a flexible way to sort the sheets in your workbook.

Using Sort Sheets

1. Activate the workbook that contains the sheets to be sorted.
2. Select **Sort Sheets** from the **PUP v7 - Workbooks and Sheets - Workbook Tools** menu. The list box will display all sheets in the active workbook in their current order.
3. Click the **Alpha Sort** button to arrange the sheet list in alphabetical order (optional).
4. Use the **Move up** and **Move down** buttons to change the position of the selected sheet.
5. When you're satisfied with the position of the sheets in the list box, click **OK**.

Note:

The order of the sheets listed in the dialog box provides a preview of how the sheets will be sorted. The sheets are not actually sorted until you click **OK**.

Sort Sheets Tips

- Because sheet names can vary widely, the **Alpha sort** button may not always provide the type of sorting you had in mind.
- If **Reverse order** is selected, the sheet list will be sorted in reverse alphabetical order.

- Choose **Strict alphanumeric** to override the "intelligent" sheet sorting. If this option is enabled, the sorting will be strict (but may not be logical). For example, Sheet12 will appear before Sheet2.
- When the **View sheet** option is enabled, selecting a sheet in the sheet list will activate the sheet.
- Sorting sheets cannot be undone.

Save With Backup

The Save With Backup utility performs two operations with a single command:

- It saves a backup copy of your workbook to a specified directory.
- It saves your workbook to its original location.

Normally, saving a workbook to a backup location is a cumbersome procedure since Excel "remembers" the backup location as the workbook's new location. When you save your file again, it is saved to the backup location -- unless you remember to use the **Save As** command on the **File** menu to redirect the save back to its original location.

Using Save With Backup

1. Activate the workbook to be saved and backed up.
2. Select **Save With Backup** from the **PUP v7 - Workbooks and Sheets - Workbook Tools** menu.
3. Specify the location for the backup file (use **Browse** to specify a drive and directory). The location can be a removable device, a network directory, or a different directory on your hard drive.
4. If you'd like the backup file to use "bak" for the file extension, select the **Use BAK extension** checkbox. This option will not affect the file name at the original location.
5. Click **OK** to save the workbook to the backup location, and then back to its original location.

Save With Backup Tips

- If you last saved your file to a floppy disk, this utility will not let you make a backup. It's not a good practice to save files directly to a floppy disk.
- You won't be able to use this utility if you haven't yet saved your file (that is, it has a name like "Book1").

Create Workbook Contents Sheet

This utility adds a new worksheet, which serves as a table of contents for quick navigation to other sheets in the workbook. You have two choices for the style of the table of contents sheet. These are summarized below.

Style	Description	Navigate to chart sheets?	Adds macros to your workbook?
Hyperlinks	Clickable hyperlinks	No	No
Buttons and Macros	Clickable buttons	Yes	Yes

Using Create Workbook Contents Sheet

To create a workbook contents sheet:

1. Activate the workbook that will contain the table of contents sheet.
2. Select **Create Workbook Contents Sheet** from the **PUP v7 - Workbooks and Sheets - Workbook Tools** menu.
3. Choose the Style.

4. Specify a **Name for the contents sheet**. This is the name that appears in the worksheet's tab.
5. Specify the **Location in the workbook** for the contents sheet.
6. Specify the **Number of columns** for the hyperlinks or buttons. If your workbook has many worksheets, you may prefer to list the hyperlinks or buttons in two or more columns.
7. Click **OK**, and the contents sheet will be added to your workbook.

Removing a contents sheet

If you decide that you no longer need the contents sheet, you can simply delete the sheet. If the contents sheets used the **Buttons and Macros** option, the macros will also be deleted.

Cell A1 of the contents worksheet has the following range name:

W.O.R.K.B.O.O.K..C.O.N.T.E.N.T.S

This name is created in order to make it easy to return to the contents sheet (see [Tips](#)). This name is not deleted when you delete the contents sheet. If you want to delete that name, use Excel's **Formulas - Defined Names - Name Manger** command.

Create Workbook Contents Sheet Tips

- If the results of this procedure are not what you expected, select **Undo** (or press Ctrl+Z). This will delete the contents sheet. If you chose the **Create buttons and macros** style, it will also delete the macros created for the buttons.
- Hidden sheets in the workbook are not included in the contents sheet.
- If your workbook has many sheets, choosing a larger number for the **Number of columns** option will allow more hyperlinks or buttons to be visible without scrolling.
- Cell A1 of the contents sheet is named:

W.O.R.K.B.O.O.K..C.O.N.T.E.N.T.S

To quickly return to the contents sheet, press F5 and double click the

W.O.R.K.B.O.O.K..C.O.N.T.E.N.T.S item in the Go To dialog box. This name will always appear near the top of the list in the Go To dialog box.

- If you choose the **Create buttons and macros** option, VBA macro code is added to your workbook. This code resides in the code module for the Sheet object that corresponds to the contents worksheet. This code module contains a simple macro for each button. Depending on your security settings, you may not be able to use this option, or you may receive a macro warning when the workbook is opened.
- If you choose the **Create hyperlinks** option, a new named style is created. You can change the formatting of the hyperlinks by modifying the ContentsHyperlink style. To do so:
 1. Choose **Home - Styles**.
 2. In the Style Gallery, right-click the ContentsHyperlink style and choose **Modify**.
 3. Make your formatting changes in the Style dialog box, and click **OK**.

Customize New Workbook

The Customize New Workbook utility creates a new workbook with customized worksheet names. For example, you can create a workbook with 12 worksheets, each with a name that corresponds to a month (January, February, etc.). Many other options are available, and you can even create sheet names based on text in a range of cells.

Using Customize New Workbook

To create a workbook with customized sheet names:

1. Choose **Customize New Workbook** from the **PUP v7 - Workbooks and Sheets - Workbook Tools** menu.
2. Specify the option upon which to base the worksheet names (Month names, Day names, etc.)
3. The right panel of the Customize a New Workbook dialog box changes, depending on your choice in Step 2.
4. Click **OK** to create the new workbook.

Customize New Workbook Tips

- The maximum number of sheets in the new workbook is 255.
- When creating a workbook in which the sheet names correspond to months or days, you can choose to abbreviate those names (Jan instead of January, for example).
- To create sheet names that contain text and a numerical sequence, use the **A Series** option. This enables you to create sheet names such as Division-1, Division-2, etc.
- If you've created any custom lists (using Excel's **Edit Custom Lists** button, located in the Popular tab of the Excel Options dialog box), these lists appear when you choose the **Custom List** option.
- For optimal control over the sheet names, place your sheet names in a range and use the **Data in a range** option.

View Active Workbook's Folder

PUP's View Active Workbook's Folder command displays a Windows explorer window for the active workbook's directory.

Using View Active Workbook's Folder

To view the folder for the active workbook, choose **PUP v7 - Workbooks and Sheets - Workbook Tools - View Active Workbook's Folder**.

View Active Workbook's Folder Tips

- Many users find that it's easier to open Excel workbooks directly from an Explorer window. This utility is for those users.

Remove All Macros

The Remove All Macros utility will remove any or all of the following elements from the active workbook:

Item	Description
VBA Macros	All VBA macros in the workbook, including those found in VBA modules, class modules, and code modules for workbook objects (e.g., Sheet1, ThisWorkbook).
UserForms	All UserForms (i.e., custom dialog boxes created with VBA).
Excel 5/95 Dialog Sheets	Sheets that store custom dialog boxes. Unless they are hidden, these sheets are visible in the workbook window (not in the VB Editor).
Excel 4 XLM Macro Sheets	Sheets that store XLM macros. Unless they are hidden, these sheets are visible in the workbook window (not in the VB Editor).

Using Remove All Macros

1. Activate the workbook that contains the macros you want to delete.
2. Select **Remove All Macros** from the **PUP v7 -Workbooks and Sheets - Workbook Tools** menu.
3. The dialog box will display a list of macro-related items found in the active workbook. Select the item(s) to remove.
4. Click **OK**.

A message will appear that displays a summary of the results.

Remove All Macros Tips

- Your security settings may not allow the detection and removal of VBA Project components. If that's the case, you will see a message when you run the Remove All Macros utility.

To change your security setting:

1. Click the **Office Button**, and choose **Excel Options**.
 2. In the Excel Options dialog box, select the **Trust Center** tab.
 3. Click the **Trust Center Settings** button.
 4. In the Trust Center dialog box, click the **Macro Settings** tab.
 5. Add a checkmark next to **Trust access to the VBA project object model**.
 6. Click **OK** twice to return to your workbook.
- These operations cannot be undone. If there is any possibility that you may need the macros in the future, make a backup copy of your workbook before using this utility.
 - In some cases, you may receive a macro warning when you open a workbook, even though no macros exist in the workbook. Excel displays this warning if the workbook contains an empty VBA module or a code module with only blank lines. The Remove All Macros utility will remove all empty VBA modules and delete all blank lines from code modules.
 - If your workbook is in a macro-enabled format (for example *.XLSM), you can re-save it as an *.XLSX file after you remove the macro components.

Perpetual Calendar

The Perpetual Calendar utility has the following features:

- Displays a handy pop-up calendar for any month from January, 1900 through December, 2200.
- Inserts a picture of any calendar month into your worksheet.
- Creates a calendar workbook, consisting of up to 12 consecutive months (each on a separate worksheet).

Using Perpetual Calendar

1. Select **Perpetual Calendar** from the **PUP v7 - Workbooks and Sheets - Date and Time** menu.
2. In the Perpetual Calendar dialog box, use the left spinner to select the month and the right spinner to select the year. The calendar is displayed in the Calendar tab. Click **This month** to display the current month.
3. If you prefer to use Monday as the first day of the week, choose **Week starts on Monday**. If this option is not selected, weeks begin with Sunday.
4. To insert a picture of the selected month, click the Picture tab, choose a style and then click **Paste**. The picture will be pasted, and the dialog box will be closed.
5. To create a calendar workbook, click the Workbook tab, specify the **Number of months** and click **Create**. The calendar workbook will be created and the dialog box will be closed.

- To close the dialog box after viewing the Calendar tab, click **Close**.

Perpetual Calendar Tips

- If the active sheet is protected, you cannot paste a calendar picture.
- If you choose the **Color** option when pasting a calendar picture, the colors and fonts are based on the active workbook's document theme. However, the colors and fonts will not change if you apply a different theme the workbook.
- For some interesting visual effects, select the calendar picture and use the tools in the **Picture Tools - Format - Picture Styles** gallery.
- For additional visual effects, create a transparent calendar and place it on top of a shape. Then group the two objects and apply formatting.
- When creating a calendar workbook (with the Workbook tab), choose **Include previous/next month dates** if you'd like to dates from the previous and next month to fill in the blanks before the first day and after the last day.
- When a calendar workbook is created:
 - All of the unused rows and columns are hidden.
 - The row and column borders are hidden.
 - The day numbers are in text boxes, and the sheets are protected so the dates cannot be selected or modified. You can, however, enter text into the calendar.
- Also see the [Insert A Live Calendar](#) utility, which creates a calendar in a worksheet range, using formulas.
- For an easy way to insert a date from a calendar display, use the [PUP Date Picker](#).

Insert a Live Calendar

The Insert a Live Calendar utility creates a single-month calendar in a range of cells. The calendar dates are calculated using an array formula that references the date at the top of the calendar. If you change that date, the formula recalculates and displays the calendar for the new month.

Using Insert a Live Calendar

To insert a calendar into a range, start by selecting a cell in an empty area of your worksheet. The calendar uses 8 rows and 7 columns, and these cells must be empty.

