

WhatSize User Guide

WhatSizeMac.com

Version 4.9.8

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1 Welcome to WhatSize

1.1 Overview

WhatSize is a simple shareware tool that lets you view and reclaim disk space on your Mac.

Here is an overview of the dominant features that make WhatSize a simple, useful file system tool for Macs:

- **Measure** WhatSize quickly measures the size of your hard drive and allows you to sort, filter, and refine the results. The files and folders are automatically sorted by size with the biggest sizes first.
- **Chart Display** A visual display of the contents of your hard drive that enables you to drill-down and discover how your disk space is being used.
- **Cleaning Tools** Intelligent tools that suggest ways you can reclaim disk space.
- **Find Duplicates** Identify duplicate files on your system so that you can remove them. You would be surprised at how many useless files might be laying around on your hard drive.

1.2 How is WhatSize different than Finder?

Finder lays the groundwork, but along with an enhanced Finder-like view, WhatSize also gives you more insight, tools, and a visual depiction of your disk allocation. Try it out with the free download and you'll see what we mean.

1.3 System Requirements

Mac OSX v10.4+

1.4 About this User Guide

This User Guide will give you instructions on how to use the WhatSize application for your Macintosh computer. Here are some helpful links online as well:

- This User Guide:
 - http://WhatSizeMac.com/software/whatsize/WhatSizeUserGuide.pdf
- FAQ Online:
 - http://WhatSizeMac.com/software/whatsize/faq.php
- Release Notes Online:
 - http://WhatSizeMac.com/software/whatsize/release/notes.html
- Download WhatSize:
 - o http://WhatSizeMac.com/whatsize.dmg

2 Downloading and Installing WhatSize

2.1 Downloading

- 1. Go to http://WhatSizeMac.com
- 2. Click on the icon of the application or the link that says "WhatSize vX.X.X".
- 3. Or you can go directly to the URL for the latest version: http://WhatSizeMac.com/whatsize.dmg

2.2 Installing

- 1. Double-click on the .dmg file that has downloaded. This will mount and open a folder.
- 2. Move the WhatSize application into your Applications folder or the destination of your choice by clicking on it and dragging it. This will copy WhatSize to your local hard drive.
- 3. Go to the folder where you moved WhatSize and double-click on the WhatSize application to start it.

2.3 Free Version vs. Licensed Version

The free version will measure drives up to 20GB and does not have access to the System Administrator functionality.

The licensed version has no limit on the size of the volume it measures, has access to the System Administrator functionality, and supports the development of new features. Each license can be installed on two computers, for instance a desktop and a laptop.

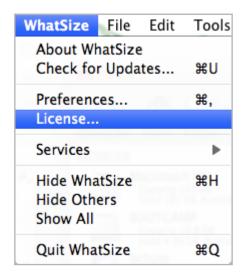
2.4 Purchasing a License

There are two ways to purchase a license:

- 1. Within the application, as detailed below, or
- 2. Go to http://WhatSizeMac.com and click on the "purchase" link.

To purchase a license within the application:

- 1. After downloading and installing WhatSize, open the application.
- 2. In the menu at the top, click on "WhatSize".
- 3. Select "License".



4. Click the "Purchase" button. This will open a new window and take you through the order and checkout process.



5. After your purchase, an email will be sent to you with your license key to register the application. The key pieces of that email are your "Serial Name" and "Serial Number". When you register your copy of WhatSize, you must enter these two pieces of information exactly as they appear in the email.

2.5 Registering WhatSize

- 1. To register WhatSize, follow Step 1-3 above to open the "License" panel of Preferences.
- 2. Click on the "Add License..." button.



