

SPRINGBOARD SERIES

INSIDER



FIVE TIPS FROM THE DEPLOYMENT DOCTOR

By Rhonda Layfield, Microsoft Setup and Deployment MVP and STEP Member

#5 – Application Testing

Quite often, application testing doesn't get the respect it deserves. I can't tell you how many times I've met with deployment teams around the world to discuss planning their deployment projects only to find that they have not even considered application compatibility testing. They just assumed testing would be done during deployment, but by whom they don't know. Proper application testing can make or break an entire deployment solution because, ultimately, when you migrate a machine from Windows XP to Windows 7, if the applications users need to perform their job don't work, then the deployment was not successful. Sure you got a new operating system on the machine, but the machine is pretty much useless without working applications. Windows XP has been out for a long, long time now, and, as you know, over time new versions of applications are created.

Another common challenge for organizations today is multiple versions of the same product. Many users get newer versions of applications due to attrition. A computer purchased today will likely get Microsoft Office 2010 installed while the rest of the organization might still be running Microsoft Office 2007. And when you get into websites and all the add-on software needed to view and interact with different sites, there can be a seemingly infinite number of applications (and different versions of them) installed.

When you deploy a new operating system, it's the perfect time to get all users running the same software—right down to the version. Believe me, your help desk personnel will thank you. The [Microsoft Application Compatibility Toolkit \(ACT\) 5.6](#) is a free download from Microsoft that will assist you in testing your applications. ACT can evaluate which applications are currently running in your environment; then, based on that information, you can choose which applications, and which versions of them, become the corporate standard. Not all applications that were built to run on Windows XP workstations are going to run on Windows 7 (big surprise right?), so before you begin deployment, find out which applications will work, which ones will not, and which ones can be mitigated to run on Windows 7 (even if they are not running at 100 percent). ACT also tests versions of Windows Internet Explorer to ensure you can still access websites properly.

One of my favorite features of ACT is that the tool is community-based. What that means is that organizations around the world have fed information into the ACT database, reporting which applications work, which ones don't, and how to resolve some of the issues. And you have access to all this information. It is very likely if you are having an issue with an application, ACT probably already knows about it and can supply you with a quick fix.

Microsoft Architect and Technical Lead Chris Jackson, a.k.a. The App Compat Guy, has provided a wealth of information—complete with his [blog](#), videos, and more—on how to get started using ACT. You'll find Chris's contributions and additional fantastic resources for ACT and Windows 7 deployment, including a Windows 7 Application Compatibility List and Windows XP to Windows 7 Migration Guide, on the [Springboard Series Application Compatibility zone](#).

#4 – Educate End Users

Migrating your operating system doesn't necessarily mean that your deployment was successful or that your users view the deployment as successful. This is prime time for your IT team to really shine. Think about how you feel when you change the operating system or an application on your own computer and can't figure out how to perform the simplest tasks such as opening documents or printing. I remember the first time I saw the Ribbon feature that is part of the Microsoft Fluent user interface. I was presenting at a conference and about 40 minutes before I was supposed to start, I remembered I needed to print my demo cheat sheet (okay, that's supposed to be a secret, but sometimes if someone asks a question in the middle of a demo I forget what I was going to do next so I rely on my cheat sheet). No problem (or so I thought) I got out my USB stick and copied my doc to it. Then I took the USB out to one of the computers hooked up to a printer, opened the doc and got my first look at the Ribbon. I just sat there for a second thinking "How hard can this be?" Then I started freaking out a bit because I really needed to be at the presentation, but I couldn't find the Print option. Thank goodness I remembered Ctrl + P, which worked just fine. But my first experience with the Ribbon was not a happy one. We've all been there. So think back to how you felt, and help your end users with a little education.

If you don't already have one, create an IT newsletter and document the top 10 ways to perform the simplest and/or most common tasks. Include screenshots and step-by-step directions. For example, you can show users a comparison between the same task in Windows XP versus Windows 7. In Windows XP you opened a document by opening the application first (Word for example); then chose Open from the File menu, and browsed to the document or double-clicked on the document in Windows Explorer. Now, in Windows 7, you can open documents from the Windows Taskbar using the new Jump List. Use screenshots to show how to use Jump Lists. Truly educating your users would involve a full one (two or maybe three) day class taught by experienced trainers. If your organization is not planning education for your users, don't leave them hanging; help them embrace Windows 7.