1. Choose **Insert a Live Calendar** from the **PUP v7 - Workbooks and Sheets - Date and Time** menu.
2. If you would like the column widths to adjust automatically, select the **Adjust column widths** options.
3. To apply background colors to the calendar, select the **Apply colors** option.
4. Click **OK**, and the calendar is inserted.

Insert a Live Calendar Tips

- If you choose the **Apply colors** option, the colors are from the active workbook's document theme. If you apply a new theme, the colors in the calendar will change.
- The dates are calculated with a single multicell array formula.
- You can copy the entire calendar range and paste it to another location.
- To change the month displayed, change the date in the top row of the calendar (a 7-column merged cell). The formulas use only the month and the year from that date, so you can enter any date for the month into this cell.
- To force the calendar to always display the current month, enter this formula into the top cell:

=TODAY ()

PUP Date Picker

The PUP Date Picker makes it easy to insert a formatted date into a cell, by picking the date from a calendar display and choosing from a list of common date formats. Alternatively, you can insert a date (without the formatting), or apply the formatting (without changing the date).

Using PUP Date Picker

1. Select **Date Picker** from the **PUP v7 - Workbooks and Sheets - Date and Time** menu.
2. Select the cell that you want to modify.
3. Use the arrow controls at the top of the calendar display to select the desired month and year. Change the month by clicking the left arrows and change the year by clicking the right arrows.
4. Click on the date in the calendar. The selected date appears in a different color.
5. If desired, select a **Date format** from the drop-down list on the right.
6. Click one of the three colored buttons to insert the date and/or format into the active cell:
 - **D**: Inserts the date only. If the cell is already formatted as a date, the formatting will not be changed. If the cell is not formatted as a date, it will use the default date format.
 - **F**: Applies the selected format to the active cell, but does not change the date.
 - **D & F**: Inserts the date and the selected format.

Notes:

- The PUP Date Picker remains visible until you close it (by clicking **Close**), or until its corresponding utility file is closed automatically. The utility file can be closed automatically if you have specified a maximum number of utility files to keep open in the [PUP v7 Options](#) dialog box. If the PUP Date Picker disappears unexpectedly, choose **PUP v7 - Workbooks and Sheets - Date and Time - Date Picker** again.

PUP Date Picker Tips

- To reverse the effect of the most recent action, choose **Undo** (or press Ctrl+z).
- Click the **Today** button to select the current date.
- If you're using the PUP [Enhanced Shortcut Menus](#) option, right-clicking a cell will display a **PUP Date Picker** menu item, which displays the PUP Date Picker.
- Excel does not support dates prior to January 1, 1900. In addition, days of the week prior to March 1, 1900, are incorrect because of a bug in Excel.
- If the column is not wide enough to display the formatted date, the column is widened automatically.
- The PUP Date Picker remembers the screen location that it was in the last time you closed it. It also remembers the most recently used date.
- Following is a list of the available date formats, and an example of each. This table uses slash (/) as the default date separator. **Note:** The slashes will be replaced by your local date separator character.

Date Format	Example
mmm d, yyyy	Aug 2, 2008
m/d/yy	8/2/08
m/d/yyyy	8/2/2008
mm/dd/yy	08/02/08
mm/dd/yyyy	08/02/2008
mmmm dd, yyyy	August 02, 2008
dddd, mmmm d, yyyy	Saturday, August 2, 2008
ddd, mmm d, yyyy	Sat, Aug 2, 2008

mmm-dd-yy (ddd)	Aug-02-08 (Sat)
m/d	8/2
mmm d	Aug 2
d mmm, yyyy	2 Aug, 2008
d/m/yy	2/8/08
d/m/yyyy	2/8/2008
dd/mm/yy	02/08/08
dd/mm/yyyy	02/08/2008
dd mmmm yyyy	02 August 2008
dddd, d mmmm, yyyy	Saturday, 2 August, 2008
ddd, d mmm, yyyy	Sat, 2 Aug, 2008
dd-mmm-yy (ddd)	02-Aug-08 (Sat)
d/m	2/8
d mmm	2 Aug
yyyy-mm-dd	2008-08-02
yyyy.mm.dd	2008.08.02
mmm-yy	Aug-02
mmm-yyyy	Aug-2008
mm/yyyy	08/2008
m	8
mm	08
mmm	Aug
mmmm	August
d	2
ddd	Sat
dddd	Saturday
yy	02
yyyy	2008
(serial number)	39486

- Choosing the **(serial number)** formatting option removes all date formatting from the cell, and displays the date's serial number.

Reminder Alarm

The Reminder Alarm utility lets you specify a time of day, and pops up a reminder message and/or sounds an alarm at the specified time.

Using Reminder Alarm

1. Select **Reminder Alarm** from the **PUP v7 - Worksheets and Sheets - Date and Time** menu.
2. Specify the time at which you want to be reminded. You can set the alarm time in either of two ways:
 - To change the hour select **Hr** and then click the arrow buttons; to change the minutes select **Min** and then click the arrow buttons.
 - To specify an alarm time in terms of minutes from now, enter the number of minutes in the **Minutes from now** box and click **Set** to update the alarm display.
3. If desired, select **Display alarm time in the title bar**. If this option is selected, Excel's title bar will display the time that the alarm is set for.
4. Select the type of alarm from the drop-down list.
5. Choose **OK**

Reminder Alarm Tips

- If Excel is closed before the alarm goes off, the alarm will be canceled.
- If Excel is not active when the alarm goes off, it will be activated (or, its icon will flash in the Windows task bar). If you chose an audible alarm, it will sound even if Excel is not active.
- Be aware that the alarm is not 100% reliable. For example, the alarm cannot be displayed or sounded if Excel is busy (e.g., running a macro). The alarm goes off only when Excel is in any of the following modes (as indicated on the status bar): Ready, Copy, Cut, or Find.
- You can set more than one alarm. If more than one alarm is set, only the alarm set last will display in the title bar, and subsequent alarm times will not be displayed in the title bar.
- The alarm is not actually set until you click **OK** (the **Set** button simply changes the time display in the dialog box). To set multiple alarm times, you need to run the utility one time for each alarm.
- If the current time displayed when the utility is invoked is not accurate, this means that your system's clock is wrong. Use the Windows Control Panel to change your system's clock.
- If you change your system's clock when a reminder alarm is set, the alarm time will not be reliable.
- The alarm sound is stored in a file named alarm.wav (located in the \pup7 directory). If you prefer a different sound, you can substitute a different WAV file. The file, however, must be named alarm.wav.

Batch Printing Wizard

The Batch Printing Wizard prints the contents of selected files (Excel workbooks or text files) with a single command. The utility loads each file you select, prints what you want, and then closes the file.

Using Batch Printing Wizard

Select **Batch Printing Wizard** from the **PUP v7 - Workbooks and Sheets - Printing** menu. The Batch Printing Wizard displays a series of four boxes. Use Back and Next to indicate your choices, and click Finish to commence the printing.

Step 1

In this step, choose the option that describes the location of the files to be printed (all files in the same directory, or files in multiple directories).

Step 2

The choices in Step 2 are determined by your choice in Step 1.

All of the files are in the same directory...

1. Click **Browse** to specify the directory
2. Specify the **Type of files**, or enter a **File specification**. The number of matching files is indicated.

The files to be printed are in multiple directories...

1. Click **Add Files** as needed to locate the files. The file(s) will be added to the Files to print list. To select multiple files, hold down the Ctrl key as you click the file names. Hold down Shift to select a group of contiguous file names.
2. Click **Remove** to remove a selected file, or click **Remove All** to remove all files from the list.

Step 3

In this step, you specify which part(s) of the workbooks you would like to print.

Step 4

This step has some additional options, described below.

Option	Description
Quiet Mode	If selected, screen updating is turned off. The files that are opened and printed will not be visible.
Generate a summary report	If selected, a report will be generated. The report describes what was printed, and also lists any errors that occurred.
Disable Auto macros	If selected, automatic macros will not be executed in the workbooks that are opened.
Password	These options determine what happens when a file requires a password to be opened. If you specify a password, it must be the same password for each file in the list.
Links & remove references	These options determine if links and remote references are updated when each file is opened.

Batch Printing Wizard Tips

- The specified workbooks are opened, and printed using the print specifications stored in the workbooks.
- It's a good idea to request a summary report (Step 4). This will let you know if any errors occurred while printing.
- If a workbook to be printed contains automatic macros, you may want to specify the Disable Auto macros option (Step 4). For example, you may print a workbook that has a Workbook_Open macro that displays a prompt when the file is opened. Disabling automatic macros will eliminate this prompt.

Print Multiple Selection Wizard

Normally, when you print a multiple selection, Excel inserts a page break between each range in your selection. The Print Multiple Selection Wizard lets you print non-contiguous ranges without a page break between each range.

Print Multiple Selection wizard automatically creates linked picture objects on a new worksheet. These objects are essentially "snapshots" of the ranges you specify. Because they are linked to the ranges, they will reflect any changes you make to the original ranges.

Using Print Multiple Selection Wizard

1. Start by selecting the first range (or a multiple selection of ranges) that you want to print. This step is optional.
2. Select **Print Multiple Selection Wizard** from the **PUP v7 - Workbooks and Sheets - Printing** menu.
3. Use the **Next** and **Back** buttons to make your choices in the three steps (or, click **Finish** to accept the defaults).

Step 1

- To add additional range items to the list, click the **Add** button. This displays another dialog box in which you specify the range to add.
- To remove a range item from the list, select the range item and click **Remove**
- To change the order of the ranges items in the list, select a range item and click the Up or Down arrows.
- When **Activate the selected range** is selected, the selected range item is selected in the workbook.

Step 2

- The linked picture items are inserted on a new worksheet. The print settings for this new worksheet are determined by your choice in Step 2.
- If you choose **Specify new print settings**, you can click **Page Setup** to select the print settings you desire.
- If you select the **Add a blank row between ranges** option, the linked picture objects will have a space equal to one row height.

Step 3

- Your choice in Step 3 determines what will happen when you click **Finish**. The worksheet that contains the linked picture objects will be activated, printed, or printed and deleted.

Print Multiple Selection Wizard Tips

- To select multiple ranges with a mouse, press Ctrl while you select the ranges with your mouse. You can do this before you invoke the utility, or while adding a range after clicking the **Add** button.
- To select multiple ranges with the keyboard, press F8 and select a range. Then Press Shift+F8 to move to the beginning of the next range. Press F8 again to select the range. Repeat this until all ranges are selected.
- You can add ranges from any worksheet in the active workbook. To add a range from a different worksheet, click the **Add** button, click a different sheet tab, and select the range.
- The ranges are printed in the order you select them. You can change the order of the ranges in Step 1 by using the arrow buttons.
- For maximum control over the output, select **Activate the worksheet, but don't print it** in Step 3. Use Excel's print preview feature to ensure that the output appears as you want it. You can adjust the positioning of the linked pictures.
- Since the ranges are stored as linked picture objects, changes you make to the original ranges will also appear in the linked pictures.
- Excel imposes a limit on the size of linked pictures. If you select a range that exceeds this limit, you will see a message to that effect. Proceed by selecting multiple ranges instead of one large range.

Copy Page Setup

The Copy Page Setup utility makes it easy to transfer page setup settings from one sheet to other sheets in the same workbook. Page setup settings include items such as headers, footers, margins, page orientation, and so on.