- 3. You'll see a new modal slide open. Enter your "Serial Name" and "Serial Number" *exactly* as they appear in your registration confirmation email and click "Save". They'll be in this format:
 - a. Serial Name: John Smith
 - b. Serial Number: WHATSIZE4-XXXX-XXXX-XXXX-XXXXX-XXXXX

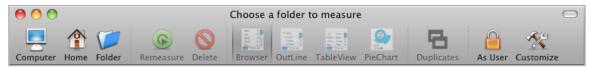


4. If successful, you'll now see your name listed in the license table. It will look something like this:



3 The Interface and Using WhatSize

3.1 Toolbar



Seen above is the default view when you first open WhatSize. From left to right:

- **Computer** Quickly scan your entire computer.
- **Home** Quickly scan your home folder.
- Folder Choose a specific folder to scan.
- **Remeasure** Remeasure a folder or drive that you've already scanned. Same as a Refresh (right-click).
- **Delete** Delete a file or folder directly from within WhatSize. This will give you a warning and allow you to "Cancel" or "Move to Trash". Once something has been moved to your Trash, you can go to your Trash to retrieve it until your Trash has been emptied.
- Browser This is the default view that shows your files and folders in columns.
- **Outline** This view shows your files and folders in a list or "tree" view.
- **TableView** This view pops a new window that shows your files and folders in a table and also allows you to filter the results. See the section in this User Guid on "Table View" for more information on sorting and filtering.
- Duplicates This pops a new window in Table View that gives you quick access to the "Find Duplicates" tool. See the "Finding Duplicates" section of this User Guide for more information.
- **As User** By clicking this icon, you toggle to the "As Admin" privileges and are prompted to enter your system password. This is only a feature of the licensed version. See more information in the "Measuring as an Administrator" section of this User Guide.
- Customize This allows you to customize the toolbar.

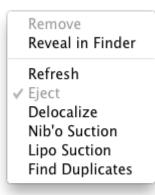
3.2 Left Pane



The left pane shows devices and folders, their size, and how many files and folders they contain. You can scan a disk or folder by clicking on it from the left pane.

- The Remeasure icon (\bigcirc) allows you to remeasure a scan. Once you click the remeasure icon, it turns into an "x" (\boxtimes) that allows you to cancel a scan.
- The "Reveal in Finder" icon () opens a Finder window with that disk or folder highlighted.
- The "+" button in the lower left allows you to add commonly used folders to the left pane.
- The "-" button in the lower left allows you to remove folders from the left pane. You can always add them back later.

Right-Click in the Left Pane



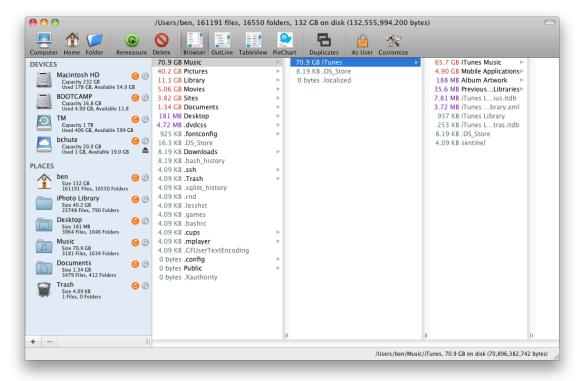
By right-clicking on one of the volumes or folders in the left pane, you can see the menu above.

- **Remove** If you added this folder to the left pane using the "+" button, the "Remove" option will remove it from the left pane as if you'd clicked the "-" button.
- **Reveal in Finder** This opens a new Finder window to that file or folder's location.
- **Refresh** This refreshes the scan.
- **Eject** This allows you to eject, or unmount, drives that can be ejected, such as a USB drive.
- **The Tools** Please see the "WhatSize Cleaning Tools" section of this User Guide for more information on "Delocalize", "Nib'o Suction", "Lipo Suction", and "Find Duplicates".

3.3 Main Views

The main viewing area is different depending on whether you have the *Browser, Outline,* or *PieChart* view selected. Note that the *Table* view pops a new window.

3.3.1 Browser View



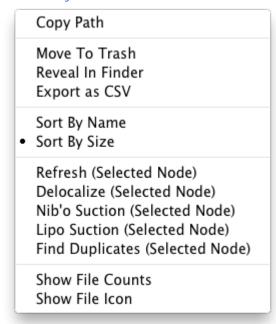
The Browser view is like the Finder's column view, but it also shows you the size of the folders and files, ordered from largest size to smallest. You can click on a folder to reveal the contents within that folder in the next column.

3.3.1.1 The Coloring Scheme

The files and folders are colored to help quickly distinguish the sizes:



3.3.1.2 Right-Click in Browser View



By selecting a folder and right-clicking, you will see the menu above.

