

TPD Office User Manual

Introducing TPD Office v1.2 for Excel

TPD Office is a system that plugs into Microsoft Office® 2003, 2007 or 2010 to let you control the security of your data. This first version includes support for Excel 2003, 2007 and 2010 running on Windows XP, Vista or Windows 7.

TPD Office for Excel gives you control over who can read or update selected cells, and you're able to maintain this control after you've sent the spreadsheet to others or even after it has been stolen. All of the cells that have been "Theft-Proofed" - TP'd (pronounced "Teep'd") - will be protected and impossible for anyone to derive or reverse engineer from the spreadsheet itself. TP'd cells are only presented when the user authenticates themselves and TPD Office determines that they have permission. Permission is checked at the time of ACCESS to the data, unlike most other protection technologies, like encryption, which are performed at the time of creation of the data.

Installing TPD Office for Excel

TPD Office can be hosted within a corporation or by a service provider. This installation package is for TPD Office hosted by Theft-Proof Data. The download is approximately 3MB, requiring 3.5MB of disk space.

TPD Office also includes a security system based on industry standard systems for authentication using user names and passwords (Kerberos). Your user name and initial password will have been supplied to you by your TPD Office system administrator. You can complete the installation without knowing your user name and password, and use Excel normally, however you will not be able to use the Theft-Proof facilities until you have been assigned a user name.

Once the installation package is on your computer (through download or by copying from media or an email), double click the installation kit or right click on the file and select "Open". Follow the prompts to complete the installation. If you have previously installed TPD Office the older version will be automatically replaced.



Using TPD Office for Excel

Excel Settings

TP'd cells show with an indicator displayed in the upper right of the cell, in the form of a small red triangle. Note that this setting uses the same setting as Excel's built-in comment facility, so displaying TP'd cells in this way will also display other cells that have comments. While it is possible, we don't recommend trying to set up comments for cells that have been TP'd. This suggestion may change for future releases.

Basic Functions

In normal operation, you may not even notice that TPD Office is in use, other than the aforementioned indicators. When you have appropriate permission to use TP'd cells, you use them as you would without TPD Office installed. TP'd information in a spreadsheet is automatically displayed when you open the sheet (if required, you will be prompted to log in). Once you are logged in, all the TP'd information will be displayed, or at least all the information that you are permitted to see. There may be TP'd cells, for example, that remain blank because you don't have permission to see them.

Theft-Proofing Cells

To TP cells simply select them, right click, and choose **Theft-Proof Selection** (you can also use the menu bar at the top, in Excel 2007 and 2010 look under "Add-ins"). You will be the owner and have full access to the cell contents and its permissions. See Assigning Permissions below to share access with others. Depending on your system settings the cell may display a visual cue that the cell has been TP'd (see Excel Settings above). Once TP'd, NO-ONE, other than the listed permissions holders, will be able to see the contents of your TP'd cells, even if your Excel file is sent to others, or is stolen.

TP'd cells behave like any other Excel cells. They can contain anything that any other cell can contain - formulas, text, numbers, dates, etc. They can be moved around by dragging, cutting and pasting. They can copied, formatted and even deleted, although in that case the underlying information is not necessarily deleted (see Advanced Functions below).

You can TP up to 1,000 cells with a single operation. They do not have to be contiguous, and if any cells in the selection are already TP'd they will remain that way. If you need to TP more on the same sheet you may, by selecting them and performing another TP operation. The limitation in a single operation is just to ensure that you really want that many cells TP'd, in case you select a huge number in error, such as an entire column of cells.

Note that no changes to any TP'd cells or their permissions are made permanent until the worksheet is saved.



Permissions

By Default, when you TP cells, you are the only person permitted to access those cells. Using permissions is a powerful way to control access to the cell data that you want to share with others, even after you have sent it to them. When you assign permission to someone else, they will be able to use their copy of those cells in the way you have permitted. You can allow them to:

- Read, which gives permission for them to read cell contents, change cell
 formatting, move cells around and even make copies. However they will
 not be able to make permanent changes to the content of the cells or any
 copies of the cells.
- **Update**, controlling the changing or updating of information within cells (includes Read).
- **Set (Permissions)**, which allows others to also change the assignment of permissions (includes Read and Update). This permission should be granted rarely, as anyone with this ability can remove or add anyone from the permission list. Note that the original owner can never be removed.

