A Principled Technologies report: Hands-on testing. Real-world results.



Deliver pre-configured systems to end users faster with Dell Provisioning for VMware Workspace ONE

Compared to a traditional deployment process, the Dell service saved IT time for small and large-scale deployments

How long would it take your IT team to get a batch of five fully provisioned laptops into the hands of your employees? What about a hundred laptops? A thousand? Depending on the size of your order, the time it takes to manually configure these devices, combined with shipping logistics, could mean days or weeks of delays for your end user.

Dell Provisioning for VMware Workspace ONE[®] can solve this problem with minimal IT intervention. The new Dell service enables your company to pre-configure devices before they leave the factory, with no ongoing IT involvement. Your admin would simply provide Dell with your provisioning information from Workspace ONE, purchase your devices, and the systems will arrive at your employees' doorsteps ready to go—bypassing the need for on-site IT configuration. An administrator only has to perform the initial set up one time for any system that will receive this deployment set

At Principled Technologies, we compared the process of using Dell Provisioning for Workspace ONE to a traditional process of procuring devices and imaging them in-house. We found that the Dell service for Workspace ONE can remove the on-site admin time and complexity of the traditional method, even when deploying large quantities of devices. With Workspace ONE, depending on external factors that affect shipping, your end users could receive a device that is ready to go and provisioned to your specifications weeks sooner.

Faster time to value



Eliminate on-site administrative deployment time—save up to 55 hours*

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Deploy large quantities of fully provisioned devices with a single, one-time configuration



End users could receive fully configured systems faster we estimate up to seven workdays in advance*

*Compared to a traditional, 1,000-system deployment process

How traditional provisioning processes drain IT time

Traditional methods for provisioning and deploying end-user devices can present real headaches to IT staff and your business in general. Though deploying a single system may not be a complex or time-consuming task, limited staff and hardware resources can make larger deployments challenging to accomplish quickly.

A traditional deployment process can create other hitches:

- Upgrading from older devices means administrators must spend time and effort to maintain deployment server hardware and software
- Admins may need to manually repackage drivers to keep systems up to date
- Manual provisioning requires a lot of physical work space, making large-scale deployments difficult
- For large deployments, some end users may have to wait weeks after initial procurement before they can start using their devices
- Organizations may have to choose whether to dedicate staff to the deployment initiative or split their time between deployment and technical support duties

A faster way to deliver fully provisioned systems

Dell offers a way to save IT administrators time and effort and deliver end-user devices faster: Dell Provisioning for VMware Workspace ONE. This service allowed us to upload a provisioning package containing applications and a configuration file that Dell then applied to all devices we ordered.

After a one-time investment of about one hour of initial setup, our IT staff was able to deliver completely configured, readyto-go systems straight to the end user with no additional IT intervention. And because that one-time setup can be repurposed for subsequent orders, future deployments require little to no additional administrator time.



What is Workspace ONE?

Workspace ONE is a digital workspace platform that allows companies to deliver and manage the applications for employee devices. Workspace ONE offers unified endpoint management, Zero Trust security, single sign-on (SSO), integrations with various services, and more. Workspace ONE also supports on-premises Active Directory, though we did not test this feature. For additional information, visit www.vmware.com/products/ workspace-one.html



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How we tested

We deployed five laptops using two different processes: a traditional method where we provisioned end-user systems in-house, and a new process where we used Dell Deployment Services in conjunction with VMware Workspace ONE. In both use cases, a single administrator completed the processes described below.

The traditional method

Traditionally, IT prepares systems using both hands-on and automated tools. Your IT staff may receive a shipment of laptops to unpack, plug in, image, repackage, and ship back out. Our testing replicated that familiar process:

- 1. Our procurement team ordered five laptops and had them delivered to our facility.
- 2. Our inventory team received the laptops and unboxed them.
- 3. Our inventory team passed the laptops off to our IT administrator.
- 4. Our IT administrator provisioned the devices using System Center Configuration Manager. Whenever possible, our administrator moved on to a new system while the previous system finished an installation.
- 5. Our IT administrator passed the laptops back to the inventory team.
- 6. Finally, our inventory team prepared each laptop for shipping. In a real-world case, the laptops would take additional time to reach remote users or satellite offices.