If you select a file and right-click, the tools will be grayed out ("Refresh" through "Find Duplicates").

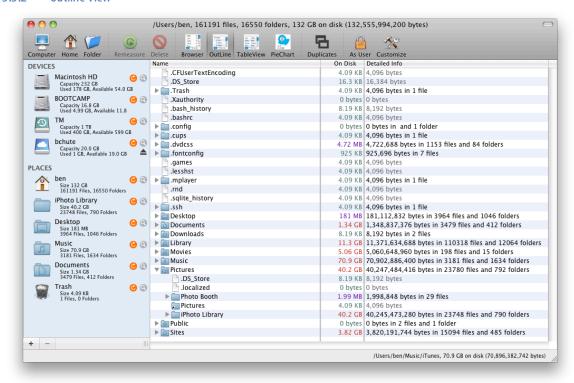
If you have no files or folders selected and right-click, everything will be grayed out except "Sort by Name", "Sort by Size", "Show File Counts", and "Show File Icon".

With that said, here is an explanation of each option:

- **Copy Path** This copies the path to the selected file or folder to your clipboard.
- **Move to Trash** This moves the file to your Trash. You can go to the Trash to view or recover deleted files until the Trash has been emptied. This action is the same as if you'd clicked the "Delete" button in the Toolbar.
- **Reveal in Finder** This opens a new Finder window to that file or folder's location.
- Export as CSV This exports only the selected files and folders to a CSV file to the location of your choice.
 The columns in the CSV file are:
 - INODE A unique system identifier.
 - LOGICAL_SIZE The logical size summarized such as "1.47 MB". Please see the "Files and Folder Sizes" notes in the FAQ for more information on the logical size.
 - \circ LOGICAL SIZE B The logical size in Bytes.
 - PHYSICAL_SIZE The physical size summarized such as "2.5 GB". Please see the "Files and Folder Sizes" notes in the FAQ for more information on the physical size.
 - PHYSICAL_SIZE_B The physical size in Bytes.
 - FILE PATH The path to the file or folder's location.
- Sort by Name Sort the column alphabetically by name.
- **Sort by Size** Sort the column by file size, biggest to smallest.

- The Tools Please see the "WhatSize Tools" section of this User Guide for more information on "Delocalize",
 "Nib'o Suction", "Lipo Suction", and "Find Duplicates".
- Show File Counts For each folder, this option shows/hides a count of the number of files within.
- Show File Icon Show or hide the file or folder icon to the left of the file or folder name.

3.3.2 Outline View

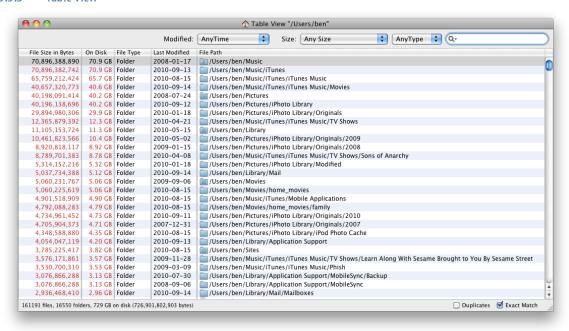


The Outline view is like the Finder's outline view, but it also shows you the size of the folders and files, as well as the exact number of bytes, the number of files, and the number of folders. You can click on the disclosure triangle to the left of a folder to reveal the contents within that folder.

3.3.2.1 Right-Click in Outline View

Right-clicking in Outline View is the same as in Browser View except without "Show File Counts" nor "Show File Icon" because this information is already displayed in the view. Please see the Browser View section in this User Guide for a description of the menu options.

3.3.3 Table View



The Table View includes more functionality than Browser or Outline view. It shows you the size, file type, last modified date, and file or folder path name, but it also enables you to filter the results by the options at the top in any combination.

3.3.3.1 Right-Click in Table View



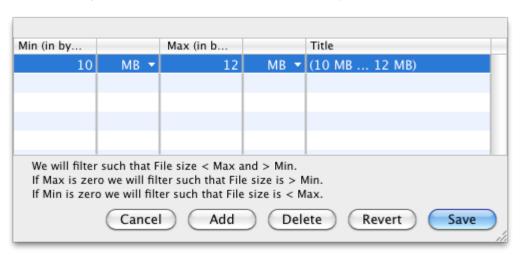
All of the right-click menu options you see above are explained in the Browser View section of this User Guide, except the two additional options of "Sort by Last Modified" and "Selection Size".

