

TaxWise Mapping Tools

Multiple Role Procedures for TaxWise

Before tax year 2008, TaxWise could be launched from different drive letters without having to run the TaxWise workstation setup program (UTSyy\TWTech\setup.exe) every time TaxWise was launched from a different drive letter. In addition to the standard shortcut that launched the local copy of TaxWise (such as "TaxWise 2007 on Drive P"), there could be a different shortcut on the computer's desktop (such as "TaxWise 2007 on Drive J") for launching the program from a server's mapped network drive when the computer was to be used as a workstation. There could be multiple different shortcuts for launching the program from different permanently mapped network drives from different networks at different times (such as "TaxWise 2007 on Drive L," etc.).

As described in Tech Bulletin 2008-15, there has been a change in the way TaxWise works that makes it necessary to run the TaxWise workstation setup program for 2008 on a given Windows drive letter, and on no other drive letter, before launching TaxWise 2008 from that given drive letter. We have dubbed this the **TaxWise 2008 Multi-Drive Problem**.

Various work-arounds have been described for coping with this problem. A class of solutions that eliminates the need to run the workstation setup program every time the launch drive changes is characterized by always launching TaxWise from the same drive letter, whatever the role of the computer at any given moment. This paper describes a solution of that class that we have named the **"TaxWise Mapping Tools (TWMapTools)."**

You can use the TWMapTools batch files and desktop shortcuts to make it easier for computers to be used in multiple roles. Multiple roles could be computers that are used in both a network and stand-alone basis, or in multiple networks as both client and server. These tools permit the multiple uses without having to run workstation setup each time the computer's role is changed. They make the computer always launch TaxWise from the same drive letter. The TWMapTools allow any computer with TrueCrypt for Tax-Aide installed to be used in any of these roles. These tools allow an IRS Depot laptop to be used either as a network workstation or a stand-alone installation, by creating a substitute P drive on these computers.

While the use of IRS depot computers as TaxWise servers is not recommended, the TWMapTools do provide for their use in this role. There are two options. TWMapTools support can be enabled by installing TrueCrypt for Tax-Aide on the IRS depot computer. Alternatively, the C drive of the IRS depot computer can be shared to the network as TaxWiseServer_P (and twsrvr_p for legacy compatibility), thus enabling TWMapTools without installing TrueCrypt for Tax-Aide on the server.

Like the TrueCrypt for Tax-Aide tools, the TaxWise Mapping Tools do not actually launch TaxWise, but only prepare the path for a subsequent launch. Because of this, they are compatible both with the standard networking procedures contained in the "Networking TaxWise for Tax-Aide" paper and with the FL1 Clone Tools, Versions 8 and 10.

The procedures below tell how to obtain and install the TaxWise Mapping Tools and how to use them to enable computers to operate in different roles, both stand-alone and as clients and servers in TaxWise networks.

Support for Tax-Aide TrueCrypt Installer Version 6.2 and later

The version of the TaxWise Mapping Tools for Tax Year 2010 provides support for Version 6.2 and later of the Tax-Aide TrueCrypt Installer. This version of the Mapping Tools no longer supports the Dual Internal Mode of the earlier versions of the Tax-Aide TrueCrypt tools.

Support for Windows 7

This version of the Mapping Tools supports all versions of Windows 7 with version 6.2 or later of the Tax-Aide TrueCrypt Installer. User Account Control (UAC) can be either on or off. If UAC is on, the P: drive mapped by Map TW P to a server may not be visible even though it is mapped. To correct this condition, either turn UAC off or apply the registry change contained in linked.reg.

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Installing the TaxWise Mapping Tools (for All Computers)

The folder 'TWMAPTOOLS' contains the required batch files and desktop shortcuts for both IRS Depot laptops and computers with TrueCrypt for Tax-Aide installed.

