

Virtualization Basics

What is Virtualization?

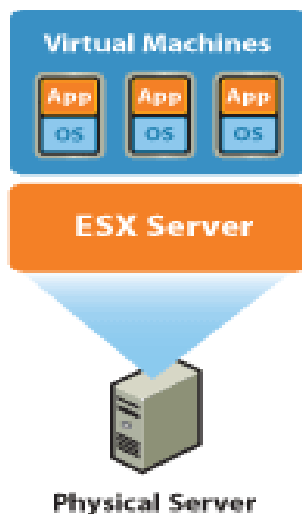
Virtualization is a proven software technology that is rapidly transforming the IT landscape and fundamentally changing the way that people compute.

Today's powerful x86 computer hardware was originally designed to run only a single operating system and a single application, but virtualization breaks that bond, making it possible to run multiple operating systems and multiple applications on the same computer at the same time, increasing the utilization and flexibility of hardware.

How Does Virtualization Work?

In essence, virtualization lets you transform hardware into software. Use software to transform or "virtualize" the hardware resources of an x86-based computer—including the CPU, RAM, hard disk and network controller—to create a fully functional **virtual machine** that can run its own operating system and applications just like a "real" computer.

Multiple virtual machines share hardware resources without interfering with each other so that you can safely run several operating systems and applications at the same time on a single computer.



Discover the Value of Virtualization

Virtualization is a technology that can benefit anyone who uses a computer. Millions of people and thousands of organizations around the world—including all of the Fortune 100—utilize virtualization solutions to reduce IT costs while increasing the efficiency, utilization and flexibility of their existing computer hardware.

Top 5 Reasons to Go Virtual

1. **Server Consolidation and Infrastructure Optimization:** Virtualization makes it possible to achieve significantly higher resource utilization by pooling common infrastructure resources and breaking the legacy "one application to one server" model.
2. **Physical Infrastructure Cost Reduction:** With virtualization, you can reduce the number of servers and related IT hardware in the data center. This leads to reductions in real estate, power and cooling requirements, resulting in significantly lower IT costs.
3. **Improved Operational Flexibility & Responsiveness:** Virtualization offers a new way of managing IT infrastructure and can help IT administrators spend less time on repetitive tasks such as provisioning, configuration, monitoring and maintenance.
4. **Increased Application Availability & Improved Business Continuity:** Eliminate planned downtime and recover quickly from unplanned outages with the ability to securely backup and migrate entire virtual environments with no interruption in service.
5. **Improved Desktop Manageability & Security:** Deploy, manage and monitor secure desktop environments that end users can access locally or remotely, with or without a network connection, on almost any standard desktop, laptop or tablet PC.



Mobile Computing: Essential Keyboard Shortcuts

Twelve shortcuts that are more efficient than clicking a mouse and dragging a pointer.

WINDOWS SHORTCUTS

Toggle between open applications. Hold down the **Alt** key and repeatedly hit **Tab** until you land on the icon for the open application you want, then let both keys up. Alternatively, you can hold down the **Windows** key while pressing **Tab** to cycle through your Taskbar buttons, then press **Enter**. Note that one quick press of **Alt-Tab** takes you back to the open application you were just using. A single **Windows-Tab** does the same, except when one of the apps is Windows Explorer, in which you may need some extra tapping to get where you want with this key combination. In any case, if you've got a lot of windows open and you **Tab** past the one you want, don't let up on the **Alt** or Windows key, and instead, hold down the **Shift** key as well and then press **Tab**.

To the desktop. Hold down the **Windows** key and press **D**. **Windows-E** zips you to My Computer.

Conjure up the context menu. Instead of right-clicking in a document or on an object to call up its context menu, just press **Shift-F10**.

Shut down with style. Tap the **Windows** key (or press **Ctrl-Esc**), then press **U** to select "Turn Off Computer" from the menu. From there, type **S** to put the computer into Standby mode, **U** to turn it off, or **R** to restart Windows.

APPLICATION SHORTCUTS

The following shortcuts work with most Microsoft Office and other Windows applications.

Open, save, and close. To open a document, select **Ctrl-O**. Use **Ctrl-N** to open a new document or new Microsoft Internet Explorer session. To save your work in a document, press **Ctrl-S**. **Ctrl-W** (or **Ctrl-F4**) closes an open document. **Alt-F4** closes the application you're in.

Move up, down, all around. **Ctrl-Home** jumps you to the beginning of an open file, while **Ctrl-End** fast-forwards you to the end. To grasshopper your way across a spreadsheet or line of text, hold the **Ctrl** key while pressing either the up, down, left, or right arrows.

Cut, copy, and paste. To cut a block of text or other information from a document, select it and then press **Ctrl-X**. The best mouse-free way to select text or other data is to position the cursor in front of your desired selection using the arrow keys, as described above. Then while holding down the **Shift** and **Ctrl** keys, press the appropriate arrow keys (you can let the **Ctrl** key up or not as needed) until you've highlighted the entire selection. To copy a selection to the clipboard, use **Ctrl-C**. To paste the clipboard's contents into a new location, use **Ctrl-V**. To see the clipboard's contents, press **Ctrl-C** twice.