- Sort by Last Modified: This allows you to sort the list by the date the file was last touched.
- Selection Size: Select one or multiple files and choose this option to see the size of the selected files.

3.3.3.2 Table View Filters

- **Modified** This is the "last modified" date. You can choose to filter for files that were modified:
 - Today Files touched today.

- Yesterday Files touched yesterday.
- Last Week Files touched within the last week.
- Last Month Files touched within the last month.
- Last 3 Months Files touched within the last three months.
- Last 6 Months Files touched within the last six months.
- Last Year Files touched within the last year.
- Before 1 Year Files touched more than one year ago.
- Before 2 Years Files touched more than two years ago.
- Before 5 Years Files touched more than five years ago.
- Before 10 Years Files touched more than ten years ago.
- **Size** Filter by the size of the file:
 - >1 MB − Files larger than 1 MB.
 - > 10 MB Files larger than 10 MB.
 - \circ > 100 MB Files larger than 100 MB.
 - > 1 GB − Files larger than 1 GB.
 - o (1 MB ... 10 MB) Files from 1 MB to 9.99 MB in size.
 - (10 MB ... 100 MB) Files from 10 MB to 99.99 MB in size.
 - (100MB . . . 1 GB) Files from 100 MB to 999.99 MB in size.
 - Customize Selecting this option pops the modal shown below. This allows you to enter a custom size filter.
 - Double-click on the Min and Max numbers to enter a new value.
 - Click on the arrow next MB to choose another file size like GB or KB.
 - You can add or delete as many custom filters as you'd like.
 - Any saved filters will now show in the "Size" filter drop-down menu.



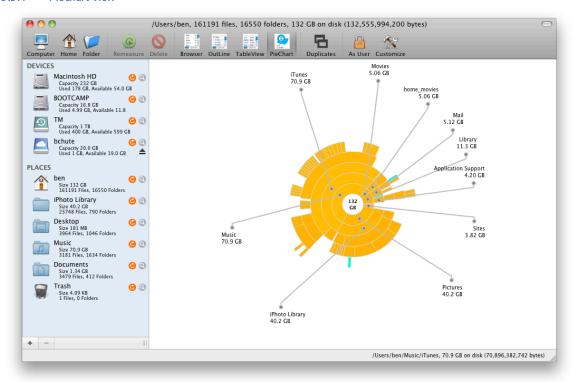
- **AnyType** This allows you to filter by "Folder" or "File".
- **Keyword Search** As you type in the box (screenshot below), the results are dynamically filtered. Clicking on the magnifying glass shows you the last searches for which you hit the "return" key.



• **Duplicates** — This checkbox in the lower right corner of the Table View will initiate the "Find Duplicates" tool. See the "WhatSize Tools" section on "Finding Duplicates" for more information.

• **Exact Match** — This checkbox applies to the keyword search and applies to file names only. It will only return exact match results if checked, including case sensitivity and file extension, such that if you type in "document.doc" it will NOT return "Document.doc".

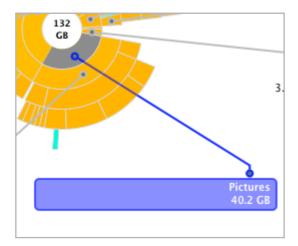
3.3.4 PieChart View



The Pie Chart view shows you the contents of the selected folder in a visual, hierarchal format.

Here are some tips for this view:

- Roll over a pie slice to show what it represents.
- Double-click on a pie slice to drill-down to the contents of that folder.
- Double-click anywhere in the white area to drill out, or move up in the file hierarchy.



Screenshot above: The bands that ripple out from the band nearest to the center represent the contents of
that folder. For instance, in the screenshot above, all of the yellow bands radiating out from the purple
"Pictures" chunk represent the separate sub-folders and files within the "Pictures" folder. This
understanding will help with your ability to drill-down in to content.

3.3.4.1 Right-Click in PieChart View

Note that there is no right-click menu in PieChart View.