Using Copy Page Setup

1. Activate the worksheet or chart sheet that contains the page setup setting that you want to copy.
2. Choose **Copy Page Setup** from the **PUP v7 - Workbooks and Sheets - Printing** menu.
3. The **To** list box lists all other non-hidden sheets in the workbook. Select the sheets that will receive the page setup settings from the active sheet. By default, all sheets are selected. You can unselect sheets by clicking them in the list. The **All** button selects all sheets in the list, and the **None** button deselects all sheets in the list.
4. If the active worksheet contains any images in the header or footer, select **Include pictures in headers/footer** if you'd like to transfer the images to the other sheets.
5. Click **OK**, and the page setup settings are copied.

Copy Page Setup Tips

- Hidden sheets are not listed in the **To** list. If you need to copy the settings to a hidden sheet, unhide the sheet before using this utility.
- Copying page setup settings can sometimes be slow, so be patient. After you click **OK**, the dialog box displays the name of each sheet as it's being processed.

Font Reference Sheet

The Font Reference Sheet utility displays a single-sheet workbook that contains a drop-down list of all of the fonts installed on your system. It also shows the first 255 characters from that font.

Using Font Reference Sheet

To create a font reference sheet:

1. Select **Font Reference Sheet** from the **PUP v7 -Workbooks and Sheets - Printing** menu.
2. A new single-sheet workbook is displayed.
3. Use the controls at the top to change the font, the size, or the bold property. In addition, you can type some sample text into cell D2.

Font Reference Sheet Tips

- In order for the drop-down lists to work, macros must be enabled.
- The file is based on an Excel template (font reference.xltn), which is stored in your \pup7 directory.
- To change the color and default font, apply a different document theme to the workbook (use **Page Layout - Themes - Themes**)
- To view the VBA macros in this template, press Alt+F11 and select the VBA project for **font reference**.

Export Range to File

The Export Range to File utility exports a range of cells to a new file. The new file can be any of the following:

File Format	Description
-------------	-------------

Excel workbook	A standard Excel workbook file, with one worksheet.
----------------	---

Text file (CSV)	A text file, with values separated by a comma. This is a common file format, used by many applications.
-----------------	---

Simple HTML	An HTML file, readable in a web browser. Options allow most, but not all, of the formatting to be preserved. The file is significantly smaller than that produced by the Complex HTML option.
-------------	---

Complex HTML	An HTML file, readable in a web browser. This is the format produced when you use Excel's Save as Web Page command. All of the formatting is preserved, and the file can be opened in Excel with no loss of information.
--------------	--

Using Export Range to File

Before using Export Range to File, select the range of cells that you want to export.

1. Choose **Export Range to File** from the **PUP v7 - Workbooks and Sheets - Import/Export** menu.

2. In the Export Range to File dialog box, verify that the **Range to export** is correct.
3. Select one of the four file formats.
4. The right section of the dialog box varies, depending on the file format you select. Specify additional options and choose **OK**.
5. A file selection dialog box appears. Specify a filename and location and click **Save**.

Export Range to File Tips

- The contents of hidden rows or columns are not exported, unless you choose the **Complex HTML** option.
- If you export the range as an Excel workbook and don't select the **Convert formulas to values** checkbox, the exported file may contain link formulas.
- If you export the range as a text file and you select the **Save values as shown onscreen** option the values may lose precision if the cells are not formatted to display all decimal places.
- If you select the **Open the file after exporting the data** option, the exported file will be opened. If you chose an HTML format, the file will be opened in your default browser.
- If you choose the **Complex HTML** option, you can specify a title for the HTML document by choosing **Use this title** and entering the title text.
- Be aware that the **Complex HTML** option will generate a much larger file than the **Simple HTML** option. However, all of the formatting is retained, and the file can be opened in Excel with no loss of information. Even the formulas remain intact. Note, however, that formulas which refer to cells outside of the exported range will be converted to values.
- When you choose the **Preserve font name, size, color** option for a Simple HTML export, the font size may not be duplicated precisely. Fonts are assigned to the HTML font size attribute based on the following table.

Font size range	HTML Font Size
< 10	HTML font size 1
10 to 12	HTML font size 2
12.1 to 14	HTML font size 3
14.1 to 24	HTML font size 4
24.1 to 32	HTML font size 5
32.1 to 47	HTML font size 6
>47	HTML font size 7

- To export an entire worksheet, use PUP's [Save Sheet as HTML](#) command.

Export Range as Graphic

The Export Range as Graphic utility exports a range of cells as a graphic image. It supports the following graphic file formats:

File Format	Description
GIF	Graphics Interchange Format
JPEG	Joint Photographic Experts Group
TIFF	Tagged Image File Format
PNG	Portable Network Graphics

Using Export Range as Graphic

1. Before using Export Range as Graphic, make sure that the range to be exported uses a color for its background. To avoid producing a poor quality graphic, unshaded cells should be colored with a white background.
2. Select the range of cells that you want to export as a graphic image. Or, you can select the range while the Export Range as Graphic dialog box is displayed.
3. Choose **Export Range as Graphic** from the **PUP v7 - Workbooks and Sheets - Import/Export** menu.
4. Select a graphics file format (GIF, JPG, TIF, or PNG).
5. Click **Specify Filename**.
6. In the Save As dialog box, specify a filename and location and click **Save**.

Export Range as Graphic Tips

- The default file name for the exported graphic file is based on the sheet name and range you selected. For example, if you export range C5:H12 on Sheet1 using the GIF format, the default file name will be sheet1!C5-H12.gif. You can change this to a different name in the Save As dialog box.
- The Export Range as Graphic utility makes it easy to create attractive textual graphic files for Web pages. You can apply any type of formatting to the range before exporting it.
- Graphic objects contained in the range to be exported will also appear in the exported graphic file. For example, you can create a Word Art graphic and export the underlying cells (the Word Art image will also be exported).
- If your worksheet uses a background picture (added with the **Page Layout - Page Setup - Background** command), the image may not be rendered correctly in the exported graphic file.
- The quality of the image varies depending on the file format and the colors used. In some cases, changing the background color may improve the quality of the image.
- The Export Range as Graphic utility uses the graphic export filters supplied with Excel (or Microsoft Office). If you are unable to export to a particular file format, re-run the Setup program for Excel (or Microsoft Office) and make sure that the export filter is installed.

Save Sheet as HTML

The Save Sheet as HTML utility exports the data on the active worksheet to an HTML file with a single table. An HTML file is readable in a Web browser. Options allow most, but not all, of the cell formatting to be preserved.

Using Save Sheet as HTML

Before using this utility, activate the worksheet you want to export.

1. Choose **Save Sheet as HTML** from the **PUP v7 - Workbooks and Sheets - Import/Export** menu.
2. Specify the formatting options.
3. Choose **OK**.
4. A file selection dialog box appears. Specify a filename and location, and click **Save**.

Save Sheet as HTML Tips

- Data in hidden rows or columns is not exported.
- If the worksheet is displaying gridlines, the HTML table will have borders. If the worksheet is not displaying gridlines, the HTML table will not have borders. Borders applied to cells or ranges is not translated.
- To export a specific range of cells (not the entire sheet), use PUP's [Export Range to File](#) command.
- If you select the **Open the file after exporting the data** option, the exported file will be opened in your default Web browser.

- Only the data in cells is saved. Charts and other objects are ignored.
- Cell formatting applied as a result of conditional formatting is not applied.
- When you choose the **Preserve font name, size, color** option, the font size may not be duplicated precisely. Fonts are assigned to the HTML font size attribute based on the following table.

Font size range	HTML Font Size
< 10 points	HTML font size 1
10 to 12	HTML font size 2
12.1 to 14	HTML font size 3
14.1 to 24	HTML font size 4
24.1 to 32	HTML font size 5
32.1 to 47	HTML font size 6
>47	HTML font size 7

Insert File at Cursor

The Insert File at Cursor utility performs the following operations:

1. Opens a specified file.
2. Inserts the contents of the file, beginning at the current cursor position (the active cell).
3. Closes the file.

These operations are all performed "behind the scenes," thereby simplifying a rather tedious operation. The file to be inserted can be an Excel workbook or a text file.

Using Insert File at Cursor

1. Activate the cell that will be the upper left cell of the data in the imported file.
2. Select **Insert File at Cursor** from the **PUP v7 - Workbooks and Sheets - Import/Export** menu.
3. Ensure that the **Beginning at this cell** reference is correct (or change it).
4. Click **Browse** to locate the file.
5. If you want to retrieve only the values (i.e, no formulas), select **Values only (no formulas)**.
6. If you want to retain the existing formatting, select **Do not transfer formatting**.
7. If the selected file contains more than one worksheet, you will be prompted for the worksheet to insert.

Insert File at Cursor Tips

- The Insert File at Cursor utility will overwrite existing data without warning. If the results aren't what you expected, choose **Undo** (or press Ctrl+Z) immediately.
- If the imported data contains formulas (and you did not select the **Values only** option), double-check the formulas to ensure that the references are correct.
- Column widths are not adjusted to accommodate the imported data. You'll need to make such adjustments manually.
- No links are created, so the imported data will not be updated if the source file changes.

Filename Lister

Many people are surprised to discover that Windows provides no direct way to print a list of filenames in a directory. The Filename Lister utility solves that problem.

The Filename Lister utility generates a list of files contained in a specified directory. The list is created in a new workbook. In addition to the filenames, the list includes the file size and the date and time of each file. As an option, you can choose to display files in all subdirectories as well.

Using Filename Lister

1. Select **Filename Lister** from the **PUP v7 - Workbooks and Sheets - Import/Exports** menu.
2. In the Filename Lister dialog box, click **Browse** to display the Browse for Folder dialog box.
3. In the Browse For Folder dialog box, select the directory that contains the files you want to list.
4. If you would like to include files in the subdirectories, choose **Include files in subdirectories**.
5. If you would like the filenames to be displayed as hyperlinks, choose **Create hyperlinks**.
6. Click **OK**.

The filename list is created in a new worksheet. If you choose the **Include files in subdirectories** option, the list contains four columns: Directory, File Name, Size, and Date/Time. If you don't choose the **Include files in subdirectories** option, the list contains three columns: File Name, Size, and Date/Time.

Filename Lister Tips

- The list can be sorted by any of the columns.
- The Size column shows the file size in bytes. To convert to Kbytes, divide the value by 1,024.

GROUP: CHARTS AND GRAPHICS

The Charts and Graphics group contains command that work with charts and other objects on a worksheet.

Export Charts

The Export Charts utility lets you quickly save any number of charts as separate graphics files. The charts that you export can be embedded on a worksheet, or stored in separate chart sheets. The utility supports the following graphic file formats:

File Format	Description
GIF	Graphics Interchange Format
JPEG	Joint Photographic Experts Group
TIFF	Tagged Image File Format
PNG	Portable Network Graphics

Note: The Export Charts utility uses the graphic export filters supplied with Excel (or Microsoft Office). All of these file formats may not be installed on your system.

Using Export Charts

1. Activate the worksheet than contains the charts to export. Or, activate a Chart sheet to export the chart stored there.
2. Select **Export Charts** from the **PUP v7 - Charts and Graphics - Charting Tools** menu.
3. If the active sheet is a worksheet, the Export Charts dialog box lists the embedded charts on the active sheet. If a Chart sheet is active, the dialog box lists all Chart sheets.
4. Select the charts that you want to export. To select multiple charts, press Ctrl while you click items in the list.
5. To identify a particular chart in the list, select the chart name and click **Scroll to**. This will scroll the worksheet such that the selected chart is displayed in the upper left corner of the window. If you're working with Chart sheets, the button will display **Go to**, and clicking it will activate the selected Chart sheet.
6. The file name for each chart is derived from the name of the Chart object (or the Chart sheet). To rename a chart or Chart sheet, select the chart name and click **Rename**. You will then be prompted for a new name for the Chart object (or Chart sheet). This option is available only when a single chart is selected in the list.
7. Select the **Export format** for the exported charts
8. If you would like a warning if the chart file already exists, select **Warn if file exists**.
9. The dialog box displays the directory name in which the files will be saved. Use **Change directory** to change this directory.
10. Click **OK** to begin exporting the files.

