

How AdminStudio Helps IT Migrate to Windows Vista 5x Faster



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Executive Summary

With the Microsoft® release of Service Pack 1 (SP1) for Windows Vista™, many organizations previously reluctant to migrate to Vista are beginning to make the switch. But even though SP1 promises a more stable OS, it doesn't make the migration to Vista any easier for IT.

Windows Vista migrations can still mean serious challenges for IT managers and software packaging teams responsible for OS migration. Industry analysts estimate that organizations will need 12 to 18 months of Vista migration planning and testing, with costs reaching over \$3,000 per desktop.

In order to cut the time and costs of moving your commercial and in-house applications to Vista, it's critical to have the right application readiness and process management technology. The following white paper discusses how Acreoso Software's Workflow Manager™ and AdminStudio® solution set significantly accelerates the migration of your applications to Windows Vista by:

- Proactively indentifying the applications in your environment with Vista issues
- Correcting and providing guidance to the issues encountered
- Helping IT coordinate and manage the Vista migration process
- Leveraging your existing MSI portfolio, eliminating the need to repackage again

Changes in Windows Vista that Cause Applications to Fail

Ensuring applications will install and run predictably on Window Vista is often the most challenging and time-consuming migration task. That's because many of the traditional Windows components and features have been changed in Vista and no longer function the way they had in older versions of the OS.

Some new features and changes in Vista that may affect the installation and operation of applications include the following:

- **User Account Control (UAC)** limits applications in Vista to standard user privileges. Software requiring

elevated rights can fail unless an administrator authorizes an increase in privilege levels.

- Besides critical folders and files, **Windows Resource Protection (WRP)** now includes registry keys. Applications writing to protected areas of the Windows folder structure or registry may fail.
- The **version number** for Windows Vista has changed to 6. Any application that looks for specific Windows versions but hasn't been updated to include version 6 may fail.
- Previous Windows versions ran system services in the same login session as the first user who logs on to the console (called **Session 0**). In Vista, only system processes and services run in Session 0. Since services never run in the same session as users' applications, software that needs to operate in kernel mode may fail.
- The Vista Web platform is now at **Internet Information Services (IIS)** version 7. It includes a modular architecture that lets administrators install and enable only those components required to deliver Web services. Applications that aren't configured to operate with IIS 7 may fail.
- The Windows Firewall now includes the new **Windows Filtering Platform**, which provides better system protection by filtering the network stack. However, software that can't account for firewall restrictions may fail.
- The .NET Framework is now at version 3.0. Managed code that is not compatible with **.NET Framework 3.0** may fail.
- The **assembly identity grammar for managed code** has been modified in Vista. Software that fails to take this into account may experience problems.
- Vista supports **Fast User Switching (FAS)**, which allows you to switch to a different computer user account without first closing programs and files. Applications not supporting FAS may suffer compatibility problems.

- With Vista, Microsoft has introduced the **Desktop Window Manager (DWM)**. Applications that don't support the features in DWM may experience incompatibilities.
- The **Windows Explorer** has been updated in Windows Vista, and some changes may impact applications. For example, software that uses hard-coded values and doesn't rely on variables will fail. Also, applications that don't leverage Vista's new user interface themes may experience operational issues.
- Vista includes a **64-bit version** that is compatible to 32-bit but has changes that affect how applications operate.

Again, this is only a partial list of the many changes in Vista that can impact how applications install and operate. But it should give you an idea of why migrating applications to Vista can be so difficult and time-consuming.

In a perfect world, enterprises would have the financial means to upgrade every commercial application whose vendors have released Vista-compatible versions. Unfortunately, there are few companies – if any – that have the financial means to do this. Plus, upgrading doesn't help solve issues with your own in-house applications, and IT teams who have completed Vista migrations often say that these are the applications that will cause you the most grief.

In the real world, organizations spend significant time testing and preparing their third-party and custom applications for migration to Vista. Having the right software packaging technology in place is also critical to a timely, smooth migration. That's where Aceso Software's Workflow Manager and AdminStudio can help.