3.4 Status Bar

This is the strip across the bottom that shows the folder you are viewing as well as the overall usage of the disk where that folder is located. So if I have the "Music" folder selected in the left pane, I'd see "Music - Capacity 232 GB, Used 179 GB, Available 53.6 GB" indicating the Music folder on a Macintosh HD with capacity of 232 GB.

3.5 Preferences



- **General** This checkbox allows you to "disable auto remeasure". WhatSize is smart enough to detect changes to the file system and then automatically updates the applicable file or folder. If you have a very large file system, disabling auto remeasure may improve the performance of WhatSize. If disabled, you must simply "Refresh" a scan manually.
- **License** This is described in the "Purchasing and Registering a License" section in this User Guide.
- **Update** This allows you to automatically check for new updates on a weekly basis. If a new update is found, you will be asked for your permission to download and install the new version.
- **Sudo** This checkbox lets you remove files as sudo. This is for more advanced users who understand the risk of removing files as sudo, or System Administrator. By default, this is disabled to help prevent users from removing files or folders that are critical to the system.

4 WhatSize Tools

4.1 Finding Duplicates

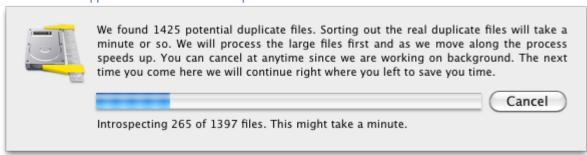
WhatSize includes the ability to find and remove duplicate files such as photos, music, documents, etc.

4.1.1 How to Find Duplicates

You can initiate the "Find Duplicates" tool in a number of different ways:

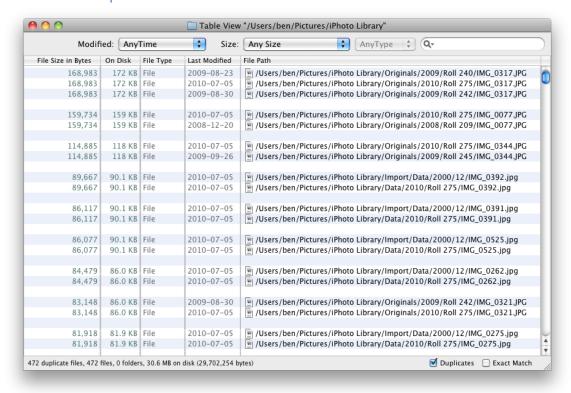
- To find all duplicates in the currently selected volume or folder in the left pane:
 - Click the "Duplicates" icon in the toolbar.
 - In the "Tools" menu at the very top, choose "Find Duplicates".
 - Right-click on the selected folder or volume and select "Find Duplicates". This will find all
 duplicates in that folder or volume.
 - Use the keyboard shortcut Cmd+9.
- In the main viewing area, you can also select a specific folder, then right-click and choose "Find Duplicates (Selected Node)". This will find duplicates only within that folder.

4.1.2 What Happens When You Run "Find Duplicates"



When you run "Find Duplicates", a modal lets you know how many potential duplicate files it found and shows a progress bar to let you know when the scan will be complete.

4.1.3 The "Find Duplicates" Results



The results window looks and functions like the *Table View*. For information on sorting and filtering in this view, please see the section in this User Guide on the *Table View*.

The difference from the normal *Table View* is that the duplicate files are grouped together as in the screenshot below:

4.1.4 Removing Duplicate Files

You can move a duplicate file to the Trash and later recover it, if needed, until the Trash is emptied.

- In the "Tools" menu at top, choose "Move to Trash".
- Right-click on the applicable file and choose "Move to Trash".
- Use the keyboard shortcut Cmd+Delete.

4.1.5 The Mechanics Behind Finding Duplicates

Two or more files are considered to be duplicates if they have the same md5 hash value. To figure out the md5 hash value can sometimes be a long and expensive operation, so WhatSize builds the hash values database in the background for convenience. If the files are later modified, WhatSize is smart enough to know the md5 hashes need to be recalculated.