A key and powerful feature, called Shared Permissions, enables ONE set of permissions to control ALL copies of the cell, regardless of how many times it is saved, copied or even updated. This means that the owner, or anyone to whom Set permission has been granted, can change or revoke access to all of the copies of the cell, regardless of where they are or when they were saved. The original owner who TP's cells has full, irrevocable rights to Read, Update and Set others to read, update and themselves allow others to access these cells. A copy of a cell exists whenever it is copied to another cell on the same or different worksheet or workbook, or when a new copy of the workbook is saved, copied or backed up. In either case all copies share the same permissions, although in the course of updating they may have different values.

Permissions can also be assigned to groups. Groups may contain individuals and other groups, so assigning permission to a group enables all members of the group to have Read, Update, or Set access. Note that permissions are checked at run-time so changes to groups are effectively retroactively applied. This means that if the group members change over time the people able to access the data will change as well. Groups can be powerful but also in effect delegate control to whomever is administering the group members.

When a person's permission is checked, all entries for that person are examined, including any groups and sub-groups of which they might be a member. Their permission will be the sum of all those permissions that apply to the cell. So for example if a person has their name listed with Read permission but is also a member of a group that has Update permission, they will have both Read and Update permission.



View Permissions

You can View permissions by right clicking the cell or using the menu bar to select **View Permissions**. A list of all users and groups that have permission for the selected cell will be displayed showing if they have Read, Update and/or Set permission. If you select a range of cells, only the cells that are TP'd will remain in the selection. If a person or group has the permission for:

- all of the selected cells, the check mark will be black
- some of the selected cells, the check mark will be grey
- none of the selected cells, the box will be white (no check mark)

Note that this is also a quick way to select all or a group of TP'd cells, but not any unTP'd cells that may be mixed between them. Simply select the entire sheet (or large block of cells), click **View Permissions** and then OK, and then only the TP'd cells within the original selection will remain selected.

Edit Permissions

You can change, add and/or delete permissions by right clicking the cell(s) or using the menu bar to select **Edit Permissions**. When you click this option for a group of cells, before the permissions are displayed the selection will be reduced to only contain those cells for which you have Set permission. As a shortcut, if you select **Edit Permissions** on a cell (or range of cells) where NO cells have yet been TP'd, they will be automatically TP'd for you before the permissions screen is displayed.

The Edit Permissions screen is a two panel window. The left panel displays all the users and groups available to be assigned permission, displayed in a hierarchical tree structure as maintained by your system administrator. On the right will be the currently assigned permissions. To add a user or group to have permission for the selected cells, simply click and drag that user from the left panel and drop (release) on the right panel. They will be added with the minimum Read permission, then you can add Update and Set by clicking the check box. To remove permission from a user or group simply clear the check box. If you clear the Read check box, the user will be removed from the right panel once you click OK. If a box contains a grey check this means that the user has permission for some, but not all, of the selected cells. You can either clear the check box to remove them from all cells, make it black to grant permission to all cells or leave it grey to leave permissions for that user or group unchanged.

A useful shortcut is the "Set as Default" check box. If you are going to be TPing a number of cells, after you set up one with the permissions you want for all of them, you can check this box before you click "OK". From then on during this Excel session whenever you TP a cell it will start with the most recent Set Default permissions.



Advanced Functionality

Blind editing: a TP'd cell can be moved, copied and formatted even if the user doesn't have permission to read the contents of the cell, or doesn't even have TPD Office installed. Once the sheet is sent to someone who does have permission, the data will appear for them. This makes it possible for someone to format cells, even incorporate them into graphs and charts, without actually being permitted to see the information. They can even fill in sample information to confirm the effect as the correct information will be displayed when an authorized user opens the workbook.

Data Integrity: Each cell's contents are stored in a remote high-security TPD Vault where they are kept until they are required by Excel. The Vault tracks the version of the stored data to ensure that the correct data is returned when requested. This maintains data integrity because, for example, you might have an older version of a spreadsheet and it must have the same information retrieved from the TPD Vault as was originally stored.

External Links: When linking to TP'd information in other workbooks, the information will only be available when the other workbook is open in Excel (and you have authenticated). This is because when a workbook is saved, the TP'd information is stored safely in the Vault, not the Excel file.

Grouped or hidden Rows and Columns, Lists: Excel can selectively hide/unhide rows and/or columns of cells using its group, hide and list features. Note that when Theft-Proof operations are initiated for these elements, hidden cells may be selected as well. Cells hidden by grouping or lists which overlap or are included in the currently selected range will be included in any Theft-Proof operation. This is consistent with how Excel manages other cell functions, such as formatting, in these situations.