This process requires the devices to change hands between multiple teams and go through up to two different shipping cycles—both of which cost your business money while keeping the device away from your end-user.

Let's take a look at how the process changes with Dell and Workspace ONE.

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Dell Provisioning for VMware Workspace ONE

With Dell Provisioning for Workspace ONE, your company can automate nearly all of its deployment process. Your organization simply selects its desired devices and completes a single configuration process. Compared to the traditional method we used for testing, Workspace ONE could get systems to off-site end users weeks earlier.

To deploy with Workspace ONE, we used the following process:

- 1. Our procurement team ordered five laptops from Dell.
- 2. Our IT team provided Dell with information about the deployment, then uploaded the provisioning package required to configure the end-user devices.
- 3. Dell provisioned and shipped the laptops directly to their end-user destinations. (We had them ship the laptops to our main office.)



After the second step, our administrator's work was done. Dell used the information we provided to select a Windows 10 OS image that best fit our needs, and applied that image to each system in our order with all appropriate device drivers included. Dell then applied the provisioning package and configuration file, which contained all the applications and organizational preferences we provided. We configured our deployment to use Windows Out-Of-Box Experience. We chose to connect to Microsoft Azure Active Directory (AD) instead of an on-premise AD server. We simulated the user joining the domain after receiving their laptop.



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Dell ProDeploy Client Suite

We tested Workspace ONE with the Dell standalone configuration service called Dell Provisioning for Workspace ONE. However, the provisioning service is available within Dell ProDeploy Client Suite (included in ProDeploy and Plus and available as an add on cost for Basic). ProDeploy Client Suite provides additional services that help customers ease deployment, including features like asset tagging, onsite installation, data migration, data sanitization and 30-day post-deployment support. For more information, visit www.dell.com/en-us/work/learn/prodeploy-plus.

How Dell Provisioning for Workspace ONE helps your business

Choose the apps that power your devices

Workspace ONE enables you to select packages and use custom files for your deployment. Our provisioning package used 10 applications, including Microsoft Office Pro Plus, Google Chrome, Slack, Adobe Reader DC, and more. To ensure our deployment worked as we intended, we validated the provisioning package prior to sending it to Dell. Likewise, companies can upload and test their own internal applications before Dell installs them on the target devices.

You make the rules

Workspace ONE enables your organization to choose the management model that works for your specific needs. Workspace ONE supports on-premises Active Directory Join, workgroups, and both Azure Active Directory Standard and Premium. Once joined, Workspace ONE keeps your policies (including group policy, patches, and applications) up-todate, ensuring employees and their confidential data remain safe.

Deploy with updates and drivers included

Dell deploys your devices with all the latest drivers and updates included. Your end users won't need to sit by while an entire quarter's worth of updates installs. They'll be able to get to work right away with a PC protected by the latest drivers and updates.

Save time on future orders

According to our Dell sales representative, Dell allows organizations to reuse information from past orders, meaning future orders won't require any effort from your IT staff. These time savings even apply to ordering different devices, as long as software requirements remain the same. If you have additional applications you want to include later (or changes to existing applications), you can send Dell your updated provisioning package.

Save money on shipping costs

When you order a system from Dell, the purchase price includes the cost of shipping to one location. But with a traditional deployment method, your staff would need to ship each system again after provisioning. Overnight shipping for a destination 60 miles away (such as Durham, NC to Greensboro, NC) could cost \$40.23 per device— and it could cost \$115.43 per device to ship across the country from Durham to Seattle.¹ In comparison, we paid just \$30 per system for Dell Provisioning for Workspace ONE. The service enabled us to send each system directly to its final destination, which could save time for your salaried staff and avoid additional shipping costs.



