

# Desktop Deployment



Adam Shepherd of Microsoft Consulting Services tells us how to simplify Windows and Office rollouts using the Desktop Deployment TechCentre

## Q: What is the Desktop Deployment TechCentre and what does it offer?

The Desktop Deployment TechCentre is your one-stop resource where you can find the tools and related support material that you need to deploy Microsoft Windows and Office. It has tools such as the Microsoft Deployment Toolkit, information about the Microsoft Desktop Optimisation Pack (MDOP) and advice on how to most efficiently deploy Windows and Office products within your organisation.

## Q: Why is MDOP important?

MDOP is the Microsoft Desktop Optimisation Pack. It's a suite of products available to Software Assurance customers as an add-on subscription licence, and is really designed to help customers maximise the investments they are making in our desktop platforms and reduce the total cost of ownership (TCO) of the desktop. There are currently six tools in the MDOP suite: Asset Inventory Service, Advanced Group Policy Management, Diagnostics and Recovery Toolset, Desktop Error Monitoring, Microsoft Enterprise Desktop Virtualization and Microsoft Application Virtualization.

## Q: Can you tell us about some of the MDOP products?

As a desktop deployment consultant, I spend quite a lot of time talking about one of the most popular tools available

within MDOP: **Microsoft Application Virtualization (App-V)**. App-V lets you take your standard applications and wrap them up into a virtual bubble so that they can be run on your users' desktops in isolation from other App-V applications. Having applications isolated in this way is useful in many ways. Firstly, it helps eliminate application to application conflicts; this is hugely valuable as it allows us to eliminate the regression testing process that we would normally have to go through as part of the standard application lifecycle.

Secondly, helpdesk calls are also potentially reduced because the applications are not actually installed. All of the application files and registry keys for each App-V application are stored locally on the machine, but are stored within an App-V cache file. This means that the application doesn't hook itself into your registry or file system and hence the desktop remains cleaner and potentially more stable. What's more, if there is a problem with the application, it's really easy to remove it cleanly without it leaving any traces of ever being installed or re-set it to a default state. Not all applications can be virtualised though, so understanding your application portfolio is crucial.

App-V also changes the way organisations can deliver applications. Traditionally, applications would be first downloaded and installed before becoming available to users. App-V introduces a concept of application

streaming where (using an App-V infrastructure) users can just log in to a machine and the applications that the user is entitled to appear almost instantly! This is done through a process called "publishing refresh", whereby the shortcuts and file type associations for an application are published to the user's desktop making the applications appear as if installed. However, the files that make up the application don't exist on the user's machine yet; when a user launches an application, all the files required to run that application are streamed down on-demand to the user. This really enables some great scenarios around "hot desking" and the Virtual Desktop Infrastructure (VDI) as no matter where a user sits, their own applications will appear almost instantly when they log in.

Another popular tool in the MDOP suite is **Desktop Error Monitoring (DEM)**. This enables a company to proactively monitor any common application or OS related problems that occur across the estate. When using DEM, if an application or operating system hangs or crashes, the Dr Watson service catches the details and forwards them to your central DEM server. This allows system administrators to get an aggregated view of all the applications causing issues across the environment; the reporting data can then be used to show the most common problems within an environment so that resources can be focused on resolving the most common issues.

**Q: Is MDOP only available to Enterprise customers with Software Assurance, and if so, are there any alternatives?**

Yes, it is only available to Software Assurance customers. However, Software Assurance is available for customers with as few as five PCs, and the products in the suite are designed to be useful in situations above that level. For customers without Software Assurance, we also have some great free tools to help with Windows deployments.

For customers looking to deploy a new desktop operating system, one of the most popular and useful tools out there today is the **Microsoft Deployment Toolkit (MDT)**. Just about every customer I've worked with is using this tool! This freely available download consists of a set of tools and prescriptive guidance that you can use to help develop and deploy Windows operating system images. At the core of the Microsoft Deployment Toolkit is the Deployment Workbench. This allows you to create a repository of deployment source files and then use these files to define and create a consistent, repeatable process for generating or deploying a desktop image for your environment. You can define a task sequence which contains a series of actions that define how your desktop image should be built along with the components that will be included. Examples include how the disk should be formatted, which operating system version to install, the localisation settings to apply, the patches that should be added and the applications that should be installed. If you're using this process to create a customised image, this allows you to create an automated process where you can network boot a machine and have it automatically build and customise the operating system, install the patches and applications, and then sysprep, reboot and capture the image back onto

the server for you. This not only saves you hours of effort, but eliminates the opportunity for user error.

The ability to define and automate the image creation process is also really important in helping make sure that when do need to go back and make updates to your image, you have a repeatable process that you can go back to. This allows you to be confident that you're accurately recreating the image, giving you a consistent environment to both develop with and support.

Once you have created your customised image, you can deploy that image to your organisation also using the Microsoft Deployment Toolkit, which can integrate with another of the freely downloadable tools, the **User State Migration Toolkit (USMT)**. MDT will make use of USMT to migrate user data and settings during a refresh or replace deployment process.

For our enterprise customers, System Center Configuration Manager (ConfigMgr) is the recommended solution for deployment (though MDT can be used to extend its capabilities). For more details on using the Microsoft Deployment Toolkit for deployment of an operating system see <http://technet.microsoft.com/en-us/magazine/cc137754.aspx>

Another useful but freely available tool is the **Application Compatibility Toolkit (ACT)**. As the name suggests, this is a suite of tools to assist in your application compatibility testing efforts. As I've already alluded to, application compatibility testing is among the biggest tasks of any deployment project. ACT includes a tool called the Application Compatibility Manager (ACM) that allows you to create a silently installing agent that you can deploy to your machines to collect an inventory of the applications along with some basic compatibility information, and then store the results in a central database. Once you're created this inventory, you can synchronise it against a community database where community assessments

will be displayed for any recognised applications including (where available) assessments by the software vendor themselves (such as whether an application is 'certified for Windows Vista'). You can also see whether other community members have logged any issues and how they have overcome them. This allows you to then quickly eliminate a number of applications from your investigation and focus on the applications that are unknown or problematic.

There are more lots more free tools that unfortunately we don't have time to discuss, but make sure you also check them all out on the new Desktop Deployment TechCentre at: <http://technet.microsoft.com/uk/desktopdeployment>

---

**ADAM SHEPHERD** is a consultant working for Microsoft Consulting Services in the UK. Adam's technical focus is on deploying, maintaining, and managing the Windows Client.