Zinstall WinWin User Guide

Thank you for purchasing Zinstall WinWin.

If you have any questions, issues or problems, please contact us:

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Contents

Introduction

Zinstall WinWin allows you to transfer your entire computer, with all applications, settings and files, to another computer / another OS - with no reinstalls and without leaving anything behind. Zinstall WinWin performs a native migration, implanting all the applications and files directly into the TARGET environment.

WinWin is recommended for most transfers, such as Windows XP to Windows 10, 8 or Windows 7, or Windows 7 / 8 / 10 to another Windows 7 / 8 / 10. If you need to transfer incompatible applications from Windows XP to Windows 7, see the "XP7 vs. WinWin" comparison below.

Quick Start

This User Guide will walk you through the migration process, and provide answers to questions you may have before, during and after the transfer.

A Quick Start guide is below.

Please make sure to read the *Preparing for Migration* section on **page 7** before starting.

If you encounter any problem or issue, refer to the **Troubleshooting Guide on page 29:**

1. If you receive a message from the software, refer to the **Message Codes** table and explanations on **page 29.**
2. To find answers for possible questions regarding the proper way to operate the software, see:
    a. **Before** the migration – **page 33**
    b. **During** the migration **– page 35**
    c. **After** the migration **– page 36**

Migration quick guide:

This quick guide provides the outline of a migration between two computers. This is only a quick overview - it is **highly recommended to refer to page 9** for a step-by-step walkthrough, and more detailed explanations.

Migrating between two computers – quick guide:

1. Before you begin, make sure all firewalls on both computers are either uninstalled or configured to allow Zinstall WinWin operation and connections.
2. On your OLD computer:
   a. Connect the computer to the Internet
   b. Install Zinstall WinWin on the computer. If you have purchased it electronically, download it from the link you have received in your License Information email. If you have purchased it on a CD, install it from the CD
   c. Run Zinstall WinWin on the computer
   d. When prompted, enter your license information and activate the product
   e. Once activation is successful, the OLD computer is no longer required to be connected to the Internet
   f. When asked "Which computer is this?", answer "This is my Old computer"

3. On your NEW computer:
   a. Connect the computer to the Internet
   b. Install Zinstall WinWin on the computer
   c. Run Zinstall WinWin on the computer
   d. When prompted, enter your license information and activate the product
   e. Once activation is successful, the NEW computer is no longer required to be connected to the Internet
   f. When asked "Which computer is this?", answer "This is my New computer"

4. Connect your old computer and your new computer via home network or using a network cable
   a. If they are already connected to the same Internet router with a wired connection, leave them connected – you don't have to do anything with the connection
   b. Otherwise, connect the computers by plugging an Ethernet cable between them directly. You can use the same cable that connects your computer to the DSL / Internet modem – take it out of the Internet, and plug it between the computers

5. Once the computers are connected, they will search for each other on the network. After a few minutes, the "Go" button will become enabled.

6. Press the "Go" button on your new computer when ready

System Requirements

Migration Source

	Minimum	Recommended
Processor	Intel Pentium 3 or AMD Athlon CPU	Intel or AMD Dual core CPU
Memory	512 MB RAM	1GB RAM or higher
Hard drive free space	1GB	20GB
Network Adapter	10/100 network adapter / wireless	Gigabit network adapter

Migration Target

	Minimum	Recommended
Processor	Intel Pentium 4 or AMD Athlon XP CPU	Intel or AMD Dual core CPU
Memory	512 MB RAM	1GB RAM or higher
Hard drive free space	1GB and, in addition, enough space for transferred applications and files	20GB and, in addition, enough space for transferred applications and files
Network Adapter	10/100 network adapter / wireless	Gigabit network adapter

Operating system supported

Operating system	Source	Target
Windows 10	Yes	Yes
Windows 8	Yes	Yes
Windows 7	Yes	Yes
Windows Vista	Yes	Yes
Windows XP	Yes	Yes

Notes

- Zinstall software must be executed with administrative privileges on both source and target systems
- Zinstall software cannot be executed when the Windows OS is running in safe mode
- If the Windows operating system is malfunctioning, or any of Windows subcomponents are corrupt, the migration might not work properly
- Internet connection is required to perform online product activation

Preparing for Migration

Before You Begin

Before beginning the transfer process, it is strongly recommended to prepare your system according to the following checklist. Doing so will ensure the migration is successful and not affected by possible system issues.

Do the following on both **SOURCE** and **TARGET**:

1. Uninstall / disable all security software, antivirus or firewalls.
2. Close all running applications.
3. It is recommended – especially for older machines – to verify file system consistency by running the standard Windows CHKDSK utility. For further instructions, see *page 27, CHKDSK*
4. If one of the hard drives you are using (either SOURCE or TARGET) is formatted with the FAT32 file system, it is required to convert them to NTFS before performing the migration. For further instructions, se*e page 27,* To perform a Windows CHKDSK hard drive consistency check, and fix possible errors, do the following:

On Windows XP / Vista / 7:

1. Open Start Menu, then "My Computer"
2. Right click on your hard drive, select "Properties"
3. Go to the "Tools" tab
4. In the "Error Checking" box, click on "Check Now"
5. Make sure both options are checked: "Automatically fix file system errors" and "Scan for and attempt recovery of bad sectors"
6. Click Start
7. If you are prompted to reboot, accept.

On Windows 8 / 10:

1. Right-click on the Start button (bottom-right corner of the screen)
2. Select "Command Prompt (Admin)"
3. If prompted to allow the application to run, click Yes.
4. In the window that opens (black window, white text), type the following command. Instead of F:, type in the drive that you want to check (could be C:, D:, E:, F: etc.) Make sure to type a colon (":") after the drive letter:
   ```
   chkdsk  /f  /r  /x  F:
   ```
5. Press enter
6. If you are prompted to reboot, accept.

If you have several hard drives, you need run CHKDSK for each of them.

5. Converting a FAT32 drive to NTFS file system.
6. Make sure there is at least 1 GB free space on each hard drive.

Anti-virus / Internet security software

Some releases of anti-virus / internet security software products lack a proper identifying mechanism and might mistakenly consider Zinstall software to be a threat. Zinstall code is digitally signed, according to policy, by official worldwide Certification Authority; nevertheless, some of the anti-virus / internet security software might automatically, and without asking the user, prevent Zinstall from normal execution. It is recommended to uninstall anti-virus / internet security software before performing the migration. Alternatively, contact the vendor of the anti-virus / internet security software, in order to get instructions on how to add Zinstall to the "white list" of permitted software.

Domain considerations

If you are migrating between two computers in a domain environment, you must add the target machine to the domain **before** the migration, and log in as the same user on both machines.

Furthermore, during the migration process, the target computer should be on the domain network, in order to allow it to authenticate the transferred profiles.

Moving from one computer to another

To transfer all your applications, settings and files from one computer to another, use the following guide.

NOTE: If you are migrating between two computers in a domain environment, you must add the target machine to the domain before the migration, and log in as the same user on both machines.

On the SOURCE computer

1. If an Internet connection is available, connect the computer to the Internet to simplify product activation.
2. Put Zinstall WinWin on the SOURCE computer
   a. If the Zinstall product was purchased electronically, download the software using the link from the Zinstall License Information email received after purchasing.
   b. If the Zinstall product was obtained as a packaged CD, install the software from the CD.
3. Run Zinstall WinWin
4. Perform product activation:
   a. When Zinstall WinWin is purchased electronically over the Internet, the serial number is obtained from the License Information email, which is sent from Zinstall Support upon purchase.
   b. When Zinstall WinWin is purchased as a packaged CD, the serial number is printed on a sticker on the CD package.
   c. You need to supply the serial number when prompted by the software.
   d. When Zinstall WinWin runs for the first time, you will be asked to enter the serial number and your email address:
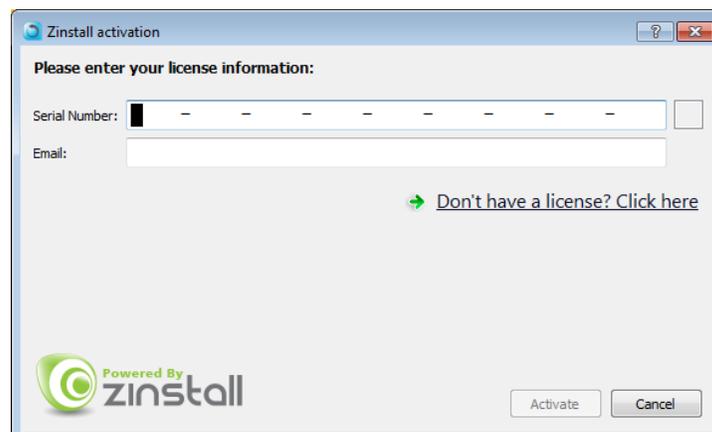
e. It is very important to provide a correct email address, otherwise you may experience difficulties in receiving support – Zinstall Support System recognizes licensed users by email address.