1. Download the 'TWMAPTOOLS 20yymmdd.zip' file from the Technology page of the AARP Tax-Aide ExtraNet.
2. Extract the 'TWMAPTOOLS 20yymmdd.zip' file and copy the 'TWMAPTOOLS' folder to the root of the C: drive.
3. Open the 'C:\TWMAPTOOLS\servers.txt' file. Replace the site name(s) and server computer name(s) with your own. Close and save this file.
4. If the computer has a version of TrueCrypt for Tax-Aide earlier than version 6.2 installed, copy 'TC_STOP_ALL.bat' to the 'C:\Program Files\TrueCrypt' folder replacing the file of that name that is already there. *(This makes TC_STOP wait for TrueCrypt to dismount volumes before continuing and is necessary for the correct operation of the "Clear ALL" process.)*
5. Open the 'Shortcuts' folder and drag the four shortcuts to the desktop. Now you can use these desktop shortcuts to Clear and Establish the P path for launching TaxWise.
6. The 'Map TW P to a Server' shortcut allows you to interactively select which network server you want to connect to if you have listed more than one in the servers.txt file.
7. If you only have one server to connect to, you can use the 'Map TW P to Boulder Server' shortcut. Rename the shortcut and replace 'Boulder' with your network or site name. Then you need to right click on the icon again and click on 'Properties' to change the site name used on the command line. On the Shortcut tab, in the Target box replace 'boulder' with the name of your network or site. Use the name you typed for the network or site in the 'servers.txt' file, with identical capitalization and no spaces.
8. If you want customized desktop shortcuts for more than one network server, drag another copy of the 'Map TW P to Boulder Server' shortcut onto the desktop. Then repeat the steps above to rename and change the command line parameter for this shortcut to connect to your next server.
9. If you have a single server, or will use a customized shortcut for each server, you can delete the 'Map TW P to a Server' shortcut from your desktop, as it will not be needed.
10. This step performs the local installation of TaxWise.
 - a. **For any computer other than an IRS computer:**
 - i. Click on the 'Map TW P Locally' desktop icon. This icon first runs the 'Clear ALL' procedure, then runs the appropriate TrueCrypt Start procedure to establish the path to the local installation of TaxWise.
 - ii. Then run P:\UTSyy\TWTech\setup.exe to re-create the 'TaxWise 20yy on P Drive' shortcut on your desktop.

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- b. **For an IRS computer**, TaxWise will not install on a substituted drive. The installation fails with "Error 1320, Pathname too long." There are two alternative ways to get around this issue:
- i. For use if the computer can conveniently be connected to a server for the installation:
 - Use the TWMapTools "Disable TW P" shortcut to free up the P: drive.
 - Initially, install TaxWise to the C: drive if you want a stand-alone installation.
 - If using the FL1 Clone Installer, do not copy icons to the desktop, since we don't want C drive icons.
 - Then map P: to a server using TWMapTools and run P:\UTSyy\TWTech\setup from the server.
 - It will present a choice between "Install a new instance" or "Maintain or upgrade an existing instance."
 - Select "Install a new instance" and allow the installation to complete.
 - If using the FL1 Clone Tools, copy the desired shortcuts (P drive icons) from P:\UTSyy\TWICONS\ to the desktop before restarting the computer.
 - Now restart the computer to finish installing the fonts and save the desktop.
 - Upon restart, the TWMapTools configuration will work as expected.
 - Do not run TaxWise from the C drive when using TWMapTools.
 - ii. For use if the computer cannot conveniently be connected to a server for the installation (or if you just like this way better):
 - Connect the IRS computer to any network.
 - Use the TWMapTools "Disable TW P" shortcut to free up the P: drive.
 - Start > Run > cmd > OK to open a command line window.
 - Type: "net use p: \\<computername>\c\$" without the quotes [press ENTER], where <computername> is the "Full computer name" of this IRS computer in System Properties, Computer Name.
 - Now you can install TaxWise on the mapped P: drive without encountering Error 1320.
 - When finished, before restart, use the TWMapTools "Disable TW P" shortcut to free up the P: drive.
 - Restart the computer.
 - Upon restart, the TWMapTools configuration will work as expected.
 - Do not run TaxWise from the C drive when using TWMapTools.