Aceso Knows Software Installations

No one knows software installations like Aceso. Our InstallShield technology is the undisputed industry standard, used by thousands of software vendors and installed on over 500 million desktops worldwide. For IT, Aceso Software's AdminStudio is the most widely used software packaging technology, endorsed by Microsoft, Novell®, LANDesk®, VMware® and Citrix® as their packaging solution of choice. Along with our Workflow Manager solution, AdminStudio enables IT teams to implement a standardized, repeatable software packaging process based on best practices such as ITIL and Microsoft BDD.

The sections below will explore the roles Workflow Manager and AdminStudio play in simplifying and accelerating IT's migration of applications to Windows Vista.

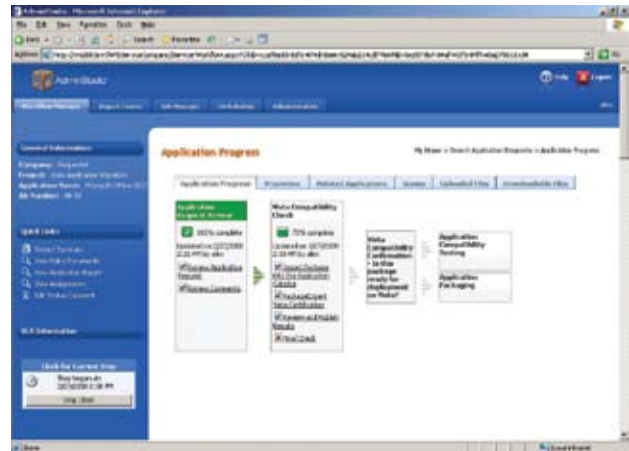
Workflow Manager Coordinates Vista Migration Tasks

Vista migrations can be extremely complex and difficult to coordinate, even under the best of circumstances. And the more applications and IT personnel involved, the more chaotic the migration process becomes. The most well

thought-out migration plan means little if you can't properly manage its implementation and execution.

Workflow Manager helps you get your entire Vista migration process under control. Workflow Manager is a Web-based process management system that helps IT departments standardize, streamline, and manage any desktop state migrations.

Workflow Manager gives IT a clear, orderly view of their

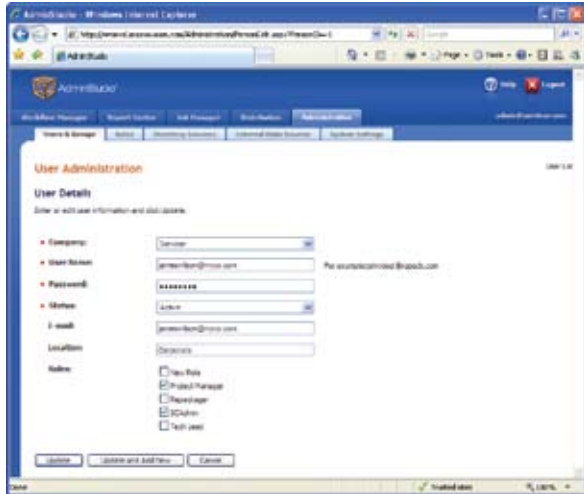


migration tasks.

Workflow Manager's Web-based templates ensure your organization follows a standardized migration process from start to finish, so tasks are completed correctly and in the right order. IT managers can use Workflow Manager to assign migration tasks to packagers and testers and monitor their progress in real time. Additionally, after a migration, Workflow Manager can support business as usual processes.

The templates are easily customized to fit the exact tasks of your Vista migration plan. Workflow Manager shows each of your packagers and testers their specific tasks in an easy-to-follow graphical workflow, so they know exactly which steps they have completed, which steps still need work, and in which order to complete them. As each step in the process is completed, it is automatically timestamped and cataloged, building an audit trail that helps ensure IT personnel are held accountable for their assigned tasks. It helps CIOs and IT managers ensure their Vista migration is on schedule.

Plus, to help IT managers maintain security and control, Workflow Manager lets you assign roles to team members based on their Vista migration duties. You can choose built-in roles – such as administrator, packager, tester, or guest – or create your own titles. Access rights to Workflow Manager and AdminStudio are then granted according to role, preventing team members from performing unauthorized tasks.



Assign Vista migration roles to IT personnel.

Evaluate Workflow Manager for Yourself
 Register to evaluate Workflow Manager at <http://www.acresso.com/adminstudio/eval>.