Export Charts Tips

- If a worksheet is active when you invoke the Export Charts utility, the dialog box displays a list of all chart objects on the active worksheet. If a chart sheet is active when you invoke the Export Charts utility, the dialog box displays a list of all chart sheets in the active workbook.
- The Export Charts utility uses the graphic export filters supplied with Excel (or Microsoft Office). If you are unable to export to a particular file format, re-run the Setup program for Excel (or Microsoft Office).
- The GIF and PNG file formats usually produce the best quality output.
- The dimensions of the exported file will match the chart dimensions.
- To help identify a particular chart, select it in the list and click **Scroll to** (or **Go to**, if a Chart sheet is active).

- When exporting a chart on a chart sheet (or on multiple chart sheets), you can adjust the size of the chart(s) by resizing the workbook window. Make sure the workbook's window isn't maximized, then adjust the window size to match the desired chart size.
- The file names are based on the Chart object names (or Chart sheet name) -- with an underscore character substituted for each space.
- Use the **Rename** button to change the name of a Chart object or a Chart sheet. This will also change the name of the exported file name. The **Rename** button is available only when a single chart in the list is selected.
- You can also change the name of an embedded Chart object manually: Select the chart and use the Chart Name box in the **Chart Tools - Layout - Properties** group.

Chart Data Labeler

The Chart Data Labeler utility makes it easy to add labels to chart data points. Importantly, the labels can be stored in any arbitrary range of cells. Although Excel lets you add data labels to a chart, it does *not* allow you to select the range for the labels. The Chart Data Labeler utility overcomes this limitation.

In addition, data labels that you add to a chart can be linked to a range, and even use the same formatting as the cells in the range.

Using Chart Data Labeler

1. Activate the chart to which you want to add data labels. The chart can be an embedded chart, or a chart sheet.
2. Select **Chart Data Labeler** from the **PUP v7 - Charts and Graphic Tools - Chart Tools** menu.
3. If the chart contains more than one data series, select the series name from the **Chart data series** list box. These series names correspond to the names in the chart's legend.
4. Use the **Label range** control to specify the range that holds the labels to be added to the chart.
5. Specify options (see below).
6. Click **OK** to add the labels to your chart.

Option	Description
Create links to the labels	If selected, the labels will be linked to the range: If you modify the text in the labels in the range, the changes will automatically be reflected in the chart's data labels. However, changing the formatting of the range will not affect the formatting of the data labels in the chart.
Copy label formatting	If selected, the data labels will use the following formatting attributes from the data label range: font, font size, font style (bold and italic), and text color. However, changing the formatting of the range will not affect the data labels in the chart.
Warn before overwriting labels	If selected, you will get a warning message if the selected data series already contains data labels.
Warn if range size does not match	If selected, you will get a warning message if the number of cells in the Label range does not match the number of data points in the selected series.
Position	Specify the position of the data labels, relative to the series marker, bar, column, or other series item. Not all positions are appropriate for every series type. If you choose an invalid position, the default position for the series type is used.

Chart Data Labeler Tips

- If the results aren't what you expected, choose **Undo** (or press Ctrl+Z) immediately. Exception: If the data labels originally contained links, the links cannot be recreated when the operation is undone.
- The **Label range** for the chart labels can be in a different worksheet or in a different workbook.
- After the data labels are added, you can change their position by using Excel's normal procedures. Select the data series labels, and then press Ctrl+1.
- To change the position of a single label, select the data series labels, click the single label, and then drag it to its desired position.
- If you select a single cell for the **Label range**, the Chart Data Labeler utility will use additional cells below the specified cell.
- If you're using the [Enhanced Shortcut Menus](#) option, you can right-click on a chart and choose **Chart Data Labeler** from the shortcut menu.

Caution:

The data labels are not linked to the specific data points. For example, if you delete a row that contains a data point for the chart, the data labels will no longer be correct. You will need to re-run the Chart Data Labeler utility to re-apply the labels.

Resize Charts

The Resize Charts utility makes it easy to precisely adjust the size of one or more embedded charts. It's particularly useful for making all charts on a sheet exactly the same size.

Using Resize Charts

Start by selecting an embedded chart. This utility does not work with a chart on a Chart sheet.

1. Choose **Resize Charts** from the **PUP v7 - Charts and Graphics** menu.
2. The Resize Charts dialog box displays the dimensions of the selected chart. You can change either or both of these dimensions.
3. To make all charts on a sheet the same size, select the **Make all charts on the active sheet this size** checkbox.
4. To ensure that the chart retains its original aspect ratio (i.e., the ratio between the width and the height), select the **Lock aspect ratio** checkbox. When this option is in effect, two **Calc** buttons are visible. Click the top **Calc** button to calculate the Width based on the Height displayed. Click the bottom **Calc** button to calculate the Height, based on the Width displayed. If you're resizing multiple charts, the aspect ratio that's maintained is based on the chart that is selected when the utility is invoked.
5. Click **Apply** to change the size of the selected chart.
6. If the size is satisfactory, click **Close** to dismiss the Resize Charts dialog box.

Resize Charts Tips

- If the results aren't what you expected, choose **Undo** (or press Ctrl+Z) immediately.

Convert Chart To Picture

The Convert Chart To Picture utility creates a static picture object from a single chart, or all charts on a worksheet. The original chart remains intact.

Using Convert Chart To Picture

Start by selecting that embedded chart that you want to convert to a picture.

1. Choose **Convert Chart to Picture** from the **PUP v7 - Chart and Graphics - Chart Tools** menu.
2. To convert all charts, choose **Convert all charts on the active worksheet**.
3. Click **OK** to convert the chart (or charts) to a picture (or pictures).

The picture is placed directly on top of the original chart, offset slightly to the right and downward. Use your mouse to drag the picture to a different location.

Convert Chart To Picture Tips

- There is no Undo for this utility. If the picture isn't what you expected, just delete it.
- This utility works only with charts that embedded on a worksheet. It does not work with Chart sheets.
- Keep in mind that a picture is essentially a "dead" chart. It is no longer associated with your data, so changing the data will not affect the appearance of the picture.
- Creating a picture from a chart is useful if you'd like to keep charted results of various what-if scenarios.
- The picture can be manipulated with the tools in the **Picture Tools - Format** tab.

Chart Report

The Chart Report utility creates a new worksheet that contains useful information about a chart or all charts. You can use this utility to create a type of "documentation" for your charts. You can choose from two report options:

- A simple report for all charts in the workbook
- A detailed report for a single chart

Using Chart Report

If you are creating a report for a single chart, start by selecting that chart. To create a report for all charts, select any chart.

1. Choose **Chart Report** from the **PUP v7 - Chart and Graphics - Chart Tools** menu.
2. Specify the report type (simple or detailed)
3. Specify the location for the report (in a new worksheet, or in a new workbook).
4. If you would like the report to include a small image of the chart, select **Include chart thumbnail**.
5. Click **OK** to generate the report.

Chart Report Tips

- The Chart Report is a "snapshot" of the current chart. If you make changes to the chart, the report is not updated to reflect those changes.
- For details on the specific information included in the report, consult the Help system for Excel.

Object Align Size and Space

The Object Align Size and Space utility works with a group of objects on a worksheet, and makes it easy to adjust their alignment, size, or spacing. It works with the following object types: shapes, pictures, clipart, SmartArt, WordArt, and embedded charts.

Using Object Align Size and Space

1. Select the graphic objects that you want to adjust. You must select at least two objects.
2. Select **Object Align Size and Space** from the **PUP v7 - Chart and Graphic - Object Tools** menu.
3. In the Object Align Size and Space dialog box, make the appropriate changes (see below).
4. Click **Close** to close the dialog box.

Aligning objects

1. In the Object Align Size and Space dialog box, click the **Align** tab.
2. Select the dominant object from the drop-down list. The dominant object is used as the basis for the alignment of the other objects.
3. Select the desired alignment option and click **Apply**.
4. If the results aren't what you expected, select **Undo** in the **Align** tab.

Sizing objects

1. In the Object Align Size and Space dialog box, click the **Size** tab.
2. Select the dominant object from the drop-down list. The dominant object is used as the basis for sizing the other objects.
3. Select the desired option from the Size options and click **Apply**.
4. If the results aren't what you expected, select **Undo** in the **Size** tab.

Or...

- Adjust the size of all objects interactively by using the spinners.

Spacing objects

1. In the Object Align Size and Space dialog box, click the **Space** tab.
2. Select the desired option from the Spacing options and click **Apply**.
3. If the results aren't what you expected, select **Undo** in the **Space** tab.

Or...

- Adjust the spacing of all objects interactively by using the spinners.

Object Align Size and Space Tips

- After you close the Object Align Size and Space dialog box, you can reverse the changes you made by choosing **Undo** (or by pressing Ctrl+Z). This will return the objects to their original sizes and positions, and override any Undo operations you may have performed in the Object Align Size and Space dialog box.
- Select multiple objects by pressing the Ctrl (or Shift) key as you click each object. Or, use the Selection pane (available in the **Format - Arrange** group when a graphic object is selected).
- When **Jiggle selected object** is selected, the dominant object will move slightly when it's selected in the list to help you identify the object.

Object Report

The Object Report utility creates a report that describes all graphic objects on a worksheet. The report is generated in a new workbook, and the report for each worksheet appears in its own sheet. The sheet names in the report correspond to the sheet names in the original workbook.

The object report consists of 10 columns, and displays the following information for each object.

Information	Description
Name	The name of the object
Z-Order	The index of the object
Left	The left position of the object
Top	The top position of the object
Width	The width of the object
Height	The height of the object
Type	The type of object
AutoShape Type	The AutoShape type, if the object's type is AutoShape
Top Left Cell	The address of cell that corresponds to the objects upper left corner
Hidden	TRUE if the object is hidden; FALSE if the object is visible

Using Object Report

To create an object report, start by selecting the workbook that contains the objects for the report.

1. Choose **Object Report** from the **PUP v7 - Charts and Graphic - Object Tools** menu.
2. In the Object Report dialog box, select the option that corresponds to the scope of the report.
3. Click **OK** to generate the report.

Object Report Tips

- The report can be sorted by any of its columns
- Keep in mind that Excel allows two or more objects to have the same name.

GROUP: AUDITING

The Auditing group contains command that can help document your work or identify potential errors.

PUP InfoBox

The PUP InfoBox provides a convenient way to get quick information about the active cell. The InfoBox updates as you move around the worksheet, and always displays information about the active cell. The PUP InfoBox displays the following information about the active cell.