5. Enter the serial number and email address
   a. If a red "X" appears to the right of the serial number, this means that the serial number has been accidentally mistyped. Double-check all of the characters, and correct the typo.
   b. When a green checkmark appears to the right of the serial number, this means that the number has been typed correctly.
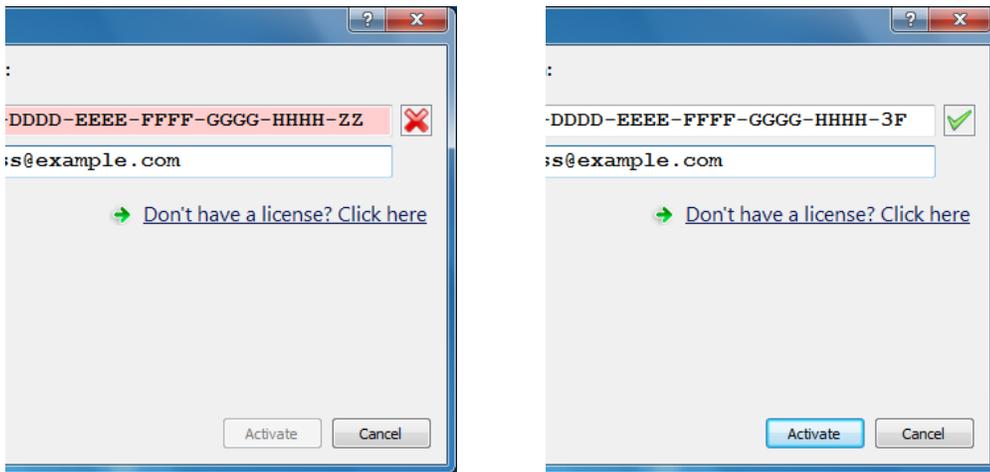
6. Press the "Activate" button. An "Activation in progress" message will appear:
   a. If the SOURCE computer is connected to the Internet, the activation will be performed automatically over the Internet.
   b. If the SOURCE computer cannot be connected to the Internet, the activation can be performed using any other Internet connection ("offline activation"). If this is the case, see *26,* **Web Activation** below for further instructions.

7. After a successful activation, the following message will appear:
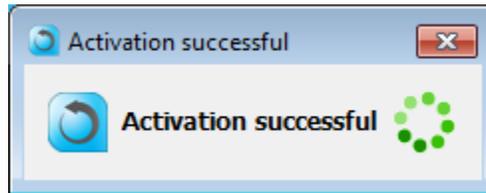
8. The SOURCE computer is no longer required to be connected to the Internet
9. Then, click *"This is my Old computer"*:
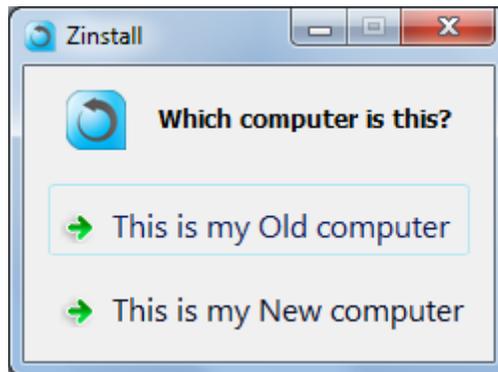
10. The following screen will appear, which means the SOURCE computer is ready to start the transfer:
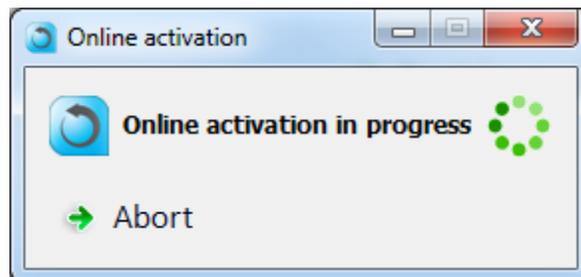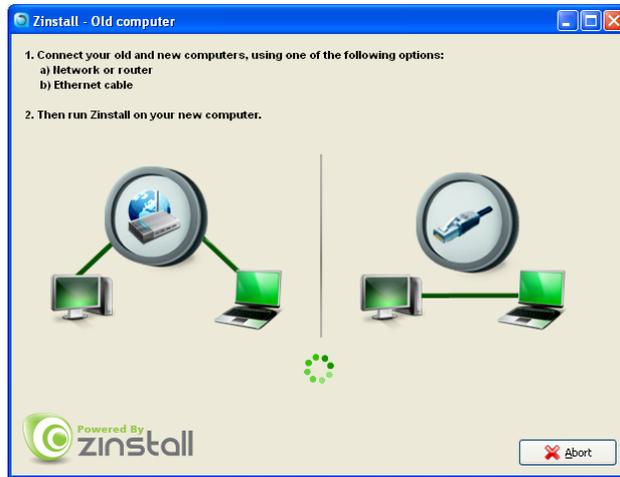

11. Continue to the next step below.

On the TARGET computer

1. If an Internet connection is available, connect the computer to the Internet to simplify product activation.
   a. If you only have one Internet connection, disconnect the SOURCE computer from the Internet, and connect the TARGET computer to the Internet instead
2. Put Zinstall WinWin on the TARGET computer
   a. If Zinstall WinWin was purchased electronically, , download the software using the link from the Zinstall WinWin License Information email received after purchasing, just like you did on the SOURCE computer.
   b. Or copy Zinstall WinWin from the SOURCE computer using a memory stick, external hard drive or a CD. The file you need to copy to the TARGET computer is located in the Start Menu on the SOURCE computer, under the Zinstall WinWin Creator folder / "Downloaded files":
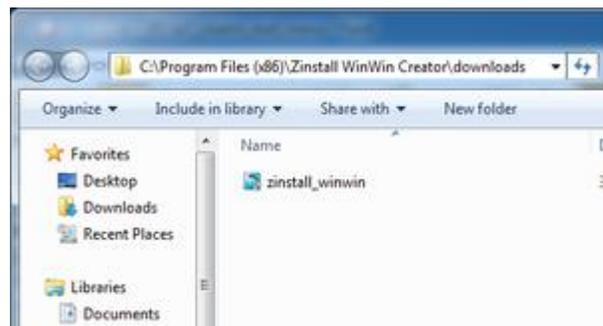
        c.   If Zinstall WinWin was obtained as a packaged CD, install the software from the CD, just like on the SOURCE computer.

3. Run Zinstall

4. Perform product activation:

        a.   When Zinstall WinWin is purchased electronically over the Internet, the serial number is obtained from the License Information email, which is sent from Zinstall Support upon purchase.

        b.   When Zinstall WinWin is purchased as a packaged CD, the serial number is printed on a sticker on the CD package.

        c.   You need to supply the serial number when prompted by the software.

        d.   When Zinstall WinWin runs for the first time on the TARGET computer, you may be asked again to enter the serial number and your email address, as provided at purchase.