AdminStudio Speeds Up Vista Testing

While Workflow Manager helps coordinate and manage migration tasks, AdminStudio gives IT the necessary toolset to ensure software operates reliably on Windows Vista. Migrating applications to Vista can be a major headache – but it doesn’t have to be. AdminStudio has automated, time-saving MSI testing, editing, and repackaging tools that let you migrate applications to Windows Vista up to 70% faster.

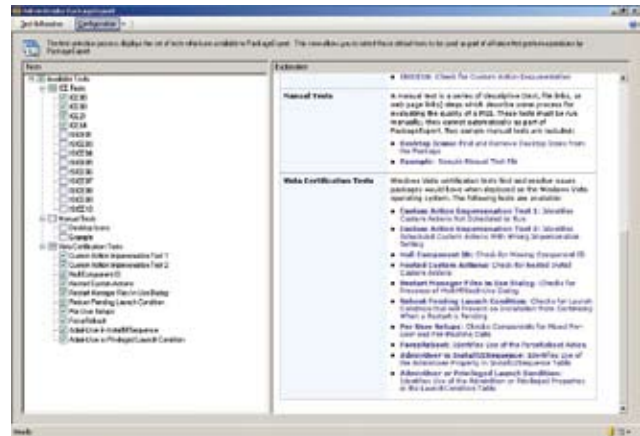
Testing – Will Your Current Applications Work on Vista?

Will the applications in your environment run properly on Windows Vista? Do I have to package and test all of my applications again? Those are key questions in any Vista migration, and the more applications you have, the more difficult it becomes to answer.

AdminStudio’s PackageExpert answers this question for you. It can run automated tests on all the MSIs in your environment to identify any Vista-related problems. It will also fix most errors automatically, saving you time and effort. For the few problems PackageExpert doesn’t fix automatically (because some fixes will vary based on each enterprise’s specific environment), it will recommend the appropriate steps to take to correct the issue and will walk you through the process.

PackageExpert also supports batch processing, so you can save significant time by pointing to your application repository to test all your MSIs at once and have the tests run automatically. You don’t even need to be there. You can upload all your MSIs for testing before you go home for the weekend – and when you come in on Monday all your MSIs will be Vista tested for you, with most (if not all) of the corrections made automatically. It’s that easy.

Another concern for many IT departments is whether they will have to repackage their MSIs all over again for Vista. If you have already spent time and effort putting applications through your application readiness process, the last thing you want to do is duplicate that work again for Vista. By using AdminStudio’s PackageExpert, you don’t have to. It lets you correct Vista-related issues in your MSIs without wasting time with another round of unnecessary repackaging.



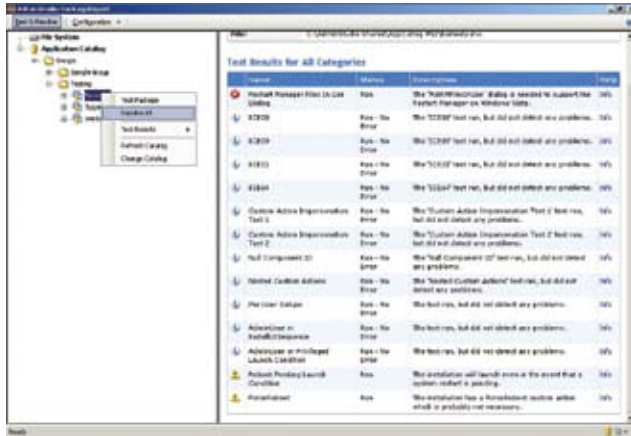
AdminStudio lets you select which Vista Certification Tests to run on MSIs.

As you can see from the screenshot above, running Vista tests on MSIs is as simple as clicking a checkbox in the left-hand side of the AdminStudio user interface. A description of each test can be found in the right-hand side of the UI.