Cell Information	Description
Value	The underlying value of the cell.
Displayed As	The contents of the cell as it is displayed (that is, with number formatting applied).
Cell Type	A description of the cell's contents. Either: Blank, Value, Text, Logical, Date, Time, or Error.
Number Format*	The number format code applied to the cell.
Formula	The cell's formula, if any. Use the Show formulas in R1C1 notation checkbox to change the way in which formulas are shown.
Name	The cell's name, if any. If the cell is part of a named range, that name is <u>not</u> displayed.
Style*	The cell's named style, if any. By default, cells use the "Normal" style.
Horiz. Alignment*	The cell's horizontal alignment setting.
Protection*	The protection status of the cell: Either Locked, Hidden, or Locked, Hidden.
Format Conditions*	The number of conditional formatting conditions, if any.
Data Validation*	Displays the number of data validation conditions, if any.
Cell Comment	The text of the cell's comment, if any.
Dependent Cells	The number of formulas that use the cell, either directly or indirectly. This number includes only the formulas on the same sheet.
Direct Dependents*	The number of formulas that use the cell directly. This number includes only the formulas on the same sheet.
Precedent Cells	If the cell contains a formula, the number of cells used by the formula (either directly or indirectly). This number includes only the formulas on the same sheet.
Direct Precedents*	If the cell contains a formula, the number of cells used directly by the formula. This number includes only the formulas on the same sheet.

Notes:

- Items marked with an asterisk (*) can be clicked to display a dialog box or additional information.

Using the PUP InfoBox

1. Select **PUP InfoBox** from the **PUP v7 - Auditing** menu. The PUP InfoBox dialog box will be displayed.
2. While the PUP InfoBox is displayed, you can continue to use Excel -- select cells and ranges, enter and edit data, etc. In most cases, changes you make will be reflected in the contents of the toolbar. If the information is not updated, click **Refresh** to force an update.
3. When you are finished using the PUP InfoBox, click the Close button (**X**) in the dialog box's title bar.

Notes:

- The PUP InfoBox remains visible until you close it, or until its corresponding utility file is closed automatically. The utility file can be closed automatically if you have specified a maximum number of utility files to keep open in the [PUP v7 Options](#) dialog box. If the PUP InfoBox toolbar disappears unexpectedly, just select **PUP InfoBox** from the **PUP v7 - Auditing** menu again.

PUP InfoBox Tips

- Items that are underlined can be clicked:
 - **Number Format:** Displays the Number Format tab of the Format Cells dialog box.
 - **Horiz. Alignment:** Displays the Alignment tab of the Format Cells dialog box.
 - **Protection:** Displays the protection tab of the Format Cells dialog box.
 - **Format Conditions:** Displays the Conditional Formatting Rule Manager dialog box.
 - **Data Validation:** Displays the Data Validation dialog box.
 - **Direct Dependents:** Draws tracer arrows to cells on the active sheet that use the active cell directly.
 - **Direct Precedents:** Draws tracer arrows to cells on the active sheet that are used directly by the formula in the active cell.
- The **Show formulas in R1C1 notation** option, when checked, displays formulas using a different notation. Unlike standard A1 notation, R1C1 notation makes it very easy to identify cells that contain the same formula.

Note:

There is some overhead involved in updating the PUP InfoBox to reflect the current active cell. For maximum performance, you will not want to keep this InfoBox displayed at all times.

Workbook Summary Report

The Workbook Summary Report utility produces a report with key information about the active workbook. The report is created in a new workbook. You can choose to include any or all of the following information:

- **Workbook Summary:** Summary information about the workbook.
- **Name Report:** A listing of all names defined in the workbook.
- **Worksheet Report:** Information about each worksheet in the workbook
- **VBA Module Report:** A listing of the number of VBA procedures contained in each VB Component within the workbook.

Using Workbook Summary Report

1. To create a workbook summary report, activate the workbook. Then select **Workbook Summary Report** from the **PUP v7 - Auditing - Reports** menu.
2. In the Workbook Summary Report dialog box, select the components to be included in the report.
3. Click **OK**.

The report is created in a new workbook.

Workbook Summary Report Tips

- The Workbook Summary page of the report is in outline form. Use the outline controls (on the left side of the worksheet) to expand or collapse the information.
- The Name Report page categorizes the defined names in terms of scope (workbook level or worksheet level) and visibility (hidden or visible). You can use PUP's [Name Lister](#) utility to work with names.
- The Worksheet Report page is in the form of a database table, and it can be sorted by any field.
- The VBA Module Report page lists all modules, even if they are empty. Every Excel sheet has an associated code module (named Sheet1, Sheet2, etc.), and the workbook itself has an associated code module named ThisWorkbook. These modules always exist, even if they are empty.
- When you specify the **Summarize each worksheet** option, some of the summary information will not be generated for protected worksheets. To include the missing information in the report, unprotect the sheets and generate the report again.
- Your security settings may not allow the VBA module report to be generated. If that's the case, you will see a message when you run the Workbook Summary Report utility.

To change your security setting:

1. Click the **Office Button**, and choose **Excel Options**.
2. In the Excel Options dialog box, select the **Trust Center** tab.
3. Click the **Trust Center Settings** button.
4. In the Trust Center dialog box, click the **Macro Settings** tab.
5. Add a checkmark next to **Trust access to the VBA project object model**.
6. Click **OK** twice to return to your workbook.

Date Report

The Date Report utility creates a useful report that describes all date cells in a worksheet or workbook.

Using Date Report

1. Select **Date Report** from the **PUP v7 - Auditing - Reports** menu.
2. In the Date Report dialog box, select the scope for the date report (either **Active sheet only** or **All sheets in the active workbook**).
3. Click **OK**.

The report will be created in a new worksheet.

Date Report Tips

- The date report includes all cells that contain dates. It also includes non-date cells that use any of the following date-related functions: DATE, DATEDIF, DATEVALUE, DAY, DAYS360, EDATE, EOMONTH, MONTH, NETWORKDAYS, NOW, TODAY, WEEKDAY, WORKDAY, YEAR and YEARFRAC.
- The rows of the date report can be sorted by any column.

Formula Report

The Formula Report utility creates a useful report that describes all formulas in a worksheet or workbook. The report is generated in a new workbook, and the report for each worksheet appears in its own sheet. The sheet names in the report correspond to the sheet names in the original workbook.

The formula report consists of 14 columns, and displays the following information for each formula cell.

Information	Description
Address	The cell address of the formula
Row	The row number of the formula
Column	The column number of the formula
Result	The unformatted result returned by the formula
Display	The result of the formula, as displayed in the cell (that is, with number formatting applied)
Number Format	The number format string for the cell
Formula	The formula, standard format
RC Formula	The formula, in R1C1 format
Locked	TRUE if the cell's Locked attribute is set (this has no effect unless the sheet is protected)
Hidden	TRUE if the cell's Hidden attribute is set (this has no effect unless the sheet is protected)
All Precedents	The number of cells used by the formula, either directly or indirectly (same sheet only)
Direct Precedents	The number of cells used directly by the formula (same sheet only)
All Dependents	The number of cells that refer to the formula cell, either directly or indirectly (same sheet only)
Direct Dependents	The number of cells that refer directly to the formula cell (same sheet only)
Name	The name (if any) of the cell that contains the formula

Using Formula Report

1. Select **Formula Report** from the **PUP v7- Auditing - Report** menu.
2. In the Formula Report dialog box, select the scope for the formula report (either **Active sheet only** or **All sheets in the active workbook**).
3. Click **OK**.

The report will be created in a new worksheet.

Formula Report Tips

- The rows of the formula report can be sorted by any column. For example, you can sort by the Locked column to quickly identify the formulas which are not locked.

- Each formula is listed in standard format, and in R1C1 format. R1C1 format is useful for identifying copied formulas. Sorting the report using the RC Formula column will place all copied formulas together in the list.
- Array formulas are enclosed in braces.
- The All Precedents and Direct Precedents columns contain a count of cell precedents in the same sheet only.
- The All Dependents and Direct Dependents columns contain a count of cell precedents in the same sheet only.
- The Locked and Hidden attributes have no effect unless the worksheet is protected.
- If your workbook contains many formulas, generating a formula report may take a few minutes.

Number Format Report

This utility generates a report that describes the number formats used in a worksheet.

Using Number Format Report

1. Select **Number Format Report** from the **PUP v7 - Auditing - Reports** menu.
2. In the Number Format Report dialog box, select the option that corresponds to the scope of the report.
3. Click **OK**.

The report will be generated in a new workbook.

Number Format Report Tips

- The report includes only number formats that are used. Your workbook may contain custom number formats that are not used in any cells.

Data Validation Report

This utility generates a report that describes all the cells that contain Data Validation.

Using Data Validation Report

1. Select **Data Validation Report** from the **PUP v7 - Auditing - Reports** menu.
2. In the Data Validation Report dialog box, select the option that corresponds to the scope of the report.
3. Click **OK**.

The report will be generated in a new workbook.

Data Validation Report Tips

- In the report, some cells may be empty. That's because the Data Validation options are not available for some Types. For example, the "In-cell Dropdown" option is valid only when the Data Validation Type is "List."

Conditional Formatting Report

This utility generates a report that describes the cells that contain Conditional Formatting.

Using Conditional Formatting Report

1. Select **Conditional Formatting Report** from the **PUP v7 - Auditing - Reports** menu.
2. In the Conditional Formatting dialog box, select the option that corresponds to the scope of the report.
3. Click **OK**.

The report will be generated in a new workbook.

Conditional Formatting Report Tips

- In Excel 2007, a cell can have any number of conditional formatting conditions. Each format condition is listed in a separate row in the report.
- If your workbook contains many cells with multiple conditional formatting conditions, consider using the Conditional Formatting Report as the source data for a pivot table in order to generate additional summary information.

VBA Project Summary Report

The VBA Project Summary Report utility generates a listing of all VBA procedures contained in a workbook. Optionally, the report includes a list of the controls contained in all UserForms.

Using VBA Project Summary Report

1. Select **VBA Project Summary Report** from the **PUP v7 - Auditing - Reports** menu.
2. In the VBA Project Summary Report dialog box, select the workbook that will be reported on. The list does not include: (1) VBA projects that are protected with a password, (2) VBA projects in which macros have been disabled, and (3) VBA Projects contained in workbooks that have never been saved.
3. To generate a report of all UserForm controls, place a checkmark next to **List UserForm controls**.
4. Click **OK**.

The report will be created in a new workbook.

VBA Project Summary Report Tips

- The VBA Project Summary Report lists all modules, even if they are empty.
- Every Excel sheet has an associated code module (named Sheet1, Sheet2, etc.), and the workbook itself has an associated code module named ThisWorkbook. These modules always exist, even if they are empty.
- Your security settings may not allow the detection and removal of VBA Project components. If that's the case, you will see a message when you run the VBA Project Summary Report utility.

To change your security setting:

1. Click the **Office Button**, and choose **Excel Options**.
2. In the Excel Options dialog box, select the **Trust Center** tab.
3. Click the **Trust Center Settings** button.
4. In the Trust Center dialog box, click the **Macro Settings** tab.
5. Add a checkmark next to **Trust access to the VBA project object model**.
6. Click **OK** twice to return to your workbook.

Workbook Link Finder

The Workbook Link Finder utility helps you identify all links in a workbook -- even the common "phantom links" that are difficult to track down.

You can identify any of the following types of links:

Link Type	Description
Linked files	The items that appear in Excel's Edit Links dialog box. To display this dialog box, click the Office button, and choose Prepare - Edit Links to Files. This command is not available if the active workbook contains no links.
Formula links	Formulas that refer to cells in a different workbook
Name links	Names that are defined using a different workbook
XL5/95 dialog box links	Links in the controls contained on Excel 5/95 dialog sheets
Chart links	Links contained in a chart's SERIES formula, titles, data labels, or in shapes contained in the chart
Object links	Links contained in objects or shapes on worksheets
OLE links	Links from embedded objects

This utility also has an option to create a report of all links.