5. Press the "Activate" button. An "Activation in progress" message will appear:
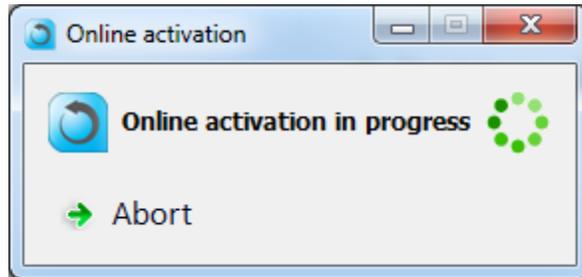
        a.   If the TARGET computer is connected to the Internet, the activation will be performed automatically over the Internet.

        b.   If the TARGET computer cannot be connected to the Internet, the activation can be performed using any other Internet connection ("offline activation"). If this is your case, see *26,* **Web Activation** below for further instructions.

6. After a successful activation, the following message will appear:
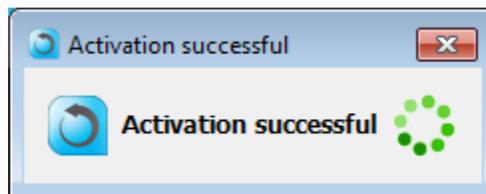
7. The TARGET computer is no longer required to be connected to the Internet

8. Then, click *"This is my New computer"*:
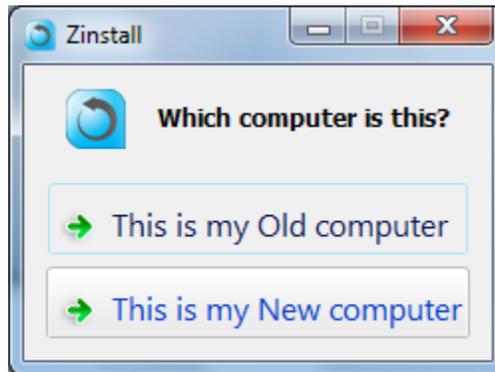
9. You will see the following screen. Continue to the next step.
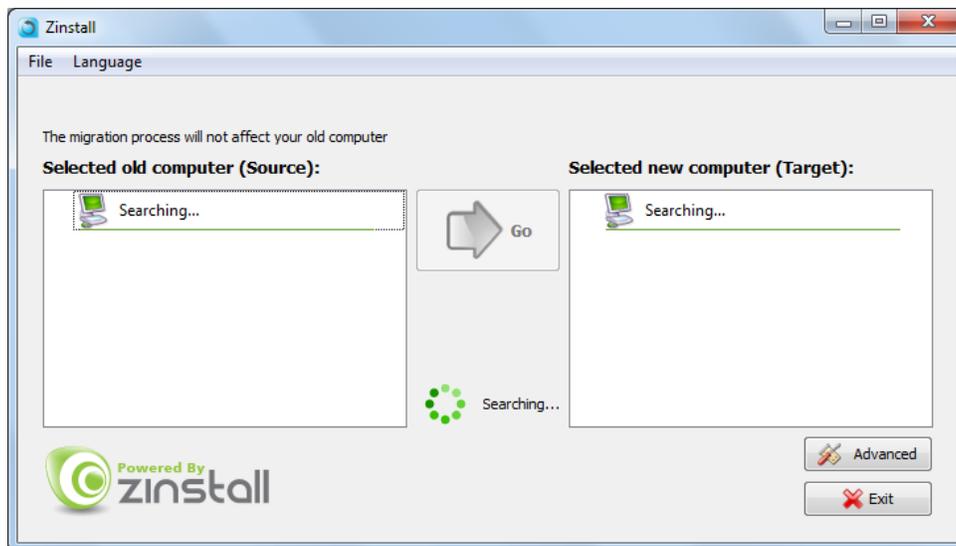
10. Continue to the next step - *Connect the SOURCE and TARGET computers one to another*

Connect the SOURCE and TARGET computers one to another

1. You can connect your computers by either:
   a. Connecting each of the computers to same Internet router or home / office network.
   b. Connecting one computer to another directly with a network (Ethernet) cable. **NOTE:** If you only have one Ethernet cable, you can disconnect it from your Internet router and use it to connect one computer to another directly
   c. See below for a picture of what a network / Ethernet / LAN cable you need looks like:

2. You do not have to perform any configurations – just plug the cables in, and Zinstall WinWin will automatically configure the connection.
3. After the computers are properly connected, they will find each other on the network. You will know that this has happened when a green checkmark appears on the old computer. This may take a few minutes.
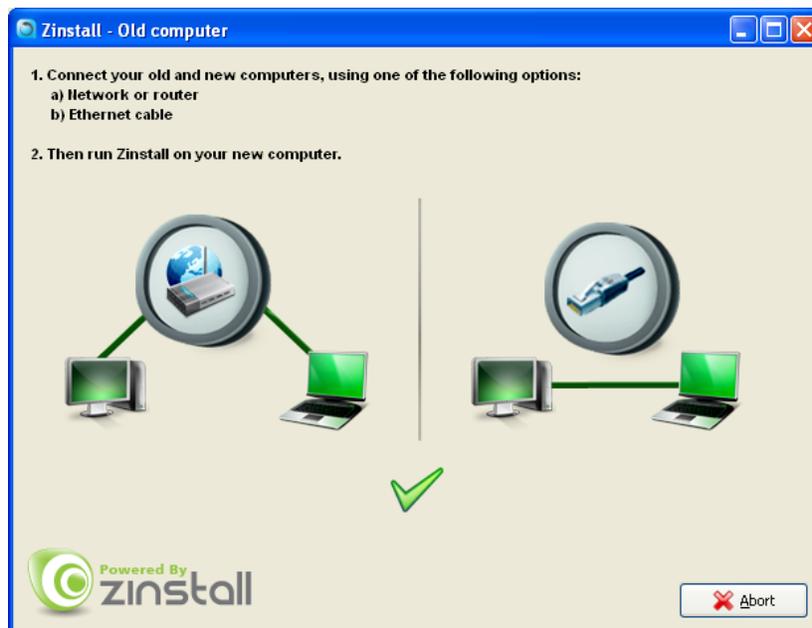
4. Note regarding wireless connections:

   Zinstall WinWin supports performing a migration via a wireless network connection. However, wireless connections significantly increase transfer times, and may disconnect spontaneously, preventing Zinstall WinWin from completing the migration. It is strongly recommended to use a wired connection whenever possible. To ensure the computers connect using the wired connection, consider disabling wireless on the computers.

5. Continue to the next step - *The Migration Process*

The Migration Process

1. Once the migration source is detected, the "Go" and "Advanced" buttons will become enabled on the TARGET computer.

   a. The "Advanced" button allows configuring advanced migration options, mainly recommended for advanced users – if relevant for your task, refer to *page 19,* **Advanced Configuration Options** for detailed explanations.
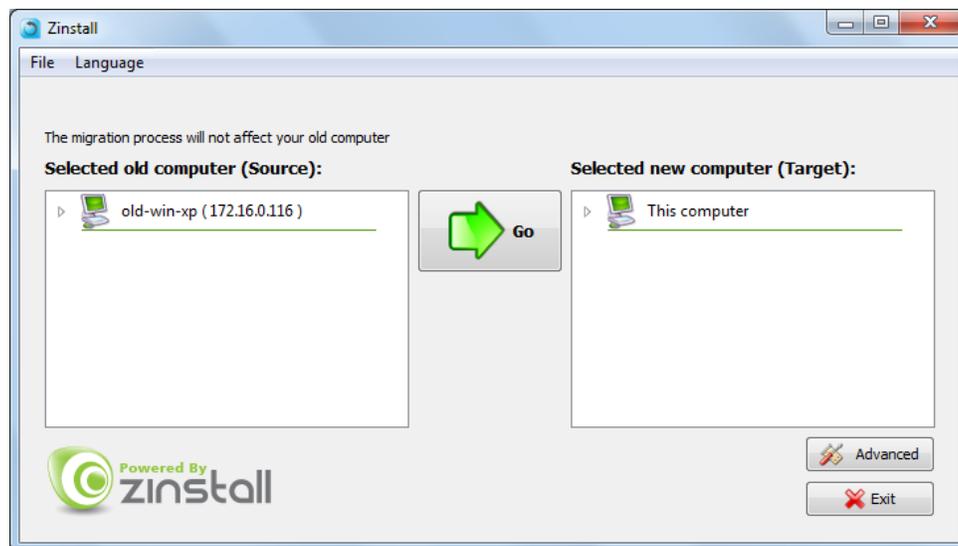
2. Press the "Go" button to start the migration when ready.