What Size skips the following file names: .svn, build, cvs, *.app, *.framework, *.bundle, */library/caches/

4.2 WhatSize Cleaning Tools

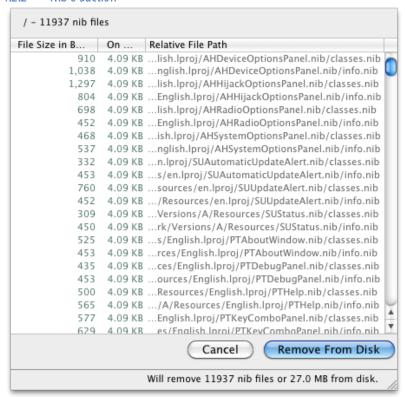
What Size includes several tools that help you to remove unnecessary files from your Mac and reclaim disk space.

4.2.1 Delocalizer



Delocalizer assists you in removing unwanted locales for languages that you do not use.

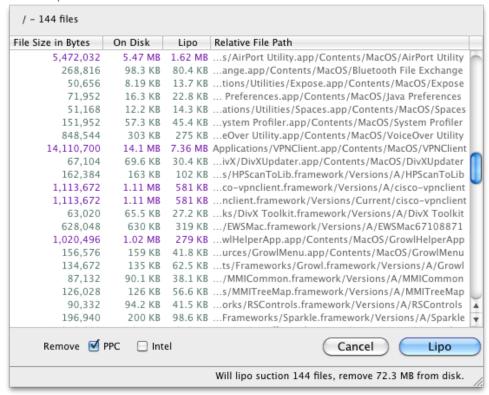
4.2.2 Nib'o Suction



Nib'o Suction can remove unnecessary artifacts of the application development process.

Specifically, "Nib files" (files with a .nib extension such as interface.nib) are used by the Apple development toolkit, Xcode, to model the User Interface in Mac Applications. However, sometimes developers can simply forget to remove these extra nib's before shipping the product. The nib files are actually folders with many files inside.

4.2.3 Lipo Suction



Lipo Suction is a cleaning tool that removes unnecessary architecture files.

Specifically, when Apple moved to Intel and Universal binaries, the Mac binaries now contain legacy information about the previous architectures. For instance, most of the executable files currently on your Mac contain machine symbols for PowerPC, Intel, Intel 64bit, or PowerPC 64bit. When the Operating System runs these binaries, it will choose the proper architecture, so it is safe to remove the other unused options.

For example, on an Intel machine, the Operating System will try to load the Intel symbols of the program and ignore the PowerPC portion. So in this example, WhatSize knows it can remove the PowerPC portions as unnecessary. Or if you are running a PowerPC machine, you can safely get rid of all Intel or Intel 64bit symbols since the system will never use them in a PowerPC machine.

Attention to the details was key in implementing this feature. WhatSize does not allow the removal of symbols of the host machine. For example, WhatSize will not remove Intel symbols on an Intel machine. Nor will it remove symbols from a binary that has only one architecture, usually older PPC-only applications.

4.3 Measuring as an Administrator



WhatSize allows a user to measure the hard drive as a System Administrator (or "root"). This gives you the ability to measure all files on a given Volume or Folder regardless of permissions. This is useful when measuring an entire Volume.

IMPORTANT NOTE: This function should be used with caution and we recommend that you have a backup, a clone, or a time machine of the file system on which you will be working.

4.3.1 Initiating the "Measure as Administrator"

To initiate the "Measure as Administrator" functionality, click the lock icon in the toolbar to toggle between a "User" and an "Admin".

WhatSize will pop a window asking for you to authenticate through the Mac Security framework, which will then promote you to Administrator status. This will allow you to view, measure, and delete files and folders that might belong to the System or other users of this machine.

4.3.2 For Advanced Users

What Size allows Admin users to move items to the Trash, but only items that reside under "/Users" in the file system. This is done to prevent removal of critical files by mistake, for instance any Unix-like files or folders. If you insist on removing these types of files, please use the "Copy Path" option (right-click) and remove the file via the Terminal application.

See also the "Sudo" option in the Preferences pane.

5 Frequenty Asked Questions (FAQ)

What kind of technology powers WhatSize?

Developed in Cocoa (Objective-C), WhatSize makes use of multithreading, low level UNIX file system APIs, C programming, and Objective-C method implementation (IMP) caching to achieve speed, a low memory footprint, and stability that is unmatched by other tools.