Using Workbook Link Finder

1. Activate a workbook that contains links to one or more other files.
2. Select **Workbook Link Finder** from the **PUP v7 - Auditing -Utilities** menu.
3. In the Workbook Link Finder dialog box, select a **Link type**. The links of that type (if any) will display in the **Links** list box.
4. Select a link in the **Links** list box, and more information about the link will display below the list box.
5. To create a report that describes all links, click **Report**. This button closes the dialog box and creates a report in a new workbook.
6. If you don't generate a link report, click **Close** to close the Link Finder dialog box.

Notes:

- When you run Workbook Link Finder, you will be presented with a list of all linked workbooks that are currently open. Before you can use this utility, you must close all of the workbooks that are used as a link source in the workbook being checked.
- You will be warned if the workbook has any protected sheets. The Workbook Link Finder is not able to identify links contained on protected sheets.
- It is possible for a workbook to contain links to files that are not listed when you view Excel's Edit Links dialog box. This can occur if a name is defined using an external reference, but the name is not actually used in a formula. In such a case, the Workbook Link Finder will locate the linked names when you select **Name links**, but it may not list the linked file when you select **Linked files**.

Workbook Link Finder Tips

- When you open a workbook, Excel may prompt you to update links. In some cases, you may think that the workbook doesn't contain any links. This type of "phantom link" is often very difficult to identify. Use the Workbook Link Finder to track down links. Often, a phantom link is caused by an erroneous name link. Check this by using the **Name links** option.
- If you can't locate a link identified by Workbook Link Finder, keep in mind that the object that contains the link may be hidden.
- If some of the information is too wide to be displayed completely, increase the width of the Workbook Link Finder dialog box by dragging the control on the right side of the dialog box.
- Excel provides some built-in tools for working with links. Click the **Office** button, and choose **Prepare - Edit Links to Files**. This command is not available if the active workbook contains no links.
- The PUP [Name Lister](#) utility is also helpful for tracking down and deleting erroneous names.
- For chart links, the Workbook Link Finder has a limitation: It cannot identify links contained in Secondary Value Axis titles or Secondary Category Axis titles.

Name Lister

The Name Lister utility lets you view all names defined in a workbook, sorted by the following categories:

Category	Description
All names	Every name defined in the active workbook.
Workbook-level names	Names defined at the workbook level.
Sheet-level names	Names defined at the worksheet level. These names are preceded by the worksheet's name and an exclamation point (e.g., Sheet1!MyName).
Hidden names	Names that are hidden, and do not appear in Excel's Name Manager dialog box.
Linked names	Names that are defined in terms of a range in a different workbook.
Erroneous names	Names that contain an erroneous reference. These names often cause a "phantom link" problem -- Excel prompts you to update links when you open the workbook, but no links seem to exist.
By sheet	Names that refer to cells on a specific sheet (you select the sheet of interest).

Using Name Lister

1. Activate a workbook that contains one or more names.
2. Select **Name Lister** from the **PUP v7 - Auditing - Utilities** menu.
3. In the Name Lister dialog box, select a name category from the list of option buttons. The names of that type (if any) will display in the **Names in** list box. When **By sheet** is selected, use the drop-down box to select a sheet. The list box will display the names defined on the selected sheet.
4. Select a name in the **Names in** list box, and the name's definition will display below the list box.
5. To create a summary listing of all names in the workbook, click **Report**. The report will be generated in a new workbook.
6. To select a cell or range that corresponds to the selected name, click **Go to**.
7. To delete the selected name, click **Delete**.
8. To delete all of the names shown in the list box, click **Delete All**. If the **All Names** category option is not selected, the **Delete All** button will delete only the names shown in the selected name category.

Name Lister Tips

- The Name Manger in Excel 2007 has been greatly improved. You may prefer to use that tool rather than the PUP Name Manager. The Name Manger, however, does not display hidden names.
- When you click **Go to**, be aware that not all names refer to cells or ranges. In some cases, clicking this button will display a message indicating that the name cannot be activated.
- When you choose the **By sheet** option, the last option in the drop-down list is **(no sheet)**. When you select this option, the list box will display the names that aren't defined in terms of a cell or range (that is, named formulas).
- Be careful when deleting a name. A name that's used in a formula will cause the formula to return an error. You can use PUP's [Unapply Names](#) utility to replace names in formulas with their corresponding range references -- but you must do this before you delete the name.
- The **Delete** and the **Delete All** button are not available if the workbook's structure is protected. To delete a name in a protected workbook, you must unprotect the workbook.
- Deleting names cannot be undone. If you delete a name that is used in a formula, the formula will return an error.
- You can always delete names listed in the **Erroneous names** category without causing any problems.

Compare Ranges

The Compare Ranges utility performs a cell-by-cell comparison of two ranges or two entire worksheets, and generates a report of the differences found. You can select among three options that determine if two cells are different:

Comparison Options	Result
Compare cell contents	If checked, cells will be considered different if they do not contain the same contents.
Check formulas vs. values:	If checked, cells will be considered different if one of the cells contains a formula and the other does not.
Compare numeric formatting	If checked, cells will be considered different if they use different number formats.

Using Compare Ranges

If you're comparing two ranges, start by selecting one of the ranges to be compared. If you're comparing two entire worksheets, activate one of the sheets to be compared.

1. Select **Compare Ranges** from the **PUP v7 - Auditing - Utilities** menu.
2. In the Compare Ranges dialog box, select the **Range** option if you're comparing two ranges. If you're comparing two entire worksheets, select the **Worksheets** option.
3. Specify the comparison options, and the maximum number of differences to be identified (either **No limit**, or a number that you specify in the **Stop at** box).
4. Click **Next**.
5. If you're comparing two ranges, specify the **First range** and the **Second range**. These two ranges should contain the same number of rows and columns.

or...

If you're comparing two worksheets, specify the **First worksheet** and the **Second worksheet**.

6. Click **Finish**.

The comparison report will be created in a new workbook.

Compare Ranges Tips

- If you're comparing two ranges, the ranges can be in different worksheets or in different workbooks.
- If you're comparing two worksheets, the sheets can be in different workbooks,

Worksheet Map

The Worksheet Map utility creates a handy, color-coded map that summarizes the contents of a worksheet. A worksheet map can help you spot errors in your worksheet -- for example, a non-formula among a group of formulas. You can generate a worksheet map for a single worksheet, or for each worksheet in a workbook.

A worksheet map uses the following codes:

Map Code	Description
Green, with "F"	The cell contains a formula
Green, with a numeric value	The cell contains a formula. The number indicates the relative complexity of the formula
Yellow, with "V"	The cell contains a numeric value or a date
Red, with "E"	The cell contains an error
Black, with "T"	The cell contains text
Gray, with "L"	The cell contains a logical value (TRUE or FALSE)
White, with "-"	The cell is empty

Using Worksheet Map

1. Activate the workbook that you want to map.
2. Select **Workbook Map** from the **PUP v7 - Auditing - Utilities** menu.
3. In the Workbook Map dialog box, select the scope for the map (either **Active sheet only** or **All sheets in the active workbook**).
4. If you would like the map to indicate the complexity of the formulas, select **Include formula complexity values** (see below).
5. Click **OK** to create the map(s).

The map(s) are generated in a new workbook. In addition, a navigational "toolbar" dialog box (named Worksheet Map) is displayed.

About formula complexity values

When the **Include formula complexity values** checkbox is not checked, the map will display an "F" for each formula cell. When this option is selected, the map will display a numeric value that provides some indication of the complexity of the formula. This value is the sum of:

- The number of sets of parentheses in the formula
- The number of plus (+) operators
- The number of minus (-) operators
- The number of multiplication (*) operators
- The number of division (/) operators

- The number of exponentiation (^) operators
- The number of concatenation (&) operators

Note:

- Because each formula cell is scanned separately, it can take significantly longer to generate a map when the **Include formula complexity values** option is selected. However, using this option may make it easier to spot an errant formula among a group of formulas that should be identical.

Using the Worksheet Map toolbar

Excel 2007 does not support toolbars, so this utility displays a toolbar-like dialog box when the map is displayed.

- To view a particular cell or range in the original workbook, select the range of cells in the map workbook, then click the **Activate Selected Cell/Range** button on the Worksheet Map toolbar.
- To return to the map workbook, click the **Return to the Worksheet Map** button on the Worksheet Map toolbar.
- To display information about the map codes, click **Key** on the Worksheet Map toolbar.

Worksheet Map Tips

- The Worksheet Map utility is particularly useful when you receive a workbook created by someone else. This tool can provide an overview of how the worksheets are organized.
- If you choose the **All sheets in the active workbook** option, a map is generated for each visible worksheet in the workbook (maps are not created for hidden sheets).
- If you find that this utility is running very slowly, try setting Excel's calculation mode to Manual.
- The map workbook normally contains a simple macro that deletes the Worksheet Map toolbar when the map workbook is closed. If your security settings do not allow inserting macros, you will see a dialog box to that effect.
- If you save a workbook that contains a map, the Worksheet Map toolbar will not be available when you re-open the workbook.

GROUP: PUP BOOKMARKS

The PUP Bookmarks group contains command that allow you to quickly access particular workbooks, worksheets, or ranges.

Create a PUP Bookmark

Creating a bookmark:

1. Make sure the workbook that will be bookmarked has been saved.
2. Activate the workbook, worksheet, and range for the bookmark. To create a bookmark for a chart sheet, activate the chart sheet.
3. Click **Create a Bookmark** in the **PUP v7 - PUP Bookmarks** group. The Create Bookmark dialog box is displayed.
4. Enter a meaningful name for the bookmark (to replace the generic name). To create a "hot key" in the bookmark name, precede the character with an ampersand. The following bookmark name appears with the letter A underlined. When the bookmark list is displayed, press this key to quickly activate the bookmark.

Budget & Assumptions

5. Select the action to take when the bookmark is selected (see the list of options, below).
6. Click **OK**, and the bookmark will be added to the list.

Option	Description
Activate the workbook, and go to the specified sheet & range	When the bookmark is selected, the workbook will be opened (or activated), the sheet will be activated, and the range will be selected.
Activate the workbook, and go to the specified sheet	When the bookmark is selected, the workbook will be opened (or activated), and the sheet will be activated. There will be no change to the selected cell or range.
Activate the workbook	When the bookmark is selected, the workbook will be opened (or activated). There will be no change to the active sheet or to the selected cell or range.

Editing PUP Bookmarks

To edit your bookmark list, click **Edit Bookmarks** in the **PUP v7 - PUP Bookmarks** group. This displays the Edit Bookmarks dialog box. When you select a bookmark item from the list, its workbook, sheet, and range are displayed at the bottom of the list box.

- To change the order of the bookmark names, select an item in the **Bookmark names** list and use the up and down arrows buttons to move the selected item. For example, you may prefer that more frequently used bookmarks appear at the top of the list.
- Use **Rename** to change the name of the selected bookmark.
- Use **Delete** to delete the selected bookmark name. This deletes the bookmark only. The file that it refers to is not deleted.
- Use **Delete All** to delete all defined bookmark names.
- Click **Close** to close the Edit Bookmarks dialog box.

Note:

You cannot modify the definition of a bookmark. To change the worksheet, worksheet, or range for a bookmark, you need to delete the old bookmark and create a new one.

Activating a PUP Bookmark

To activate a bookmark, click **Activate Bookmark** in the **PUP v7 - PUP Bookmarks** group (or press Ctrl+Shift+B). The bookmarks are displayed in a menu. Click a bookmark name to activate the bookmark. Or, use the arrow keys to select the bookmark and press Enter to activate it.

