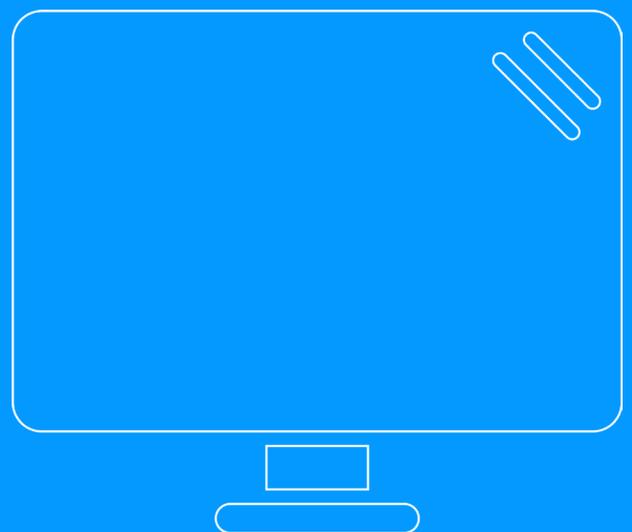


Technical Brief

Everything You Need To Know About Windows as a Service

Hosted by: Brad Sams, Executive Editor, Petri IT Knowledgebase

Presented by: Russell Smith, Microsoft MVP, and Spencer Dunford, General Manager, SmartDeploy



OVERVIEW

Russell Smith discussed Microsoft's new model and its implications for organizations. Spencer Dunford demonstrated how SmartDeploy simplifies deployment and distribution of Windows 10 images.

With Windows 10, Microsoft has upended traditional deployment processes and revised its standard release cycle. Organizations must be aware of quality updates, feature upgrades, licensing considerations, and more. Failure to understand these changes results in confusion, management challenges, and issues related to in-place upgrades. SmartDeploy eliminates the obstacles associated with deploying and distributing Windows 10 images. Organizations regain control, set their own upgrade schedules, and can reimage instead of performing in-place upgrades.

Having a reference image available is useful, even if you go with in-place upgrades. Images are helpful in break/fix scenarios where it's quicker to redeploy a Windows image than having an IT Help Desk person waste time investigating what's wrong with a particular machine.

Russell Smith, Microsoft MVP

KEY TAKEAWAYS

Microsoft is moving to a “Windows as a Service” model.

Starting with Windows 10, Microsoft is moving to two major upgrades per year. This approach offers several benefits. It keeps the operating system's security features up to date. In addition, Microsoft can deliver the latest management and deployment features, as well as incremental user interface changes. New servicing tools and options are also available, such as Windows Update for Business.

One major difference is that users won't be able to defer upgrades indefinitely. Windows 10 will receive monthly cumulative service updates. Each update delivers everything that went before it. Important elements of the two types of updates Windows will now deliver include:

- **Quality Updates.** These are the cumulative monthly updates. Quality updates can be deferred for up to 30 days or paused for up to 35 days with Windows Update for Business or other servicing tools.
- **Feature Upgrades.** These are biannual updates. They can be deferred up to 180 days or paused for up to 60 days. Feature upgrades are delivered to two different branches:
 - *Current Branch (CB).* Feature upgrades can be deferred using Windows Server Upgrade Services (WSUS) or System Center Configuration Manager (SCCM). After a 60-day grace period, devices not on the current build won't receive quality updates.
 - *Current Branch for Business (CBB).* With CBB, organizations can delay upgrades for around four months. Delays are controlled with a flag in the operating system. Feature upgrades are supported for a minimum of 18 months.

In addition to the two feature branches, Windows maintains the Long-Term Servicing Branch (LTSB). This is a separate edition of Windows. New LTSB builds are delivered every two to three years. They never receive feature upgrades, are supported only on hardware available at release time, and are supported for 10 years. LTSB is used primarily for special cases where support for a particular Windows version is needed for a long time.

Windows Update for Business streamlines updates for Windows 10 devices.

Windows Update for Business allows IT teams to manage updates to Windows 10 devices without installing a server on the local area network or an agent on every device. It is configured using Group Policy settings or Mobile Device Management. Notable features include:

- **Deployment Rings.** Organizations using Windows 10 Pro, Enterprise, Education, and Pro Education can create deployment rings. These are useful for testing feature upgrades on particular sets of devices.
- **Driver Exclusion.** Organizations can exclude drivers delivered through Windows updates using a separate servicing tool.
- **Peer-to-Peer Update Delivery.** Once a device has downloaded an update, it can serve that update to all other devices on the local network.

Best practices can reduce the complexity of Windows 10 updates and deployments.