3. During the migration process Zinstall WinWin shows how migration stages advance:
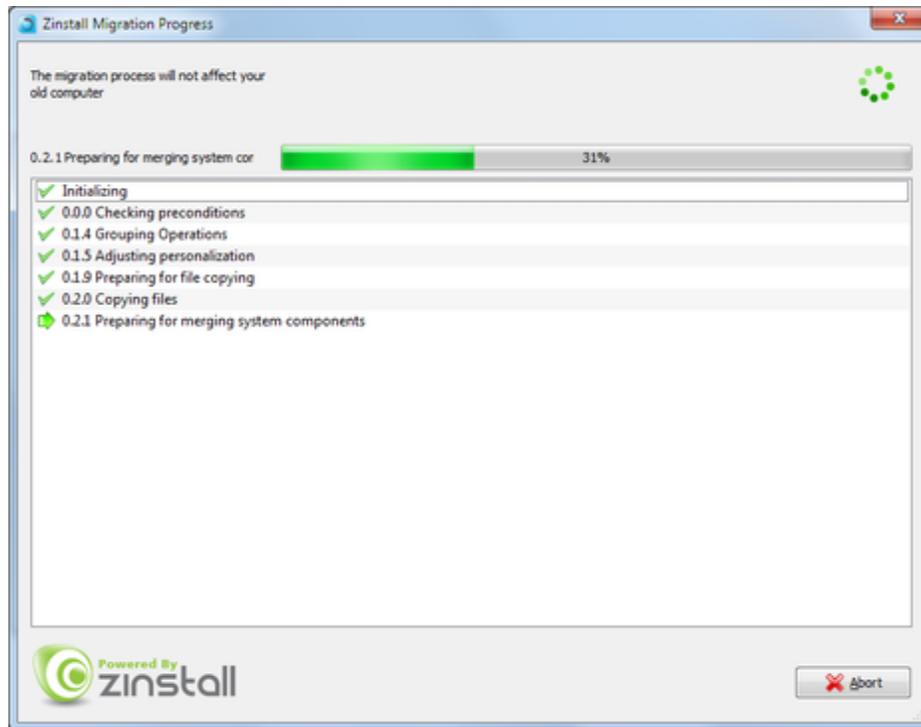
4. No user action is required at these stages.
5. You do not have to remain sitting near the computers – the entire process may take quite a while (sometimes, many hours are required). This depends on several factors, such as the condition of the SOURCE hard drive and the SOURCE computer, connection type (wired or wireless), connection speed (10Mbit/s, 100Mbit/s, 1Gbit/s), processing power of the computers and, of course, the amount of data to be transferred.

6. **IMPORTANT:** Do not touch the computers until you see a message on the TARGET computer confirming that the migration is complete! Even if the progress bar does not advance for a long time, or the computer's display becomes black – this does not mean the computer is stuck. If the screen on the TARGET computer becomes black, move the mouse to turn it back on and see the progress.
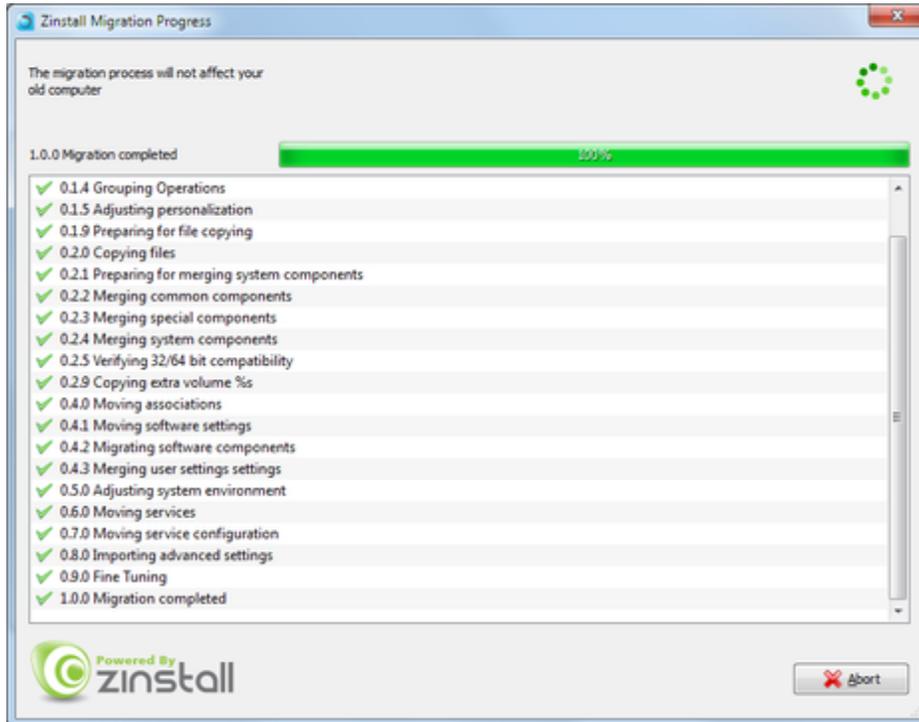
7. Just be patient and wait for the entire migration process to be completed:
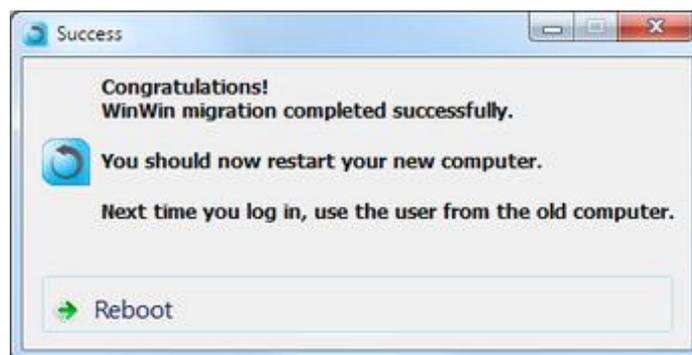
8. If you are transferring between two computers, you can now safely press the "Abort" button on the SOURCE computer.

Advanced Configuration Options

When the Advanced button is pressed, Zinstall WinWin provides several advanced configuration options for tweaking and customizing the migration process.

Manually choosing migration source and target

This option allows choosing migration source and target among several available computers, when there are several computers running Zinstall on the network, or when the source computer has several different hard drive partitions and/or hard drives. Choose which hard drives and volumes to migrate on the source system, and choose the destination drive on the target system.
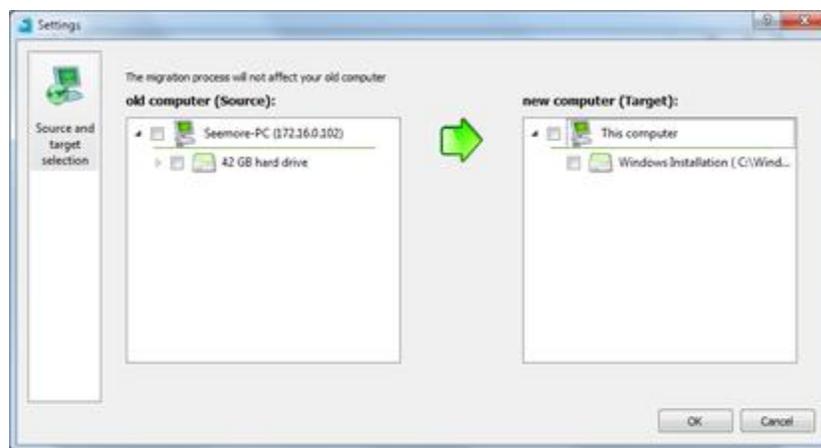
Selective Migration

In all of the scenarios above, the product allows to perform a selective migration: transferring only chosen parts of the source system, instead of all of its applications, settings and files.

IMPORTANT: This is an advanced configuration. Defining selective rules incorrectly may lead to inconsistent migration results. **If you are not sure** about your selective migration, contact a migration specialist before proceeding.