- If the bookmark name displays an underlined "hot key," press the key to quickly activate the bookmark. When you create a bookmark, precede the letter that will be designated the hot key with an ampersand (&).
- If the workbook is already open, it will be activated and the bookmarked sheet and range (if any) will be selected.
- If the workbook is not open, it will be opened and the bookmarked sheet and range (if any) will be selected.

PUP Bookmarks Tips

- PUP Bookmarks are more versatile than Excel's built-in recently-used file list. You can create a bookmark that points to a particular sheet or a specific range of cells.
- The shortcut key combination to display the PUP Bookmark list is Ctrl+Shift+B. The list appears next to the active cell. Use the arrow keys to select the bookmark, then press Enter. If the bookmark name has a hot key (an underlined letter), you can just press the hot key to activate the bookmark. The Ctrl+Shift+B key combination works even when the PUP v7 ribbon tab is not displayed.
- Remember that you can create multiple bookmarks for a single workbook. For example, you might have a large workbook that contains many sheets and ranges. You can create bookmarks so you can quickly activate a particular section of the workbook when needed.
- If you activate a bookmark in which the workbook's window is hidden, the workbook's window will be unhidden.
- If the bookmarked workbook's window is minimized, it will be restored when the bookmark is selected.
- If your security settings display a warning when a workbook that contains macros is opened, this warning will not appear when the workbook is opened using the **Activate Bookmark** command. This is normal behavior when a workbook is opened via a VBA macro.

GROUP: POWER UTILITY PAK

The Power Utility Pak group contains commands that control how PUP v7 works, plus a selection of non-serious diversions.

Enhanced Shortcut Menus: Cell, Range, Column, or Row

The new shortcut menu commands listed below appear when you right-click a cell, range, column, or row.

Menu item	Description
Toggle Page Break Display	Toggles the display of page breaks that normally appear after printing or previewing a worksheet.
Toggle Word Wrap	Toggles the Wrap Text setting for the current selection. The toggling is based on the active cell in the selection.
Change Case	Changes the case of text in the selected cells to UPPER, lower, or Proper.

The shortcut menu for a cell or range also includes the items listed below:

Menu item	Description
Print Selection	Prints the selected range. This command does not change the current print area (if any).
Center Across Selection	Applies Center Across Selection formatting to the selected cells. This command is not available on the shortcut menus for Column or Row selections.
Synchronize Sheets	Forces all sheets in workbook to have the same range selection and upper left cell as the active sheet. See Synchronize Sheets .
PUP Date Picker	Displays the PUP Date Picker , which is used for entering or formatting dates.
PUP InfoBox	Displays the PUP InfoBox , which displays information about the active cell.

Tip

- Press Shift+F10 to display the shortcut menu without using a mouse.

Enhanced Shortcut Menus: Sheet Tab

The new shortcut commands listed below appear when you right-click a sheet tab.

Menu item	Description
Sort Sheet Tabs...	Displays the PUP v7 Sort Sheets dialog box. See Sort Sheets .
Delete Empty Sheets	Deletes all empty worksheets in the active workbook.
Synchronize Sheets	Synchronizes all worksheets so they have the same upper left cell and the same range selection. See Synchronize Sheets .
Activate a Sheet...	Displays a list of all sheets in the active workbook. Activate a sheet by selecting it from the list.
Interactive Hide/Unhide...	Hide or unhide workbooks or sheets interactively. See Interactive Hide/Unhide .

Enhanced Shortcut Menus: Workbook Title Bar

The new shortcut menu commands listed below appear when you right-click a workbook's title bar.

Note: If the workbook window is maximized, the title bar will not be visible. You can access the Workbook Title Bar shortcut menu by right-clicking the Excel icon at the far left of the Menu bar (directly to the left of the **File** menu).

Menu item	Description
Toggle Vertical Scroll Bar	Toggles the display of the vertical scroll bar.
Toggle Horizontal Scroll Bar	Toggles the display of the horizontal scroll bar.
Toggle Grid Lines	Toggles the display of the ell grid lines.
Toggle Row and Column Borders	Toggles the display of the row and column headers.
Toggle Sheet Tabs	Toggles the display of the workbook sheet tabs.
Toggle R1C1 Reference Style	Toggles the reference style for formulas between A1 and R1C1.
Hide Window	Hides the active window.

Enhanced Shortcut Menus: Excel Desktop

The new shortcut menu commands listed below appear when you right-click the Excel desktop area. The Excel desktop area is the area behind the workbook windows. The desktop area is not visible if the workbook window is maximized.

Menu item	Description
Minimize All Windows	Minimizes all worksheet windows.
Tile Windows	Equivalent to the Arrange command on the Windows menu, with the Tiled option.
Activate a Window...	Displays a list of all windows.
Interactive Hide/Unhide...	Hide or unhide workbooks or sheets interactively. See Interactive Hide/Unhide .

PUP v7 Amusements

Just for fun...

Video Poker

Video Poker works much like the video poker games found in most casinos. The goal is to get a good poker hand and accumulate points.

To begin playing video poker, choose **Video Poker** from the **PUP v7 - Power Utility Pak - Amusements** menu.

1. Click **Deal** to receive five cards.
2. Discard the cards you don't want by clicking them. You can discard between zero and five cards. The **Keep All** button discards no cards. The **Discard All** button discards all cards.
3. Click **Get New Cards** to replace the discarded cards with new ones. Your winnings (if any) will be displayed.

Options

- Click the **Options** button to expand or contract the dialog box.
- Choose the amount of your bet (from 1 to 5 points). This represents the amount bet on each hand.
- Choose your game (Jacks or Better, or Joker's Wild). Each game has its own payoff schedule. Click **Payoffs** to see the payoff amounts for various hands.
- Click **Chart** to display a historical chart of your winnings.

- Click **New Game** to reset the score to 0.

Tips

- If, for some reason, you need to hide the fact that you're playing Video Poker, click the **Hide** button. Or, you can just press Escape. To resume the game where you left off, select the **PUP v7 - Power Utility Pak - Amusements - Video Poker** command.
- Note that Jack's or Better requires a pair of Jacks (or better) to win. The minimum winning hand for Joker's Wild is a pair of Aces.

Dice Game

To begin playing the dice game, choose **Dice Game** from the **PUP v7 - Power Utility Pak - Amusements** menu.

How to Play

The rules for the dice game are similar to those for Triple Yahtzee. Following is a brief summary.

The goal is to obtain a high score. Each turn consists of three rolls of five dice. Use the **Roll Dice** button to roll the dice. After the first and second roll, you can discard any number of dice by clicking the appropriate die. The next roll will replace the discarded dice. A complete game consists of 39 turns.

Basic Scoring

After the third roll, click one of the unused buttons in the Scoring section. There are 39 scoring buttons, arranged in three columns (**x1**, **x2**, and **x3**). The scoring button you click corresponds to the dice that are showing. For example, if you have four of a kind, click a button in the **Four of a Kind** category. You may, however, prefer to assign it to a different category. As you gain experience playing the game, strategies will emerge.

In the later stages of the game, you may be forced to assign the dice to a button that results in a score of 0. Once a scoring button is clicked, the value appears on the button, and you cannot assign any subsequent turns to that button.

Clicking a scoring button in the **x1** column gives a normal score. Clicking a button in the **x2** column gives double the normal score. Clicking a button in the **x3** column gives triple the score. The table below summarizes the scoring (points shown are for the **1x** column of scoring buttons).

Scoring Category	Condition	Points
Ones	At least one die that shows 1	The sum of the number of dice that show 1
Twos	At least one die that shows 2	The sum of the number of dice that show 2
Threes	At least one die that shows 3	The sum of the number of dice that show 3
Fours	At least one die that shows 4	The sum of the number of dice that show 4
Fives	At least one die that shows 5	The sum of the number of dice that show 5
Sixes	At least one die that shows 6	The sum of the number of dice that show 6
Three of a Kind	At least three of the dice match	The sum of all the dice.
Four of a Kind	At least four of the dice match	The sum of all the dice.

Scoring Category	Condition	Points
Full House	Two of one kind, and three of another kind	25 points
Small Straight	At least four consecutive numbers	30 points
Large Straight	Five consecutive numbers	40 points
Five of a Kind	All of the dice match	50 points
Chance	Any combination of dice	The sum of all the dice

Bonus Points

In addition to the points described above, you receive bonus points if the sum of the **Ones** through **Sixes** buttons is:

- Greater than or equal to 63 (**1x** column, 35 bonus points)
- Greater than or equal to 126 (**2x** column, 70 bonus points)
- Greater than or equal to 189 (**3x** column, 105 bonus points)

In other words, you will achieve bonus points if you assign at least three dice to each of the **Ones** through **Sixes** categories.

Five of a Kind Bonus Points

If you've used all three of the **Five of a Kind** scoring buttons, additional Five of a Kind rolls will result in 100 points each. This is in addition to the score resulting from clicking a scoring button.

Options

- Click the **Options** button to expand or contract the dialog box.
- If you choose the **Four rolls** checkbox, each turn consists of four rolls of the dice. This option can result in significantly higher scores.
- Click High Scores to view the highest scores for the game. Initially, this will be empty. If, after finishing a game, it is among the top five scores, that score will be entered as a high score.

Tips

- If, for some reason, you need to hide the fact that you're playing Dice Game, click the **Hide** button. Or, you can just press Escape. To resume the game where you left off, select **Dice Game** from the **PUP v7 - Power Utility Pak - Amusements** menu.
- If you accidentally click the wrong button while placing your score, click **Undo**. You can then select another scoring button.

Bomb Hunt

To begin playing Bomb Hunt, choose **Bomb Hunt** from the **PUP v7 - Power Utility Pak - Amusements** menu.

Bomb Hunt is patterned after the Minesweeper game (winmine.exe) that's included with Microsoft Windows. If you know how to play Minesweeper, you'll find that Bomb Hunt is very similar. The object of the game is to discover the bombs hidden in the playing field. The game is over (you win) when you have discovered all of the bombs by marking their cells. The game is also over (you lose) when you accidentally uncover a bomb.

How to play

Clicking a button exposes it as either a bomb, a number, or a blank. If it's a bomb, the game is over. If clicking a button reveals a number, the number tells you how many bombs are in the surrounding cells. If clicking reveals a blank, that means that there are no bombs in the eight surrounding cells. In this case, the program automatically reveals the surrounding cells.

Marking a bomb

If you think a location contains a bomb, right-click it to mark it. If you change your mind after marking a location as a bomb, right-click it again. The button will display a question mark to remind you that you thought a bomb might be there. Right-clicking again returns the button to its normal state.

Winning

You win the game if you:

1. Correctly identify each bomb by marking it, and
2. Do not incorrectly mark any position as a bomb.

Changing the parameters

You can change the size of the playing field and select the number of bombs by clicking the **Parameters** button. The default configuration is an 8 x 8 field with 10 bombs.

Tips

- Bomb Hunt requires lots of strategy and a little bit of luck. The luck comes in the initial moves when you're pretty much operating blind. You'll get better with practice. Once you've uncovered a few numbers, you use that information to deduce the location of the bombs.
- If, for some reason, you need to hide the fact that you're playing Bomb Hunt, click the **Hide** button. Or, you can just press Escape. To resume the game where you left off, select the **PUP v7 - Power Utility Pak - Amusements - Bomb Hunt** command.

Hangman

To begin playing Hangman, choose **Hangman** from the **PUP v7 - Power Utility Pak - Amusements** submenu.