#3 – Update All Routers and Switches

Network components get outdated just like any other software. Of course, network deployments rely on your network routers and switches. So, ensuring your routers and switches have the most up-to-date software (BIOS and patches) can help in many ways. Now before you shoot this tip down... I am not suggesting that you update your network infrastructure at the same time you deploy a new operating system image. That would be ridiculous. What I am suggesting is that you speak with your networking team to find out if the latest updates have been applied to your network infrastructure. If not, this would be a great opportunity to get the network in its optimal condition; this way, your 5, 10 or 15 GB operating system images will be deployed quickly, efficiently, and with the least amount of re-transmits possible. One of the biggest benefits is Windows 7 will be thought the hero for better network performance.

#2 – Use the Right Tool for Your Environment

I present at conferences all over the world, and the question I easily get asked most often is "Which tool should I use—Microsoft System Center Configuration Manager, Microsoft Deployment Toolkit (MDT) or Windows Deployment Services (WDS)?" The answer is simple, though it primarily depends on the type of customer you are. If you are an Enterprise customer, you probably already own and use System Center Configuration Manager. If you already own it, and it is being used in your environment, you should use it. Configuration Manager gives you the option to perform Zero-Touch or Lite-Touch Installation for operating system deployments. Plus, the reporting capabilities are fantastic.

If you don't own Configuration Manager, MDT is the tool I would choose. MDT is easy to set up and manage, and it doesn't require installation on a server or any network infrastructure components. My favorite feature of MDT is how easy it is to make changes later. Whether those changes are big or small doesn't matter. For example, you could change the version of an application being deployed in less than five minutes, or swap out the operating system you are deploying in less than two minutes. [MDT](#) is a free download from Microsoft, and the only software it requires is the Windows Automated Installation Kit (also a free download).

Windows Deployment Services requires DHCP, DNS, and Active Directory and must be installed on a server. You can only deploy bare metal, fat operating system images. Fat images include the operating system plus all your

applications. The biggest drawback to using WDS is making changes to your images, including simple changes such as the version of an application. To change the application, you must deploy the image to a machine, make your changes, create a new image, and add it to WDS. Of course WDS does have positive features; integrating with Configuration Manager or MDT provides extended functionality for both products. When integrated with the other products you get PXE boot and multicasting of your image, which is not possible with either MDT or Configuration Manager alone.

#1 – Build Your Deployment Solution to Last

In almost every deployment I have participated in, I've seen a situation in which some piece of the deployment (an application, a driver, or any one of the other 200 things you are attempting to do) doesn't work, and someone says "Let's not worry about that now; we can always come back to it later—let's just get this working." And what happens? Nobody ever goes back to address those temporary fixes. Over time, these fixes don't work anymore, and you're left with all those issues being exposed and causing headaches for years.

Deploying an image to a computer one time probably isn't the last time that computer will receive an image. What a lot of people don't think about is re-imaging machines today as a valid troubleshooting step. We do it all the time. When is the last time you spent four hours troubleshooting an issue on a desktop machine? Today, most of our user's data is stored on network shares, so we don't need to worry so much about data anymore. When a machine starts acting up the easiest and quickest way to fix it is to re-image the machine. So while you're building your deployment solution, think about living with it for the next five years. Is it set up to last? **Did you take the time to really do the job right or did you just do it fast?**

If you truly want to be a deployment hero, the last idea I'd like to leave you with is this: Contact your help desk personnel and ask what the top 10 issues are that initiate phone calls to the help desk. Resolve those issues in your new image. It will be noticeable to all.

Happy deploying!

[Rhonda Layfield](#) has been in the IT industry since 1982. She is a Microsoft Setup and Deployment MVP and Desktop Deployment Product Specialist who also offers lecture-based (demo-driven) and hands-on deployment courses. For more information, visit www.DeploymentDr.com.