To perform a Selective Migration in one of the scenarios above:

1. Go to the Selective Migration tab in the "Advanced" menu.

2. Press the "Activate Advanced Settings Mode" button to initiate selective migration options.
   NOTE: This process will take a while to complete. Wait until you see the selection list to continue.
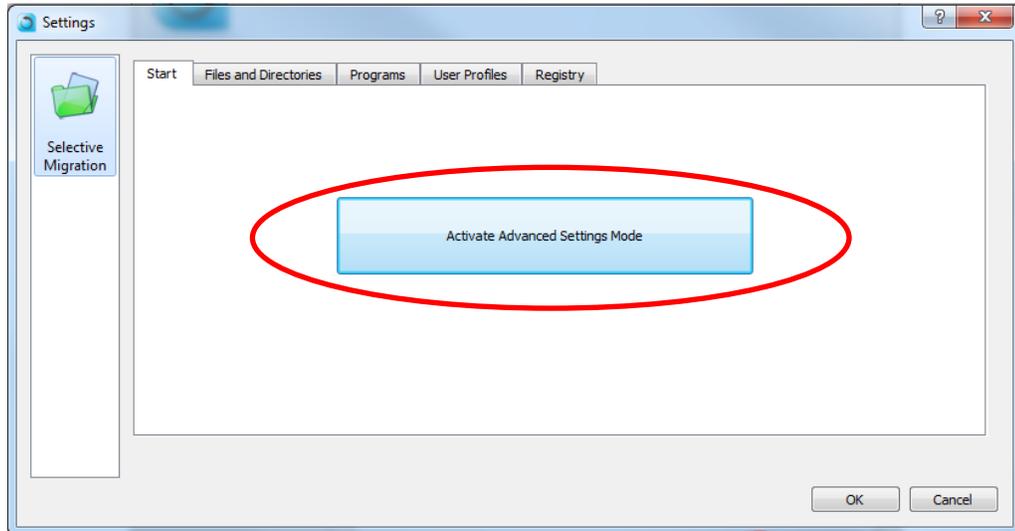
3. Once the initialization is complete, Selective Migration options become available in 4 separate tabs: **Files and Directories**, **Programs**, **User Profiles**, and **Registry**.
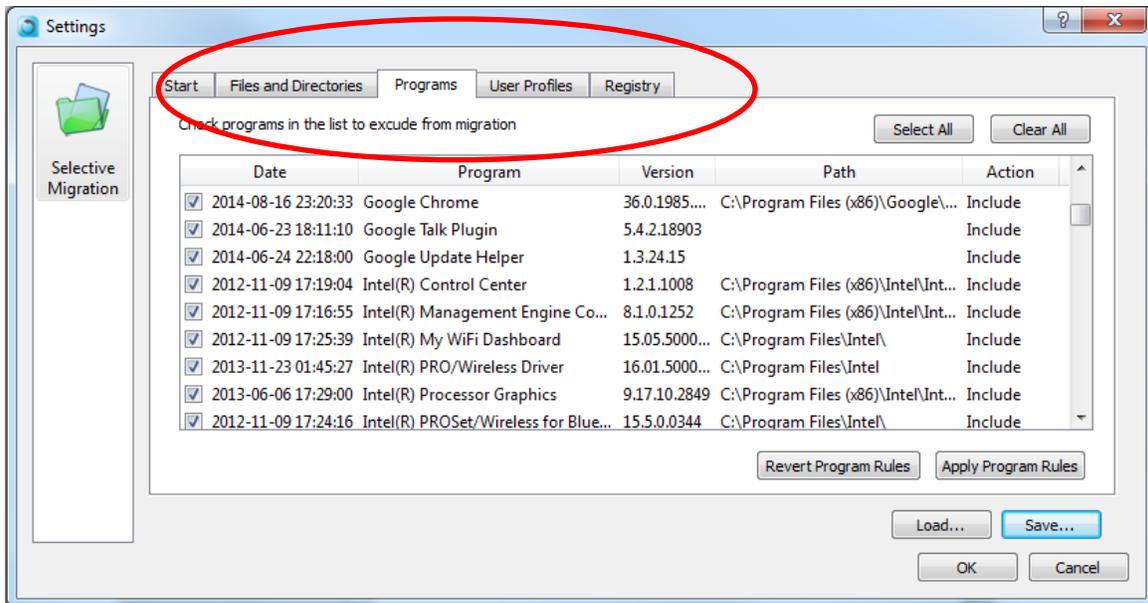
4. **Files and Directories selection:**

   In the Files and Directories tab, Exclude and Include rules can be defined on chosen files or folders.

   a. To add a new rule, browse for, or type in, the path in the path input on the top right, and select Exclude / Include on the left. Then, click the "Add Rule" button.

      a. If you are typing the path manually, make sure to type in the full path, including the drive letter
      b. If you are browsing for the path, make sure to toggle "Directory" or "File" in the left combo box, and choose the appropriate drive letter from the combo box after the word "volume":
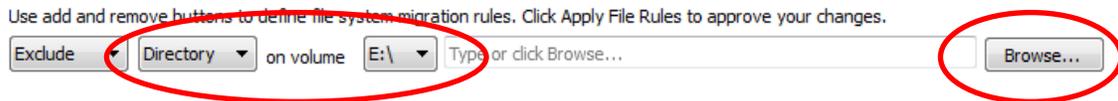
   b. An **Exclude rule** means that the file or folder will not be transferred to the target system. It will appear with an unchecked check box in the Type column, and with the word "Exclude" in the Action column. To toggle the rule to Include, just click the checkbox on the left.
   For example: **excluding** the folder "E:\temp" means that "E:\temp" and all of its contents will not be transferred (while everything else will be).

   c. An **Include rule** means that the file or folder will be transferred to the target system, even if their parent folders have been excluded. It will appear with a checked check box in the Type column, and with the word "Include" in the Action column. To toggle the rule to Exclude, just click the checkbox on the left.
   For example: **including** "E:\temp\subfolder" means that it will be transferred, even though the rest of "E:\temp" will not because of the exclude rule in the previous section.

5. **Programs selection:**

In the Programs tab, you can prevent programs from transferring to the target system.

    a. By default, all programs are marked with a checkmark on the left, meaning that they all will be transferred to the target system. You can also change click the "Clear All" button if you prefer to start with no programs being transferred.

    b. By click the checkmark on the left of each program description, you can toggle whether it will or will not be transferred to the target system.

    c. If you choose to uncheck a program, for which the path to its files is unknown, you will be prompted to provide said path. If you do not know where the files are stored, cancel that prompt. In such case, some of the files may be transferred, but the program will still be excluded from the target system.
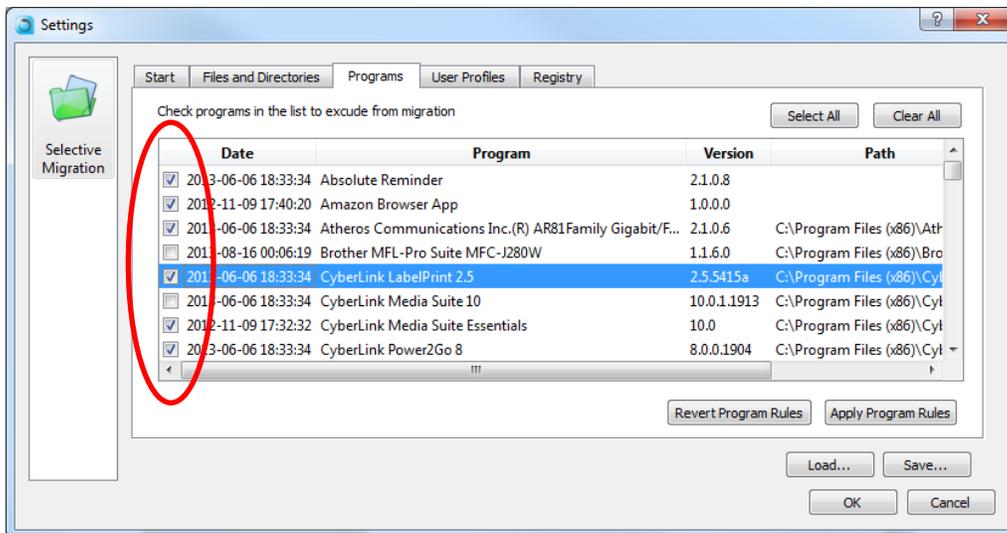
6. At any point, you can save your current rules into a configuration file, by pressing the "Save…" button. You can then load the rules you have defined at a later point, or if you decide to run this migration again.