Hangman is a classic word-guessing game. The goal is to guess the word by choosing letters. If you guess a letter correctly, all occurrences of the letter are displayed. If you guess a letter that's not contained in the word, a new body part is added to the unfortunate gentleman on the left.

When you've guessed all of the letters, the word is fully exposed and you win. If the skeletal remains of the body are completely revealed, you lose. Words are chosen randomly from a list of 3,500 words. It's possible, but unlikely, that the same word may be chosen twice in one session.

Tips

- If, for some reason, you need to hide the fact that you're playing Hangman, click the **Hide** button. Or, you can just press Escape. To resume the game where you left off, select the **PUP v7 - Power Utility Pak - Amusements - Hangman** command.
- By default, words of random length are chosen. You can work with words of a specified length by choosing from the **Word length** dropdown. Typically, shorter words are more difficult to solve.
- To make the game more challenging, choose the **Incorrect vowels count double** option. Each incorrectly guessed vowel (that is, A, E, I O, or U) adds two body parts.
- When the **Sound** option is in effect, end-of-game messages will be spoken (and also displayed in the message box). Don't rely on the voice for proper pronunciation. Depending on how your system is set up, you may hear an additional sound (a system sound) when the message box is displayed. To turn off this system sound, use the Windows Control Panel and remove the *.wav file associated with "Asterisk."
- The game has a cheat code that will reveal the current word.

Sudoku Puzzle Generator

Choose **PUP v7 - Power Utility Pak - Amusements - Sudoku Puzzle Generator** to create a Sudoku puzzle in a new workbook. The dialog box lets you specify the number of clues placed on the 81-cell grid: a value from 12 to 60. Generally, puzzles with fewer clues are more difficult to solve.

How to Play

Sudoku involves placing numbers in squares, using basic rules of logic and deduction.

The objective of the game is to fill all the blank squares in a puzzle with the correct numbers, subject to the following constraints:

- Every row of 9 numbers must include all digits (1 through 9) in any order.
- Every column of 9 numbers must include all digits (1 through 9) in any order.
- Every 3 X 3 subsection of the 9 X 9 square must include all digits (1 through 9).

To solve the puzzle, just type the numbers into the cells. If a row or column contains a duplicate number, you'll see a red arrow to remind you. If one of the 3 X 3 blocks contains a duplicate entry, the numbers in that block are displayed in red.

When you solve the puzzle, the word **S O L V E D** appears at the top.

The worksheet is protected to prevent you from accidentally typing over the provided clue values. To unprotect the sheet, choose **Review - Changes - Unprotect Sheet**.

To view the solution, activate the sheet named Solution, and place a checkmark in the **View the solution** checkbox. To view only a single square, don't click the **View the solution** checkbox. Rather, select a single cell and view the number in the formula bar.

Random Number Generator

Random Number Generator simply generates a uniform random number within a numeric range you specify. Every number within the range has an equal probability of being selected.

To display the Random Number Generator, choose **Random Number Generator** from the **PUP v7 - Power Utility Pak - Amusements** menu.

1. Enter the upper and lower values.
2. Click **Start** (or press **S**) and the numbers flash by.
3. Click **Stop** (or press **S** again) and the randomly selected number is displayed.
4. To close the Random Number Generator dialog box, press **Esc**.

The value displayed in the lower left corner is the total number of random values calculated during the time interval between clicking **Start** and **Stop**. The background color of the dialog box uses a color from the active workbook's document theme.

The Random Number Generator is perfect for office raffles and drawings (easier than picking a number out of a hat), and it will keep a 5-year old child entertained for at least 10 minutes.

ADDITIONAL INFORMATION

Downloading Program Updates

The goal is to make every component of PUP v7 error-free and accurate. Bug fixes and updated files are available free of charge from the following web site:

- <http://www.j-walk.com/ss/pup/pup7>

If you discover a problem that's not addressed in an update file, please report it using the e-mail address below. Describe the problem and list the steps required to reproduce it. The problem will be corrected, and an updated file will be posted at the Program Updates site.

- support@j-walk.com

Obtaining Technical Support

- Registered users are entitled to unlimited free technical support for the Power Utility Pak. This assistance is available directly from the author. Use this email address: support@j-walk.com
- Questions asked via e-mail are typically answered within 24 hours, often within the same day.
- If you discover a bug or problem with a utility or worksheet function, please report it. The problem will be corrected, and an updated file will be posted at the Program Updates site.

Solutions to Common Problems

If you're having a problem with PUP v7, check the following information.

The PUP v7 ribbon tab is not displayed

Probable causes:

- Power Utility Pak is not installed. Refer to [Installing PUP v7](#)

Running a PUP utility is very slow

If you're working with a very large or complex workbook with lots of formulas, you may find that the performance of some utilities is slow because the workbook is recalculated frequently. For example, when selecting a PUP utility, you may experience a delay before the dialog box is even displayed. Or, generating reports may take an unnecessarily long time.

To speed things up try setting Excel's calculation mode to **Manual** (use **Formulas - Calculation - Calculation Options**). When you're finished with the operation, return the Calculation setting to **Automatic** to ensure that your formulas return the correct result.

Excel is acting strangely

Unfortunately, it's not uncommon to encounter a situation in which Excel stops working properly. For example, the video display may be incorrect, or Excel may suddenly stop responding.

In most case, the solution is to exit Excel and re-start it. If possible, don't run any other applications while you use Excel. This problem is not caused by the Power Utility Pak per se. However, if you've loaded many of the PUP utilities, you might try unloading them by using the **PUP Options** command on the **PUP v7 - Power Utility Pak - PUP** menu.

Also, it's a good idea to keep track of which add-in programs are installed. Installing add-ins that you never use consume memory and resources. Figure out whether you really need these add-in to be loaded at startup, or contact your System Administrator if you're unfamiliar with this process.

A utility or function isn't working correctly

Although every effort was made to ensure that the Power Utility Pak is error-free, it's possible that you may encounter an error under some situation. For example, you may see an error message that seems inappropriate, or a utility simply doesn't perform as it should.

The first step is to check the PUP v7 Program Updates web site:

- <http://www.j-walk.com/ss/pup/pup7>

The site may contain an updated version of the particular utility file, which you can download.

If an updated version is not available, please report the problem.

1. Make a list of the exact steps required to reproduce the problem.
2. Send an e-mail to J-Walk & Associates at:

- support@j-walk.com

The problem will be corrected, and an updated file will be posted at the PUP v7 Program Updates site.

The text in dialog boxes is cut off

If the text in some of the PUP v7 dialog boxes appears cut off, or is not displayed correctly, you're probably using the "Large Fonts" system option. Unfortunately, this setting is not fully compatible with Excel custom dialog boxes.

Activate the Windows Control Panel and access the Display Properties dialog box. Click the Settings tab and change the **Font Size** setting to Small Fonts. Be aware that changing this setting will affect the appearance of your other programs.

How PUP v7 Works

Power Utility Pak was developed using the programming tools that are supplied with every copy of Excel -- the Visual Basic for Applications (VBA) macro language. One of the primary design goals of PUP v7 was simplicity. Consequently, it does not use any custom DLLs or non-standard controls, and it does not make any changes to your system settings.

Here's a basic overview of how the product works:

- PUP v7 consists of dozens of add-in files. Most of these files use a *.PUP7 extension, rather than an *.XLAM extension. They are, however, standard Excel 2007 add-in files. The PUP7 extension is used so these files won't appear in the Browse dialog box when the **Browse** button is clicked from Excel's Add-Ins dialog box.
- When the PUP7.XLAM add-in is opened, the Ribbon is updated with a new tab named **PUP v7**. The PUP7.XLAM file also controls the loading and unloading of the utilities (i.e., the *.PUP7 files).
- PUP7.XLAM loads the utilities on an "as needed" basis so they won't use up memory and system resources if they are not used.
- PUP7.XLAM keeps track of which utilities are in memory, and you can specify the maximum number of utility files to keep in memory. You control this in the PUP Options dialog box (choose **PUP 7 - Power Utility Pak - PUP - PUP Options**).
- PUP stores its settings in the Windows Registry database. This is also where it stores the last-used dialog box settings. The path is:

```
HKEY_CURRENT_USER\Software\VB and VBA Program Settings\Power Utility Pak\
```

- To view the current registry settings for PUP v7, choose **PUP 7 - Power Utility Pak - PUP - About PUP v7**. Then click **Registry Entries**, and respond **Yes** to the message box.
- To delete all of PUP v7's registry settings, choose **PUP 7 - Power Utility Pak - PUP - About PUP v7**. Then click **Registry Entries**, and respond **No** to the message box. This will restore PUP v7 to its default state. Be aware that this action will delete any [Sequences](#) and [PUP Bookmarks](#) that you have defined.

The PUP v7 Source Code

Licensed users of PUP v7 may purchase the complete VBA source code for a nominal fee. Examining this (usually) well-documented code is an excellent way to improve your VBA programming skills. With these files, you'll learn exactly how each utility and function was written and see the RibbonX code that creates the PUP v7 Ribbon. You can adapt these techniques to your own work.

The source code files are available from J-Walk and Associates for US \$20.00. Please note that the license does not allow you to use this code for commercial products.

About the Trial Version

The Trial Version of Power Utility Pak is intended for evaluation purposes only. The Trial Version is fully functional, and is not crippled in any way. You can use the Trial Version for 30 days. After 30 days, you must delete the files or purchase the licensed version.

How to Order PUP v7

The price for a single-user Power Utility Pak license is US \$39.95. Discount pricing is available for five or more license.

You can purchase PUP v7 using any of the following methods:

- **Online:** Safe and efficient, using a secure server. Requires a credit card. No processing fee.
- **Mail:** Use check, money order, or credit card. \$5.00 processing fee applies.
- **Fax:** Requires a credit card. \$5.00 processing fee.

CD-ROMs?

CD-ROMs are not available for PUP v7. This product is distributed only via the Internet. This method ensures that you get the most up-to-date version of PUP.

Online ordering

Ordering online is the most efficient method, and is also the least expensive because you don't pay the processing fee. Your credit card is approved online, and you download the files immediately. For online ordering, go to this URL:

- <http://j-walk.com/ss/pup/pup7>

About J-Walk & Associates Inc.

Power Utility Pak was developed by John Walkenbach, principal of J-Walk and Associates Inc. -- a small consulting firm based in Tucson, Arizona.

Walkenbach has been using spreadsheets since the early days of VisiCalc. He has written approximately 300 articles and reviews, and his work has appeared in publications such as PC World, Windows, PC/Computing, and InfoWorld. In addition, he's the best-selling author of about 50 spreadsheet books, most of which have been translated into several foreign languages.

Contact Information:

- Web site: <http://j-walk.com/ss>
- Email: support@j-walk.com

End User License Agreement

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POWER UTILITY PAK VERSION 7

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The PUP FUNCTION LIBRARY component of PUP copies VBA macros to an Excel workbook file. The PUP license allows such workbooks to be distributed to others. However, the VBA macros may not be included as part of any other commercial product.

BACKUP COPIES

You may make any reasonable number of backup copies of PUP.

MULTI-SYSTEM INSTALLATION

You may install PUP on multiple computer systems, subject to the condition that only one such system will be in use at any given time. For example, you may install the software on an office system and a home system.

DISASSEMBLY

You may not reverse-assemble or reverse-compile any component of PUP.

VBA SOURCE CODE

The complete VBA source code for PUP is available to licensed users for a nominal fee. This code is intended primarily for instructional purposes. The VBA code may not be incorporated into other commercial products.

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