How are the files sizes calculated?

What Size measures the *Physical* and *Logical* size of each file and displays the *Physical* size. This is actually the proper way to show how much disk space a file is using. This is the same value you see when you perform "Get Info" on a file in Finder.

The *Block* size is the smallest chunk of information the operating system will use to store data. The default is usually 4KB, but this value can vary between 4KB to 256KB.

The *Logical* size is the actual size of the file, regardless of *Block* size.

As an example, if you create a simple text file with one character in it, the file's *Logical* size will be one byte (1B), but because the *Block* size is 4KB, the *Physical* size of the file — the actual space used on your hard drive to store this file — is 4KB.

How are folder sizes calculated?

WhatSize takes into account the folder size itself and thus the WhatSize measurement is a bit bigger than the Finder's. The folder size is what the file system is reserving for the folder itself. For example, a folder with 25,000 zero size files will still take roughly 1MB. The 1MB is used by the Operating System behind the scenes to manage the folder contents.

What is a bit, a byte, a kilobyte, a megabyte, etc?

One Bit is one tiny piece of information.

One B (Byte) = Eight Bits

One KB (Kilobyte) = 1024 Bytes (2^{10})

One MB (Megabyte) = 1024 KB = 1,048,576 Bytes (A CD is usually around 600 MB)

One GB (Gigabyte) =1024 MB = 1,073,741,824 Bytes (A DVD is usually around 4.5 GB)

One TB (Terabyte) = 1024 GB = 1,099,511,627,776 Bytes (About 230 DVDs or 1,750 CDs)

One PB (Petabyte) =1024 TB = 1,125,899,906,842,624 Bytes (About 230,000 DVDs or 1,790,000 CDs)

Why is my brand new 150GB external hard drive only showing 139GB available?

So you license a copy of WhatSize and go and measure your brand new empty Volume. The numbers don't seem to match. You just bought and installed a 150GB hard drive, but after formatting the Volume, WhatSize shows it as only 139GB or less available. Even though this Volume is empty, the Operating System and the File System took a nice 11GB for their data structures. This is normal. Actually, the bigger the drive, the more space the File System will need.

I accidentally deleted a file. How can I recover it?

Open up the Trash and move the file back to its proper location.

I lost my license email. How can I register my copy of WhatSize?

We're working to automate this, but for now please email whatsize@id-design.com with the email address you used to purchase the license.

How can I view the file size of several selected files?

As of 4.9.8, in all views, you can select the file or folder and use the keyboard shortcut Cmd + 1 (that is a letter capital i, not the number 1). In the Table View, you can also right-click and choose "Selection Size".

Is quicklook enabled?

As of 4.9.8, yes, simply select a file and hit the spacebar just like in Finder.

6 WhatSize Keyboard Shortcuts

This is a summary of the keyboard shortcuts available in WhatSize, taken from the menus at the top from left to right.

 $\mathcal{H} = \text{command key}$

 $\mathbf{\hat{u}} = \mathbf{shift} \ \mathbf{key}$

 \leq = delete key

Shortcut	Function	From Menu
₩U	Check for Updates	WhatSize
₩,	Preferences	WhatSize
жн	Hide WhatSize	WhatSize
₩Q	Quit WhatSize	WhatSize
₩	NOT WORKING	File
₩0	Open a folder	File
₩W	Close the window	File
₩P	Print the main viewing area content	File
₩A	Select all files in currently selected folder	Edit
☆ЖН	Measure your Home folder	Tools
ΰ₩M	Measure your Computer	Tools
ជ∺ប	Remeasure Selection	Tools
₩.	Stop Measurement	Tools
Ω₩Α	Measure as Administrator	Tools
☆₩(Copy Path	Tools
#≪	Move to Trash	Tools
☆Ж(Reveal in Finder	Tools
ЖІ	Selection Size	Tools
Ж 1	Browser View	Tools
₩2	Outline View	Tools
₩3	Table View	Tools

₩5	Pie Chart View	Tools
₩6	Delocalize	Tools
光7	Nib'o Suction	Tools
₩8	Lipo Suction	Tools
₩9	Find Duplicates	Tools
жм	Minimize window	Window
₩B	Show/Hide Toolbar	Window