Tests in AdminStudio are currently organized into two major categories:

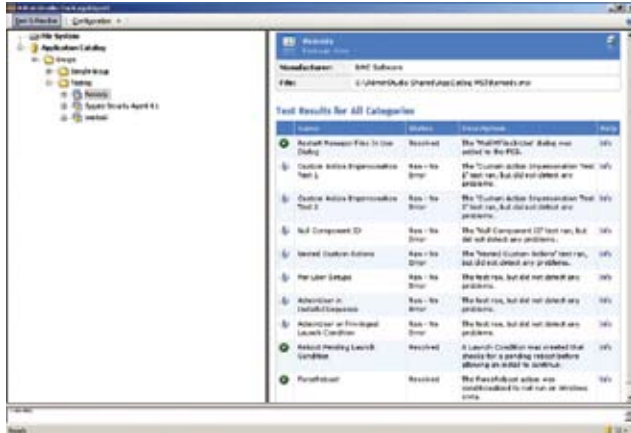
- **ICE Tests**—The ICE tests perform checks against the structure of an MSI package to enforce Microsoft best practices. They are used to determine if an installation package is built according to Windows Installer standards.
- **Windows Vista Certification Tests**—The Windows Vista tests check packages for compliance with installation requirements for Windows Vista, and are intended to enable the successful deployment of packages on Vista.

In addition, you can add your own enterprise-specific tests and remediations for AdminStudio to run.



AdminStudio displays Vista-related errors and warnings.

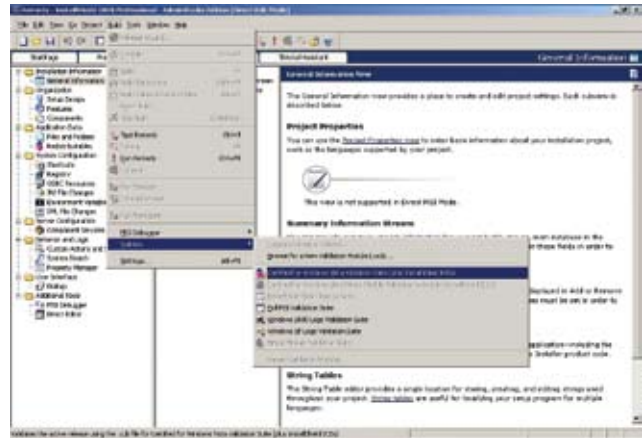
After running the tests, AdminStudio displays the results, identifying any potential issues your MSI will have running on Windows Vista. It provides a description of what each test detected as well as their severity level. If problems are found, AdminStudio will automatically correct the majority of them for you. If a specific problem is identified that requires manual correction, AdminStudio will walk you through the process.



AdminStudio automatically corrects Vista-related problems.

Fixing Problems – What Do You Do When Applications Don't Work?

When AdminStudio recommends a corrective course of action, you can make the necessary corrections to your MSIs quickly and easily using AdminStudio's Editor tool. Editor uses InstallShield technology, the world's standard in MSI authoring and editing for Windows Vista. IT administrators use it to see inside MSIs and directly edit any aspect of the package. It gives you an easy way to correct Vista-related errors, including UAC problems, version number updating, WRP issues, and more.



AdminStudio validates that MSIs meet Vista Logo requirements.

If your company relies on internally developed applications, your software developers can also use AdminStudio's Editor to create MSI installations for your own software that meet Microsoft's Windows Vista Logo requirements. It runs the same validation tests on MSIs that your software vendors use to become Vista compliant. Plus, AdminStudio generates MSIs that support the latest version of Windows Installer, so your installations can leverage the latest MSI benefits.

The Application Virtualization Option

A Windows Vista migration provides a logical opportunity for you to reevaluate your overall application readiness process and consider implementing changes. One change many IT departments are exploring during Vista migrations is a move to application virtualization.

Virtual applications run in their own isolated virtual containers, so they can't conflict with the operating system and other software on the desktop. These virtual applications help cut IT costs by aiding in the prevention of software conflicts and all but eliminating the need for true regression testing.

When your organization is interested in using the Vista migration as an opportunity to explore or adopt application virtualization, AdminStudio can help. It gives you the ability to quickly convert MSIs into both VMware® and Citrix® virtual application packages. (Note: Creating VMware packages also requires separate purchase of the ThinApp™)

AdminStudio is the only packaging solution that lets you choose from today's most popular virtualization formats. Many organizations will not settle on a single virtualization technology, as each presents a unique set of benefits on an application and enterprise specific basis.