    It is strongly recommended to **save your rules before starting the migration.**
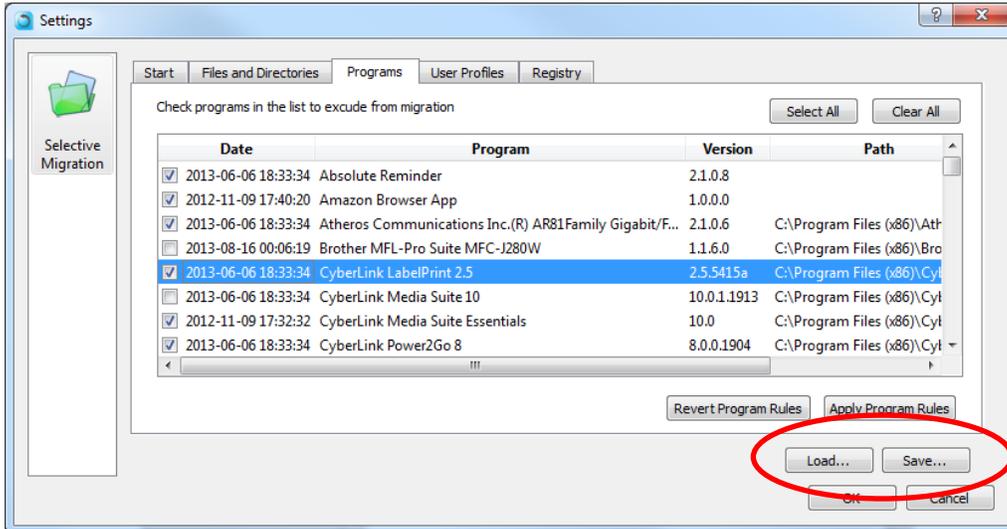
7. Once you have defined the rules as needed, click the "OK" button to return to the Source Selection screen and continue with the migration process.

Zinstall WinWin vs. Zinstall XP7

Both Zinstall WinWin and Zinstall XP7 are able to transfer all applications, settings and files from one computer to another.

The underlying difference between them that Zinstall XP7 provides migration by virtualization (type 2 hypervisor), and Zinstall WinWin provides native migration.

Similar functionality

Both products will transfer the entire SOURCE system to the TARGET system. This includes all applications, settings and files, with no re-installs and without leaving anything behind.

The transferred programs do not interfere with pre-installed programs on the TARGET system, so - for example – it is possible to use Microsoft Office 2007 alongside Microsoft Office 2003 from the OLD system.

Both products support all Windows versions (from XP to Windows 7, 8 or 10), all Windows editions (from Home to Ultimate), both 32-bit and 64-bit systems. See System Requirements for more information.

The differences

Zinstall XP7

Zinstall XP7 provides migration by virtualization.

The environment from the SOURCE system is integrated in an isolated virtual container inside TARGET system. That means that the user can instantaneously switch back and forth between the OLD and NEW environments, intuitively copy text and files between them, as well as directly access files from one another. The user works with applications from both environments– the OLD and the NEW – simultaneously, and can put shortcuts to OLD applications on the NEW desktop, launching these applications directly from the NEW desktop.

As a consequence, Zinstall XP7 also makes it possible to use applications that are natively incompatible with Windows 7 or Windows 8/10 and cannot work on Windows 7/8/10 at all, such as various accounting applications, many proprietary business applications, web applications that require Internet Explorer 6, Outlook Express, etc.

This method of migration is recommended both by us and by leading industry analysts such as Gartner as well as by Microsoft itself.

Zinstall WinWin

Zinstall WinWin provides native migration (contrary to the above mentioned migration by virtualization). After this native migration, the entire environment from the SOURCE system - applications, settings and files - becomes an integral part of the TARGET system. There is one unified working environment - i.e. there is no need to switch from OLD to NEW back and forth.

When to use which?

When the migration is from Windows XP to Windows 7 / 8 / 10, and it is needed to keep the old Windows 7 / 8 / 10 -incompatible applications fully operational on the TARGET system - Zinstall XP7 is the recommended product. It is also recommended to users who dislike the new Windows 7 interface, or want to keep their environment looking and feeling exactly as on the SOURCE system.

When the migration is a PC refreshment (i.e. replacing an old computer with a new one), and there is no need to preserve functionality of the above mentioned incompatible applications, the recommended product is Zinstall WinWin. Migrations from XP to Windows 10, 8 or Windows 7, Windows 7 to Windows 8 / 10 or Windows XP to Windows XP are especially WinWin-recommended.

Appendix A

Web Activation

If a computer is not connected to the Internet, Zinstall WinWin will be unable to activate itself automatically. In this case, Zinstall WinWin will prompt you to perform a Web Activation manually.

1. On any computer with an Internet connection, open a browser (for example, Internet Explorer)
2. Go to www.zinstall.com/activation - It doesn't matter which computer you use for this - you can even use a smartphone.
3. In browser Web Activation form, enter the Activation ID, Serial Number and email as they are shown in the running Zinstall WinWin window.
4. Click *Activate* in the browser.
5. The Web Activation form will show you a Confirmation ID.
6. Enter this Confirmation ID in the running Zinstall WinWin window.
7. Click Activate in the running Zinstall WinWin window.