Formula Arrays: Excel supports various forms of arrays. TPD Office handles all forms of arrays. In the case of Multiple Result arrays (Ctrl-Shift-Enter with multiple cells selected) you must Theft-Proof the entire range of cells (they will be automatically selected when you select a TP operation on even one cell). If you attempt to create a Formula Array from existing TP'd cells, you will receive an error message when you next save or perform a TP operation on those cells to the effect that you must TP formula array cells as a group (and neither the save or TP operation will be performed). You must remove the array (delete the cell contents), un-TP the cells you wish to include in the array, recreate the array and THEN TP the array. Once TP'd you can extend, shrink, copy and paste the array or subsets of it and TP status will follow, just as happens with non-formula array cells.

Parallel Mode: When first implementing TPD Office, your company may elect to operate in Parallel Mode (PM) for a period of time while gaining confidence in using the system. If turned on, the prompt "Currently in Parallel Mode" will be displayed during the login process. When in PM each time you save a sheet with any TP'd cells, an un-TP'd copy of the sheet is made, hidden and saved at the same time. This means that for as long as you work in PM, your data is saved in the TPD Vault but it is ALSO saved in the workbook. Please note that this mode will only familiarize you with how TPD Office works, it will NOT actually protect your data until PM is turned off.



While in Parallel Mode you can select the option "Restore from Parallel Mode" from the main Theft-Proof menu. This will restore all sheets in the workbook to a state as if Theft-Proofing had never been done. All formatting and data changes are preserved. Restore can only be done on a workbook that is not currently open – a file open dialog box will be displayed to select the workbook to be restored, following which it will be opened in Excel. The restore will not be permanent until the workbook is saved. The workbook will be restored exactly to the state it was in when last saved. This means that if there were cells which the user did not have permission to "Read", those cells will remain blank after the restore from PM. To retrieve those cells the user with read permission would have to restore from their copy.

If a workbook is selected for Restore that was not last saved with PM on, there is no restore possible and a message will be displayed.

Once PM is turned off, whenever a workbook is opened that was previously saved during Parallel Mode, the hidden information will automatically be deleted and the file saved. Note that if a workbook is never opened it will retain the hidden information.

If PM has been turned off and it is desired to restore a workbook from PM, it must either be done manually (by un-hiding sheet(s) and restoring any links), or PM must be temporarily turned on by the administrator.

Pivot Tables: Pivot tables are used in Excel to display source data in various forms, in much the same way as charts are a representation of the data. Theft-Proofing is applied only to the source information from which either the chart or the pivot table draws its information. TPD Office for Excel can apply Theft-Proofing to the source data when it is contained on an Excel worksheet. If the data source is an external database then Theft-Proofing needs to be applied to the source database using TPD Enterprise. Theft-Proofing is not supported for the column headings for pivot table data.

Safe outsourcing: TP'd information can be shared with individuals outside your organization if their organization is also using TPD Office. Contact your system administrator to set this up if required.

Shared Permissions: Caution should be used when editing multiple workbooks with cells that share permissions between them. If you make <u>permissions</u> changes on one open Workbook, even if you don't save that Workbook the same changes will be shown for the other open Workbooks, until you either close or save them. If you save or are prompted to save the second workbook (and say yes) it means the changed permissions will be saved as well.

Sharing and Change Tracking: These settings are not supported by TPD Office because they store sensitive information outside of the Theft-Proofing environment and therefore pose a security risk. If either is detected on loading a TP'd spreadsheet, you will be prompted to turn it off before saving.



Simultaneous Editing of Multiple Workbooks: There are two ways to open Excel workbooks which can result in different effects for normal as well as Theft-Proofing operations. Each time you launch Excel from a Start Menu or desktop icon it creates a new Excel session, and if you do Theft-Proof operations you will be prompted to log on for each session. If you start Excel by double-clicking a file, or opening a new or old workbook from the Excel File menu, the same logon will apply to all workbooks. Please note that copying TP'd cells from one Excel **session** to another will result in loss of the TP status of the cell, as in this situation Excel copies ONLY the cell contents and formatting - formulas, comments, etc. are removed. We recommend opening all Theft-Proofed workbooks in the same Excel session, which is the normal workflow for most people.

TPD Office Button: As a convenience in sending files to other people, you may include a graphic that assists them to find and download the TPD Office application. Assuming that have been set up in your organization they would then be able to log on and view the protected information you are sending them. The graphic no longer appears once they have installed TPD Office.

