



The Truth About Windows Vista

Two important misconceptions you might have, and how Vista resolves them.

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The majority of new computers being shipped today come with a Vista operating system; however the only market that is quickly adopting Vista is the consumer market. Many corporations are still leery about making the switch, and many IT departments have yet to put it into testing and use.

Two common misconceptions about Vista may account for the slow corporate implementation rate. One is that applications currently running on Windows XP will not run on Windows Vista. This is not true. Many applications will run successfully on Vista due to the system's strong compatibility features. The second misconception is that setup and deployment of Vista are too complex and require additional training or third-party expertise in order for end users and IT departments to utilize and administer the Operating System. This misconception also is not true. In fact, Vista has several features that were created specifically to allow for a streamlined and smooth deployment.

Understanding Vista Compatibility Tools

Unfortunately, Vista's application compatibility has been misconstrued by some media outlets and misunderstood by some users. Using Vista's most current version of the Application Compatibility Toolkit (ACT) and a custom shim database, you should be able to mitigate most of the issues identified through certifying or testing applications for Vista compatibility. The compatibility testing process ensures that constant updates and revisions to the system shim database are distributed from Microsoft via Windows Update.

To understand how these compatibility tools work together, let's first take a look at the shim database. In ordinary terms, a shim is a thin, often tapered piece of material used to

fill in space between things for support, leveling, or adjustment of fit. In the case of application compatibility, the term "shim" relates directly to this definition — a thin piece of code — specifically between the application's code and the Windows code. Essentially, the shim is a set of instructions telling Windows what to do when a particular application is run.

For example, when an application requiring Windows version 5.1 (XP) is executed on Vista, an error message will occur. To resolve this issue, a shim can be created within the system database using the ACT Compatibility Administrator. This shim will tell Windows to perform a "version lie" shim to return an older Windows version to the application when it is started. This basic example just scratches the surface of what can be done with the ACT, Compatibility Administrator, Vista and a shim database.

Vista ships with a system shim database containing thousands of prebuilt shims for various software applications. These help ensure the applications will function when installed or run on Vista. Since Vista's release, the number of prebuilt compatibility shims has grown to tens of thousands. As we all know though, there are times when an application just won't work, even with an up to date system shim database from Microsoft. That's where ACT's Compatibility Administrator comes into play.

The ACT Compatibility Administrator creates and maintains the enterprise shim databases, which let you create an authoritative application inventory through the use of the Application Compatibility Toolkit Data Collector and an ACT SQL database. The following compatibility evaluators will allow you to collect and process your application information. Each evaluator performs a set of functions, providing a specific type of information to ACT.

Compatibility Evaluators:

- ❖ **Inventory Collector:** Examines your organization's computers to identify the installed applications and system information.
- ❖ **User Account Control Compatibility Evaluator (UACCE):** Enables you to identify potential compatibility issues due to permission restrictions enforced by the User Account Control, formerly known as Limited User Accounts. Through compatibility logging, UACCE provides information about potential application permission issues and the ways to resolve any problems so the new operating system can be deployed.
- ❖ **Update Compatibility Evaluator (UCE):** Provides insight and guidance about the potential effects a Windows operating system security update can have on your installed applications. The UCE dynamically gathers application dependencies and is deployable to both your servers and client computers in either a production or test environment. UCE collects information on loaded modules, open files and registry entries accessed by the applications currently running on the computers. This information is written to XML files uploaded to the ACT database.
- ❖ **Internet Explorer Compatibility Evaluator (IECE):** Enables you to identify potential Web application and website issues that occur due to the release of a new operating system. IECE works by enabling compatibility logging in Internet Explorer, parsing logged issues and creating a log file for uploading to the ACT Log Processing Service.
- ❖ **Windows Vista Compatibility Evaluator (WVCE):** Enables you to identify issues related to the Graphical Identification and Authentication DLLs, to services running in Session 0 in a production environment and to any application components deprecated in the Vista operating system.

Understanding Vista Deployment


Another common misconception is that Vista is complicated to deploy, when in reality Vista deployment can be a smooth and efficient process. In previous versions of Windows, image creation is a manual process. Drivers, mass storage controller vendor/device IDs, etc. need to be collected and input by hand. IT professionals also have to manually create the sysprep.inf file, determine what settings to choose, create mass storage and OEMpnDriversPath sections, and finally run the sysprep and test their images. It is not unheard of for this process to take 40 or more hours.

After your Windows image is perfected, the administrators still have to update all maintenance and update tasks manually. Over time, making image changes, or installing and uninstalling software, language packs and different hardware can destroy the clean state of your image, requiring you to recreate it from scratch. This often makes image creation a tedious and painful process for many administrators to manage.

Vista addresses this process by attempting to simplify all of these difficult and time-consuming administrative tasks. It allows almost every maintenance action to be done from the command line without actually applying your image. Vista allows you to make changes directly to the image file itself.

Windows Vista also offers improvements to image engineering with Windows Deployment Services and the Microsoft Deployment Toolkit, which act as a toolset for image deployment, maintenance and user-state management. MDT is a set of guidelines and tools, including ACT, Windows Automated Installation Kit and User State Migration Toolkit (USMT), that, when used to its full capability, can completely automate the image creation, maintenance and deployment lifecycle of your IT infrastructure.

When used together, WDS, MDT and the USMT can give your organization an automated enterprise-class deployment methodology, which is global in scale.

Ultimately, many administrators may find that Vista is a better and more enhanced operating system than Windows XP. It is more secure and easier to administer, maintain, repair and deploy than most people think, provided you take advantage of the tools available. 

Here are some interesting facts and figures about Vista that were first published in *Microsoft TechNet Flash* on June 4, 2008.

More than 140 million copies of Vista have been sold, making it the fastest selling operating system in Microsoft history. Even Macs run it.

More than 2,700 software programs are "Certified for" or "Works with" Vista-logged operating systems and 97 of the top 100 consumer applications are compatible.

According to an independent survey, 62 percent of small businesses said Vista saved them time and 70 percent said it makes them more productive.

71 percent of Windows Vista customers like it better than their last operating system.

People familiar with Windows Vista are two to three times more likely to have a favorable impression of it.

Windows Vista now supports more than 77,000 printers, cameras, speakers and other devices.

The reduction in greenhouse gas emissions for every 10 PCs that switch to Vista is equivalent to the reduction achieved by taking one automobile off the road.