Pay a quick visit to the menu bar. Pressing the **Alt** key in almost every application brings the focus to the active application's menu bar. From there, you can press the key matching the underlined letter in the menu item you want to go right to that item. You do not need to hold down the **Alt** key. For example, in Word, Excel, and many other applications, the **F** in the word *File* at the top left of the menu bar is underlined. Press the **Alt** key and then type **F**, and you're skyrocketed to the File menu. If you're using personalized menus (that is, your *Tools*, *Customize* options are not set to "Always show full menus") then to expand an open menu, press **Ctrl-Down Arrow**.

INTERNET EXPLORER SHORTCUTS

Add to your Favorites. In Internet Explorer, **Ctrl-D** automatically adds the currently displayed Web page to your Favorites list (just be sure the current focus is the Web page and not an entry in your Favorites list; **Ctrl-D**, in that case, is a request to delete the entry). **Ctrl-B** opens the Organize Favorites dialog box.

Go back, go forward, and branch. To return to a previously viewed page in Internet Explorer, hold down the **Alt** key and press the **Left Arrow** key. **Alt-Right Arrow** moves you forward. **Ctrl-N** opens a new session, but with a twist: This session has the same history as the previous session, allowing you to branch off in one session without losing your place in the other.

Extra tip: Put Internet Explorer to work for you when entering domain names in the Address bar: Just type in the domain name and press **Ctrl-Enter** to have Internet Explorer type the *www.* and the *.com* for you. (If you're going to a *.org*, *.gov*, or other non-*.com* site, **Ctrl-Enter** won't help.)

Go home. Do you use Yahoo or some other site as your home page? If so, **Alt-Home** will take you there.

Refresh a current Web page. This one's great for those last-minute EBay auctions. To refresh the displayed Web page, use **Ctrl-F5**.

What the Economic Stimulus Act Means For Your Business

Good news for business owners - the Economic Stimulus Act of 2008 provides two expensing options for depreciation.

Provision 1: Section 179 Expensing

Internal Revenue Code 179 allows for a certain dollar amount of fixed asset purchases to be expensed in the year of purchase rather than spreading the cost over the life of the asset via regular depreciation. Taking advantage of Internal Revenue Code (IRC) 179 has always been limited to businesses that purchase under a certain dollar amount of fixed assets each year. The limit under this act has been increased from \$510,000 to \$800,000.

There is also a limit on the dollar amount of the special expensing. Way back in the day this limit was \$17,500. Over the years, it's gone up to \$128,000. Under the Business Provision of the Economic Stimulus Act of 2008, this limit has been increased to \$250,000 – almost a 100% increase.

The fixed asset must be purchased and placed in service during the 2008 tax year. For those using a calendar tax year that's January 1 through December 31. If one uses a fiscal year, it would apply to purchases made during the 2008 fiscal year.

Here's an example how it works:

A business buys a new computer system for \$25,000. Its taxable income is \$100,000 and total asset purchases during the year totaled \$175,000. The entire cost of the computer system, \$25,000, can be expensed in 2008, reducing taxable income to \$75,000 and reducing the adjusted basis of the computer system to zero.

Provision 2: Special Depreciation Allowance

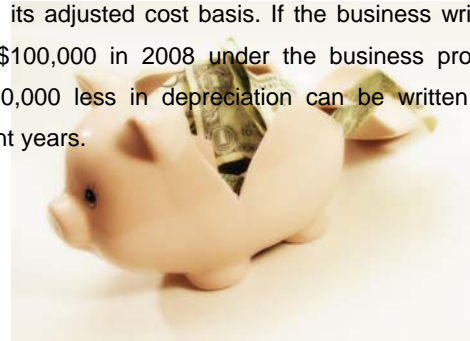
For property acquired and placed in service during the calendar year 2008, business can take a special 50% depreciation allowance. Operate under a fiscal year? Sorry, the January to December calendar requirement applies to those businesses as well.

The adjusted basis of the asset is figured and 50% of that dollar amount can be expensed in 2008 via the depreciation Form 4562.

Here's an example of how it works:

A machine is purchased and placed in service in November 2008. Its total purchase price and cost to modify and install is \$100,000. The business doesn't opt to take any IRC179 depreciation on this piece of equipment in 2008. The total dollar amount expensed in 2008 is \$50,000. The business can also take regular depreciation on the remaining \$50,000 during 2008.

Just remember, the business provision allows for an acceleration of depreciation expensing only. The total amount of depreciation taken for each fixed asset can't be more than its adjusted cost basis. If the business writes off an extra \$100,000 in 2008 under the business provision, that's \$100,000 less in depreciation can be written off in subsequent years.



Source: http://taxes.suite101.com/article.cfm/economic_stimulus_act_of_2008
Maire Loughran, Jun 14, 2008

AaSys

Solutions

IT'S FOOTBALL TIME!...

"The superior man blames himself. The inferior man blames others." Don Shula, Former Miami Dolphins Coach

It's not whether you get knocked down. It's whether you get back up." Vince Lombardi, Former Green Bay Packers Coach

Please join AaSys in welcoming the following individual to our Team:

Marlene Vennin,

Customer Service Representative



AaSys will be closed on Monday, October 13, 2008 in observance of Columbus Day.



Are there topics that you would like to have covered in future newsletters? We are always looking for topics of interest. We welcome all suggestions! To submit a topic, subscribe, or unsubscribe to our distribution list, please email Shama Renée-McIntosh at smcintosh@aaSysgroup.com.