11. This computer is now ready for use in either stand-alone or networking roles.

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Preparing an IRS depot computer for use as a TaxWise Server (not recommended)

12. Open the 'C:\TWMAPTOOLS\For IRS server only' folder. Double click on the 'share IRS for tw.bat' file to execute it. The computer can now be used as a TaxWise server, a workstation, or stand-alone.

Using the TaxWise Mapping Tools in the Stand-alone Role

13. For TrueCrypt for Tax-Aide computers, the original 'TCxn Start,' 'TC Stop,' or Start/Stop Tax-Aide Drive shortcuts on your desktop will still work. They are not needed as the new 'Map TW P Locally' and 'Disable TW P' shortcuts include their functions. You can use either pair of shortcuts to start and stop TrueCrypt when using the local installation of TaxWise. The advantage of using the TWMapTools shortcuts is that they include the "Clear ALL" process that frees up drive P if it has been mapped to a network share.
14. For IRS depot laptops, use the 'Map TW P Locally' and 'Disable TW P' shortcuts to establish and clear the path to use the local installations of TaxWise.

Using the TaxWise Mapping Tools in Networking Roles

As with all networking, it's best to turn off all Firewalls during the initial setup.

15. Connect a client to a server with either a 'crossover' Ethernet cable or through a network switch or router.
16. On the server, click on the 'Map TW P Locally' desktop icon. This icon first runs the 'Clear ALL' procedure, then runs the appropriate TrueCrypt for Tax-Aide Start procedure to establish the path to the local installations of TaxWise.
17. It's best to restart the client computers once the server's TrueCrypt Start procedure says "the workstations can be started now."
18. On the client, click on the 'Map TW P to a Server' icon or the customized network icon for the server you want to connect to. You will need to type the site name when asked unless you use a customized network icon. Either of these icons runs the 'Clear ALL' procedure before mapping and connecting to the server.
19. Now you can use the 'TaxWise 20yy on P Drive' shortcuts on either the server or the client to launch TaxWise using the server's data base.
20. When you finish your session on the network, click on the 'Disable TW P' icon. This runs the 'Clear ALL' procedure. It is used on the clients to disconnect from the server and on the server to dismount the TrueCrypt volume. When running on a server, it will notice if there are any workstations still connected and, if so, will ask if you want to shut down the server anyway. It gets rid of anything that is mapped to or mounted on P:.

Using the TaxWise Mapping Tools with Traveler Mode TrueCrypt Volumes

The TY2011 version of TWMapTools supports Traveler Mode TrueCrypt volumes created by the Tax-Aide TrueCrypt Utility for TY2011. Insert the flash drive but do not run the Traveler start program. Map TW P locally will invoke the Traveler start program to mount the TrueCrypt volume. Disable TW P will invoke the Traveler stop program. Map TW P locally will only mount the Traveler volume if a UTSxx folder or a TrueCrypt volume does not exist on the local hard drive.

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Mapping Tools TaxWise Installation Hierarchy

Map TW P Locally checks for a TaxWise installation in this order:

Tpdata.tc file exists on the C: drive – invoke Start Tax-Aide Drive to mount the P: drive.

UTSxx folder exists on the C: drive – subst the C: drive as the P: drive.

Start Traveler.exe exists on any drive (A:-Z:) – invoke Start Traveler on first drive found to mount the P: drive

Disable TW P checks for a TaxWise installation in this order:

Network mapped P: drive exists – unmap the P: drive

Stop Traveler shortcut exists – invoke Stop Traveler to unmount the P: drive

Tpdata.tc exists on the C: drive – invoke Stop Tax-Aide Drive to unmount the P: drive

UTSxx folder exists on the C: drive – unsubst the P: drive