26
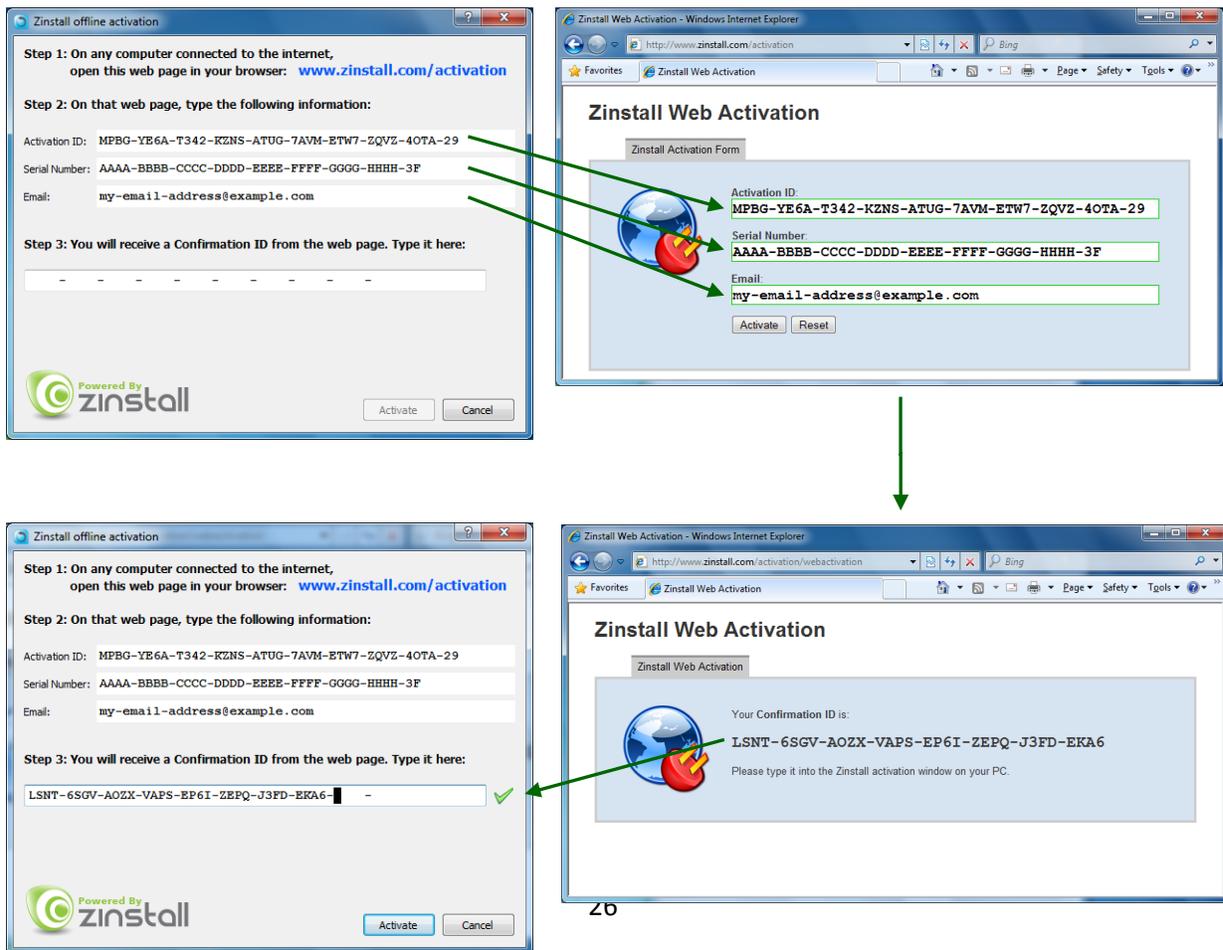
CHKDSK

To perform a Windows CHKDSK hard drive consistency check, and fix possible errors, do the following:

On Windows XP / Vista / 7:

8. Open Start Menu, then "My Computer"
9. Right click on your hard drive, select "Properties"
10. Go to the "Tools" tab
11. In the "Error Checking" box, click on "Check Now"
12. Make sure both options are checked: "Automatically fix file system errors" and "Scan for and attempt recovery of bad sectors"
13. Click Start
14. If you are prompted to reboot, accept.

On Windows 8 / 10:

7. Right-click on the Start button (bottom-right corner of the screen)
8. Select "Command Prompt (Admin)"
9. If prompted to allow the application to run, click Yes.
10. In the window that opens (black window, white text), type the following command. Instead of F:, type in the drive that you want to check (could be C:, D:, E:, F: etc.) Make sure to type a colon (":") after the drive letter:
    ```
    chkdsk  /f  /r  /x  F:
    ```
11. Press enter
12. If you are prompted to reboot, accept.

If you have several hard drives, you need run CHKDSK for each of them.

Converting a FAT32 drive to NTFS file system

If some of the drives on your SOURCE computer are using the FAT32 file system, they should be converted into the NTFS file system in order to ensure a reliable transfer. Do the following for each of the FAT32 partitions:

1. Open a command prompt by going to Start Menu -> All Programs -> Accessories -> Command Prompt
2. In the command prompt, type the following command and press enter:
   convert c: /FS:NTFS
3. If you are asked to provide a "volume label", type in the label the drive has as seen in My Computer. For example, if My Computer has "Drive C: [My Drive]", you need to type in "My Drive".
4. Answer YES to question about "volume in use, do you wish to force?"

5. Answer YES to question about "system volume, schedule for next boot?"
6. Restart your computer
7. When windows begins to start , let it do a disk check (it will show the message "the type of the filesystem is FAT, press any key to cancel disk check" - do NOT press any key at this stage)
8. Once a disk check is done, conversion to NTFS will begin. This may take some time. Wait for it to finish

Troubleshooting Guide

Message Codes

Message Code	Troubleshooting instructions
10	**A currently running application is preventing Zinstall from operating properly.** Close down all applications running on your computer and run Zinstall Migration Suite again. If you are unsure which application to close - restart your computer and run Zinstall again.
11	**No activations remaining** Your license has been activated on too many computers, and cannot be activated on more computers. Another license is required.
13	**You are trying to activate the wrong product with your serial number /** **Anti Virus or Firewall blocking Zinstall from loading** 1. Make sure the serial number you are using fits the product you are trying to activate it with. For example, if you are activating Zinstall WinWin, make sure you are using a WinWin serial. 2. Make sure antiviruses and firewalls are uninstalled or fully disabled.
122	**In-place upgrade attempt without a Windows.old folder** You have chosen the "in-place upgrade" scenario, however your Windows does not have an old Windows.old archive. Without Windows.old, there is nowhere to migrate from. If you have previously created a container of your original Windows, you need to use the "Migration from container to machine" scenario to continue.
190 191	**Critical Windows service is corrupted on your computer** This message code appears when an essential standard Windows component is either malfunctioning or corrupted. Although such malfunctioning / corrupted component is not part of Zinstall software, it needs to be fixed in order to allow proper execution of Zinstall within the Windows installation. When this message is shown, it also includes detailed information about the name of the malfunctioning component and a failure code which can be used for troubleshooting. Troubleshooting: 1. If the problem is caused by Microsoft Windows Management Instrumentation service

	(WMI) – i.e. Microsoft component malfunction – it should be fixed by utilizing Microsoft's support resources. Instructions can also be found on the following page: http://windowsxp.mvps.org/repairwmi.htm
	
	 2. The following instructions initiate a built-in Windows component repair:
	     a. Open Control Panel -> Add/Remove programs
	     b. Click "Add/Remove Windows Components" on the left panel
	     c. Click "Next", and then "Finish" in the dialog that pops up
	     d. Windows will try to reinstall its standard components

252	**The network connection between your computers has been disconnected during the migration.** This may be caused by • Faulty network adapter on the SOURCE computer • Faulty network switch that fails during the migration, because of its failure to handle of large volumes of data copied • Firewall/antivirus/security software interfering with network traffic. Troubleshooting: 1. Make sure the network cable and adapters are properly connected physically. 2. Make sure both SOURCE and TARGET computers are online and not turned off / hibernating 3. Make sure there are no firewalls/antiviruses/security software installed / running on either SOURCE or TARGET computers 4. If you are using a direct cable connection, use a router connection instead. 5. If you are using a router connection, use a direct cable connection instead 6. Close all programs on both computer before starting the migration again If the problem persists, the recommended solution is: 1. Remove the hard drive from the SOURCE computer and connect it to the TARGET computer. 2. Perform the migration using that hard drive as migration source (see User Guide for detailed instructions)
254	**VSS issue** Volume Shadow copy Service (VSS) is a Windows component that allows creating a snapshot of a volume in order to copy it in a consistent manner. For more details, see Volume Shadow Copy Service Overview. Zinstall uses VSS on the source computer in order to create a consistent copy of all its disks. In case of a VSS problem, Zinstall can still perform the migration, but this may cause issues in later stages of the migration, if file system and/or registry activity happens on the source computer during the migration.

	If Zinstall Migration Suite shows a warning about VSS, either close all applications on the source computer in order to lower the chances of problems later on, or resolve the VSS problem before proceeding with the migration process, according to the following guide. How to solve VSS problems? Windows XP 1. On your SOURCE computer, download the vshadow utility from: http://www.zinstall.com/sto/tools/vshadow.exe 2. Open a command prompt and for each volume on your source computer, run "vshadow x:" where "x" is the volume drive letter. For example: "vshadow c:" 　 This should result in a lot of text being printed out. 3. If the VSS is working fine, the output should end with the line "Snapshot creation done." 4. If a VSS problem is still present, the output will end with a detailed problem description and error code. 5. You can use this problem description and error code to either contact Microsoft's support or try and find a solution using available knowledge base and Internet sources. Once you get VSS to work, run the migration again.
262	**General error** Troubleshooting: 1. Perform a CHKDSK - hard drive consistency check - on the hard drive of the SOURCE computer 2. Make sure there are no firewall/antivirus/security software installed / running on 3. Restart both the SOURCE and the TARGET computers 4. Then run the migration again
298	**One or more of the partitions on the computer's hard drive are formatted using the FAT32 file system** For a reliable transfer, FAT32 partitions should be upgraded to the NTFS file system. Troubleshooting: Please do the following for each of the partitions mentioned in the message you have seen. 1. Open a command prompt by going to Start Menu -> All Programs -> Accessories -> Command Prompt 2. In the command prompt, type the following command and press enter: convert c: /FS:NTFS 3. If you are asked to provide a "volume label", type in the label the drive has as seen in My Computer. For example, if My Computer has "Drive C: [My Drive]", you need to type in "My Drive".