Four recommended best practices that simplify Windows 10 updates are:

1. Use deployment rings to test cumulative updates
2. Create a new reference image when deploying feature upgrades in the organization
3. Test in-place upgrades
4. Deploy a reference image for PC break-fix scenarios or where in-place upgrades break apps or drivers

Volume licensing is a best practice for imaging.

To obtain volume licensing media, organizations must buy a single Windows 10 Pro upgrade license. This can be purchased under the Open Licensing or Open Value program. OEM licenses must be Windows 10 Pro. Organizations that want to install Windows 10 Enterprise will need a Volume License Agreement with Software Assurance.

Microsoft's in-place upgrades for Windows 10 may not be the best approach for every organization.

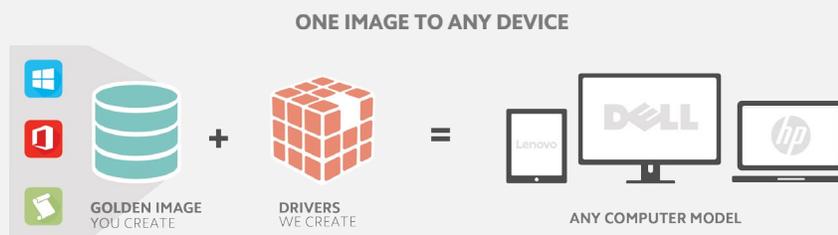
Microsoft recommends that IT teams rely solely on Windows 10 in-place updates and upgrades. Before accepting this as the organization's only option for device maintenance, IT teams must evaluate the potential risks of this approach. Many organizations have encountered unexpected user downtime, application incompatibility, and costly IT troubleshooting as a result of Windows 10 in-place upgrades.

A best practice is for IT teams to analyze the risks associated with Windows as a Service. The goal is to develop a plan that will provide IT with adequate control over endpoints. Solutions like SmartDeploy offer Windows 10 upgrade alternatives that help IT teams keep workers productive.

SmartDeploy simplifies deployment and distribution of Windows images.

Since 2009, SmartDeploy has provided solutions to simplify Windows deployment. The firm has over 2,000 customers worldwide.

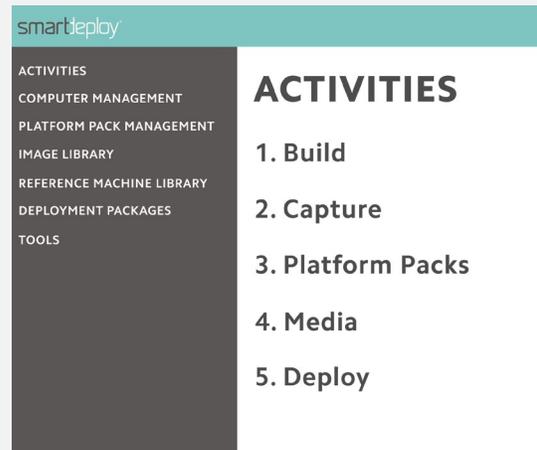
With SmartDeploy, organizations can create a single golden image or as many custom images as desired. Customers start with a virtual machine, add their desired OS and application stack, and make a direct image from it. SmartDeploy handles all driver management.



SmartDeploy enables IT teams to regain control, set their own upgrade schedules, reimage instead of performing in-place upgrades, and maintain a clean reference machine.

The **SmartDeploy Console** is the interface that guides users through the five steps needed for Windows imaging:

1. **Build.** SmartDeploy guides you through the creation of a virtual reference machine. Virtual reference machines are flexible, low-cost, and easy to access.
2. **Capture.** Simple wizards and logical best practices make it easy to capture images with SmartDeploy. The file-based system allows teams to mount files and service them offline.
3. **Platform Pack.** Users can download prebuilt device driver packages for the computer models they support. The library contains over 1200 Platform Packs.
4. **Media.** With a simple wizard, users can create boot or deployment media for USB/DVD, network, or cloud deployment. Including an optional Answer File in the deployment package allows for zero-touch, automated deployment.
5. **Deploy.** Deployment occurs with one click. SmartDeploy will also run SIS scripts automatically. SmartDeploy supports several deployment options including local offline media, pulling from existing network shares, PXE boots, and more. Wake-on-LAN is built in, so if machines are off, SmartDeploy wakes them up to complete the deployment.



Our approach is to allow customers to create a single golden image or as many custom images as they like. You get a centralized single image management practice that's based off the software you want. Those images are then deployed seamlessly to any device.

Spencer Dunford, SmartDeploy

SmartDeploy users enjoy one-click user data migration and easy maintenance of images for multiple Windows versions. In terms of performance, SmartDeploy outpaces the competition. It is possible to migrate 50 users to Windows 10 in just one hour.



To see SmartDeploy in action, organizations can download a fully-functioning free trial at: www.smartdeploy.com/freetrial