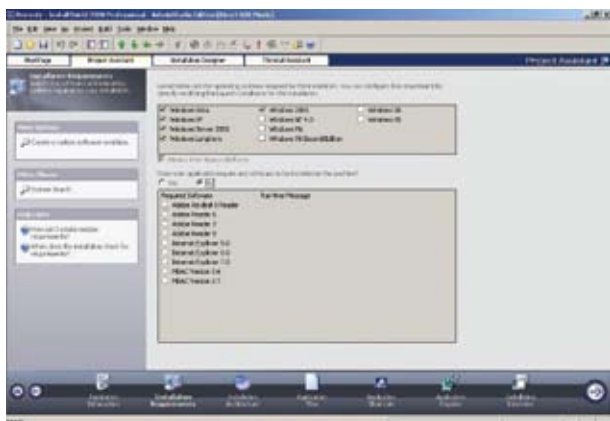


AdminStudio can convert MSIs to Citrix and Thinstall virtual packages.

AdminStudio includes both VMware and Citrix Assistants that save you time and effort by walking you through the application virtualization migration process in minutes. It makes it easy for you to convert MSIs to Citrix and VMware virtual packages with a few simple mouse clicks. No repackaging is needed, so you don't waste time redoing previous packaging work.

AdminStudio can also batch-convert your MSIs to virtual packages, saving you even more time. Again, you could schedule the conversion process to occur over the weekend, and when you come in Monday your MSIs would be virtual packages. The process runs automatically without the need for any human intervention.

AdminStudio also gives you complete control over customizing virtual packages, from modifying registry settings to controlling isolation options. Plus, it's the only solution that lets you determine the interoperability



between virtual packages and the underlying OS without compromising the integrity of the virtual application. **AdminStudio walks you through the virtualization process.**

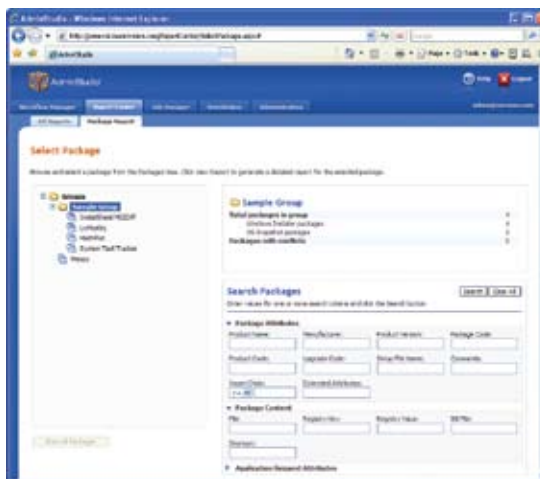
Try AdminStudio for Yourself

Download a no-cost 21-day evaluation of AdminStudio at <http://www.acresso.com/adminstudio/eval>.

Post-Migration Application Readiness and Management

Once you have completed your migration to Windows Vista, you will still need to follow packaging best practices as you acquire new applications. AdminStudio makes it easy to implement a standardized packaging process for business as usual practices, including Windows Installer (MSI) packaging or software virtualization, package editing, conflict elimination, QA and Vista testing, and deployment system handoff.

Standardizing your packaging process with AdminStudio helps IT cut software packaging time by up to 70% and deploy software with 99% success or better. It gives you a single centralized catalog that contains every version of every traditional or virtual application, patch, and operating system in your environment, as well as all the related metadata. You can then generate detailed reports and run searches on packages, so you always know what is in your environment.



Search the AdminStudio software repository for packages in your environment.

Workflow Manager can then be used to coordinate the application readiness process across your organization the same way it did for the Vista migration. It gives you an end-to-end solution for managing and streamlining packaging from start to finish.

First, Workflow Manager templates provide application owners in your organization with an easy way to submit application requests to IT. The templates automatically prompt the owner for a complete list of installation instructions, so IT gets the data it needs to properly package the application the first time.

These requests then go to the IT manager, who can use Workflow Manager to assign them to the most available packager. As with the Vista migration, packagers are shown a graphical workflow that matches your specific packaging process, so they know exactly what steps to follow. IT managers can also use Workflow Manager to monitor the progress of the packagers in real time, helping ensure that SLAs are met.

Summary

The release of Vista SP1 might drive more organizations to migrate to Windows Vista, but it doesn't make the process any easier for IT. Migrating your current applications to Vista can still be a time-consuming, error-prone process. To help streamline the migration of applications to Vista, IT teams rely on the software packaging and management technology of Aceso Software's Workflow Manager and AdminStudio. These solutions have the tools you need to significantly accelerate the migration of your applications to Windows Vista.