	4. Answer YES to question about "volume in use, do you wish to force?" 5. Answer YES to question about "system volume, schedule for next boot?" 6. Restart your computer 7. When windows begins to start , let it do a disk check (it will show the message "the type of the file system is FAT, press any key to cancel disk check" - do NOT press any key at this stage) 8. Once a disk check is done, conversion to NTFS will begin. This may take some time, please wait for it to finish 9. Once the conversion is finished, Windows will reboot itself once more. Your file system is now upgraded to NTFS.
322	**SOURCE and TARGET computers cannot connect** The SOURCE and TARGET computers cannot find each other on the network. Troubleshooting: 1. Make sure a network cable (not a USB cable!) connects the computers 2. Make sure Zinstall Migration Suite is running on both - the SOURCE and the TARGET - computers, and the appropriate Zinstall Migration Suite windows appear on both computers' screens 3. Make sure the network cable and adapters are physically connected properly and securely. 4. Make sure no firewall/antivirus/security software is installed and running on either old or new computers 5. Make sure network adapters are installed properly on both computers – the adapters have to be shown in Control Panel -> Network Connections 6. Make sure network adapters are enabled on both computers (marked as "Enabled" in Network Connections) If the problem persists: 1. If a direct cable connection was used, try using a router connection instead. 2. If a router connection was used, try using a direct cable connection instead. 3. Close all programs on both computers before starting the migration again If nothing of the above helped to overcome the problem, use an alternative transfer method: 1. Remove the hard drive from the SOURCE computer and connect it to the TARGET computer. 2. Perform the migration using that hard drive as migration source - see User Guide for detailed instructions.
328	**VSS warning** To troubleshoot, see Message 254 (above)

375	**Migration from 64 bit to 32 bit is not allowed for this system** Your Source OS is 64 bit, while the target is 32 bit. In order to complete the transfer, upgrade the target Windows to 64 bit. Then, run Zinstall again.

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	Source hard drive or storage location has disconnected during the migration
	The source hard drive (or source storage location) has disconnected from the target machine during the migration process. This can also be caused if the source has a major corruption of its data, preventing the data from being read.
	
	Steps to resolve:
	   - Make sure the source drive is securely connected to the target machine
	   - Run CHKDSK on the source drive (see Appendix above).
	   - Restart the computer
	Then, run Zinstall again.

470	**Windows updates required on target** Your target Windows must be up-to-date before continuing the migration. Run Windows Updates on the target machine until it is fully updated, including Service Packs (such as Windows 8.1 upgrade). Then, run Zinstall again. Note: If the source machine's registry is corrupted, this error may also be shown.
471 **472**	**Source computer has disconnected** Migration source has disconnected during the migration process. This error may also be caused by a hard drive corruption issue on the source machine. Restart both machines, ensure the network cables are properly connected. It is strongly recommended to avoid low quality connections, such as unstable wireless networks. To fix any possible hard drive corruption, run CHKDSK on the source drive (see Appendix above).

Before the Migration

What is a Network / Ethernet / LAN cable?

The cable which is needed to connect the computers directly is a regular network cable. It's also called "Ethernet cable" or "LAN cable". It usually comes packaged with new computers when purchased. Otherwise, it is available in any electronics or computer shop for a few dollars.

Here is what it looks like:

The old computer is broken. Can I still use Zinstall WinWin to transfer?

Zinstall WinWin can only transfer from a working old computer.

However, there is a separate product – **Zinstall Computer Rescue Kit** – which is indeed capable of rescuing even a "broken" computer which cannot be started (though it depends on what exactly is broken).

If the problem is with the computer itself, namely some of the hardware is broken down, or if the computer cannot be turned on, but the hard drive is still "healthy" – here is what should be done:

1. Purchase the Zinstall Computer Rescue Kit at Zinstall.com
2. Take the hard drive out of the old computer
3. Connect that hard drive to the new computer (either internally or externally using a simple USB adapter, available at any computer store for a couple of dollars)
4. Run Zinstall Computer Rescue Kit
5. When prompted, select "I only have this computer" and "I am migrating from another hard drive"
6. If the drive is functional and contains a correct Windows installation, Zinstall Computer Rescue Kit will recognize the drive as migration source and allow you to transfer the environment to the new computer.

Zinstall WinWin disappears after showing the initial "Loading…" screen

This type of behavior means that a third-party application is preventing Zinstall from running. This is usually caused by security software which is not configured correctly, and simply terminates Zinstall without even asking the user.

Uninstall the security software from the computer, or configure it in a way that would allow Zinstall to run. Then, run Zinstall WinWin again.

During the migration

The Old and New computers cannot find each other – "searching" for more than 5 minutes

See *Message Codes,* **SOURCE and TARGET computers cannot connect** above for detailed troubleshooting instructions.

After the Migration

Software activation

In some cases, third-party vendors require re-activation of their software, when it determines that system's component(s) are changed. Vendor policy in this regard varies and depends on several factors, such as: which and how many hardware components were changed, and which particular edition of the software is used.

In most cases, software re-activation can be done online through the software itself (when prompted to re-activate), or via the vendor website.

Example of software requiring re-activation is Microsoft Office. As stated above, Microsoft Office supports fully automatic re-activation online.

Incompatible applications

When using Zinstall WinWin to transfer between Windows XP / Vista / 7 / 8 / 10 and Windows 10, 7 or Windows 8, or between 32-bit and 64-bit systems, you may find that some of the applications are inherently incompatible with the TARGET system. For example, an application using 32-bit drivers will not run on a 64-bit system "out of the box", and software such as Outlook Express cannot be used on Windows 7 or 8 under any circumstances.

When you encounter such applications, you should contact the software vendor to check whether a different version of the software, compatible with the TARGET system – and how the incompatibility can be fixed. Alternatively, some applications can be made to run using the Windows built-in "compatibility mode" setting (configurable by right-clicking on the application and selecting "Properties").

If your primary concern in the migration is to continue using legacy/incompatible applications, consider using Zinstall XP7 to perform the migration.

After a successful migration, data still cannot be found on the target computer

If your migration was successful (i.e., you've received the "Congratulations!" message after the transfer), but you still can't see your applications/data on the target computer, this means that you are using the wrong username to log in.

If your old computer was in a domain, make sure that your target is added to the domain before the **migration**. If you have forgotten to add the target machine to the domain before the migration, do that now, then log in with the same domain user on both machines, and perform the migration again to update the machine.

If your old computer was not in a domain, then most probably you have multiple users configured. Make sure to select the same one as you have had on the old machine and log in as that user to find your data.

Transferred applications do not run like on the old computer

If you are having trouble running the applications you have transferred, this may be caused by an incompatibility issue. If this happens, you need to configure your application to run in Windows Compatibility Mode:

- Right-click on the application's icon and select Properties
- Go to the Compatibility tab
- Check the checkmark next to the "Run this program in compatibility mode" option
- Select the entry for your old computer's operating system (for example, "Windows XP") from the drop-down menu
- Then, click OK at the bottom and run the application

You only need to do this once for each application – not every time.

How to revert the TARGET computer to its original state before the migration

If you would like to revert the TARGET computer to its original state, before the migration, this can be done using Windows System Restore standard procedure.

This option is useful if you would like to perform the migration "from scratch", or if you have encountered a problem with the new computer you cannot fix in any other way.

Windows System Restore is a built-in Windows service which allows you to revert all changes made to applications, system, drivers etc. You can select the date to which you want to revert. System Restore does not change or revert documents and non-application files. To revert the computer to its original state, before the migration, revert to a System Restore snapshot taken just before the migration. It is recommended to use the snapshot taken automatically before the migration is started – it has the word "WinWin" in its description.

For detailed instructions on how to use System Restore, please see the following guide:
http://www.zinstall.com/support/common-issues-and-solutions-1/revert-computer-original-state-system-restore

Applications using an SQL server database installed on a client-side computer

In some rare cases, when SQL server database engine is installed on a client-side computer, such applications may not function correctly after the transfer.

To resolve this issue manually, mark the SQL server service to launch as the "SYSTEM" user.

Alternatively, go to *"Control Panel" -> "Add/Remove Programs"*, and select "Repair" for the required application.