Setting up each order with Workspace ONE

Using Dell Provisioning for Workspace ONE required a one-time setup task that took **one hour and eight minutes** to complete. This included completing forms, talking to Dell engineers, and creating the provisioning package. After that, our IT administrator did not need to put in any additional effort.

Total time required to configure apps and settings for Dell Provisioning for Workspace ONE			
Order	Time required for any number of systems		
First order	1 hour, 8 minutes		
Future orders using the same settings	0 hours, 0 minutes		

Getting systems ready for users: Small-scale deployments

Below is a table comparing the time it took us to prepare one, two, and five systems for shipment using each deployment method. For more details on our hands-on testing methods, see the science behind this report.

Time required to prepare systems after placing an order				
Number of systems	Dell Provisioning for Workspace ONE*	Traditional deployment (hands-on admin time)	Traditional deployment (total deployment time)	
1	0 minutes	6 minutes, 16 seconds	31 minutes	
2	0 minutes	9 minutes, 7 seconds	33 minutes	
5	0 minutes	19 minutes, 33 seconds	46 minutes	

For the traditional process, hands-on time represents the time an administrator spends actively working on a device. Note that admin time also includes unboxing and cabling the laptops, provisioning tasks, and preparing the laptops for shipment. Total time includes the time spent waiting for a device to complete a task.

As you can see, for traditional deployments, each additional laptop adds staff time to the process.

With a small set of five devices, the benefits are already clear. But how does that change for a larger order?

*After initial admin setup with Dell





Crunching the numbers: Large-scale deployments



A company that needs to deliver hundreds of devices in waves can rely on Dell Provisioning for Workspace ONE to automate the process. After placing an order of any size, this process requires no additional on-site work from your IT administrator.

We estimate the traditional method would require six and a half hours of on-site admin time to deploy just under a hundred devices. It would take almost 56 hours for an IT administrator to manually deploy a thousand devices—that's **nearly seven full workdays**, and more than a week of valuable time that doesn't account for the time your staff would need to spend shipping devices. By using the traditional method for a large-scale deployment, your final device may not ship to its end user for two weeks.

Extrapolated hands-on admin time for large-scale deployments				
Number of systems	Dell Provisioning for Workspace ONE*	Traditional deployment		
24	0 minutes	1 hour, 23 minutes		
100	0 minutes	6 hours, 37 minutes		
1,000	0 minutes	55 hours, 55 minutes		
4,000 (1,000 units quarterly)	0 minutes	223 hours, 40 minutes		

*After initial admin setup with Dell



Our analysis of the traditional method assumes all the systems are the same model and that nothing goes wrong in any of the deployments. You'll still have to repeat this process for each order—so if you need to send a thousand devices out each quarter, the Dell service could save a month of administrative time per year over a traditional deployment.

With Dell Provisioning for Workspace ONE, deployment for any number of devices takes the same amount of time from your IT administrator. This allows IT staff to tackle more challenging, mission-critical tasks for your business.

Conclusion

Dell Provisioning for Workspace ONE can save time for enterprise organizations that need to deploy devices to end users. It doesn't matter if the end users are in a single location or dispersed—or whether an organization needs to deploy, five, a hundred, or thousands of systems.

We compared the time required to deploy a set of end-user devices in two ways: a traditional process where we manually provisioned and deployed devices, and an automated process that used Dell Provisioning for Workspace ONE. Based on our testing, we estimate that for large deployments of 1,000 devices, Dell Provisioning for Workspace ONE can save your IT staff 56 hours of on-site work and deliver systems to your employees up to two weeks sooner, barring external factors that may delay the shipping process. These time savings would scale with additional deployments of 1,000 systems.



1 On January 28, 2019, we used the shipping rates calculator on www.fedex.com to determine the cost of sending 5.8lb packages from the Principled Technologies office in Durham, North Carolina. We selected the FedEx Standard Overnight service.

Read the science behind this report at http://facts.pt/fjqf7we





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