



Using Dell ProDeploy Plus for Infrastructure can improve deployment times for Dell technology

Save valuable in-house admin time by using a Dell Technologies-certified engineer for installation and configuration of a Dell solution

Expanding or refreshing your infrastructure with new compute, storage, and networking resources can be vital to boosting the operations of your organization. However, getting those resources production ready can require significant time from IT admins. For organizations purchasing Dell Technologies™ data center solutions, Dell offers Dell ProDeploy Plus for Infrastructure to ease the deployment burden for IT staff.

To see how Dell ProDeploy Plus for Infrastructure can save time, we compared the time it took a Dell Technologies-certified engineer and one of our entry-level admins to install and configure a Dell solution in our data center. The solution consisted of two Dell PowerEdge™ R750 servers, a Dell PowerSwitch S5248F-ON switch, and a Dell PowerStore 3200T array. Using ProDeploy Plus for Infrastructure, our admin only needed to help with planning, which allowed them to focus on other business priorities during deployment. **The Dell Technologies-certified engineer deployed the solution faster than our in-house admin, saving nearly 16 hours or two days of work.**

3x

faster planning and deployment vs. in-house admins

53%

less software installation time vs. in-house admins

67%

less project-planning time vs. in-house admins

First things first: Save critical time by planning your deployment with Dell Technologies experts

Project planning can help simplify even the most complex deployment. Planning phases allow IT teams to understand necessary processes, read supporting documentation, and learn toolsets before touching any hardware. Planning a deployment can (and some would say should or must) include validating power and connectivity requirements, determining site readiness, and reviewing best practices. These tasks help organizations avoid serious delays and performance problems. **A key advantage of ProDeploy Plus for Infrastructure is that Dell provides project managers, solution architects, and engineers that know the best practices, approaches, and tools for their solutions.**

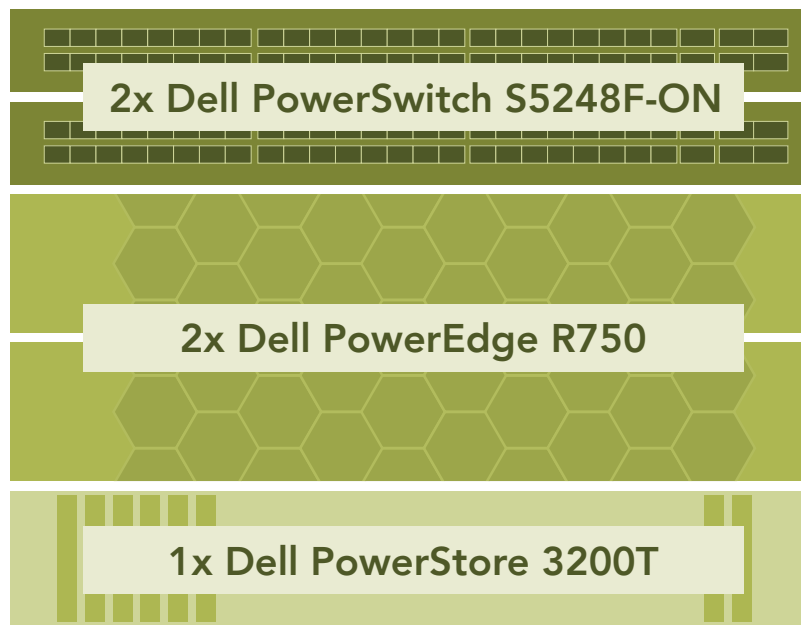


Figure 1: Illustration of the Dell solution. Source: Principled Technologies.

Streamline communication about deployment with Dell via TechDirect

In the initial stages of procurement, a Dell Technologies team member guided us through the onboarding process, providing access and a guided walk-through of our project in the Enterprise Project Services interface of Dell TechDirect. TechDirect is a self-service portal that allows Dell experts and customers to collaborate on environment design prior to on-site installation. The TechDirect portal serves as a centralized repository for information where project members from the customer and Dell can view information and provide feedback prior to approving and scheduling the on-site installation. Customers can also confirm readiness for their scheduled deployment and view the final verification reports.

During our first meeting with Dell experts about this deployment, they walked us through TechDirect, explaining how to use it and ensuring that all admins could view and access the portal and our project. At subsequent meetings, Dell experts used the Tech Direct portal for collaboration, design communication, and sign off.

The portal simplified the planning process by providing a clear rubric for our team to know what information to provide prior to installation and to have all configuration data in one place to help ensure smooth planning and review before installation.

Key takeaway:

Dell ProDeploy Plus for Infrastructure can minimize your IT staff's involvement in planning, which allows them to focus on other business priorities.

Streamline the planning process with Dell ProDeploy Plus for Infrastructure

Before a Dell Technologies-certified engineer deployed the solution in Figure 1,* a Dell Technologies in-house expert guided the planning phase. The Dell team gathered and documented the project requirements and developed a detailed project roadmap and implementation plan, which highlighted best deployment paths and practices.

Our in-house staff played a role only in giving input during the planning phase of the ProDeploy Plus for Infrastructure deployment. They provided environment information—such as switch configuration, assigning IP addresses, etc.—and approved networking, storage, and server proposals from solution architects. Our staff did not have to unbox, rack, or deploy hardware, as the Dell Technologies-certified engineer handled each of these tasks and other Dell experts assisted with planning.

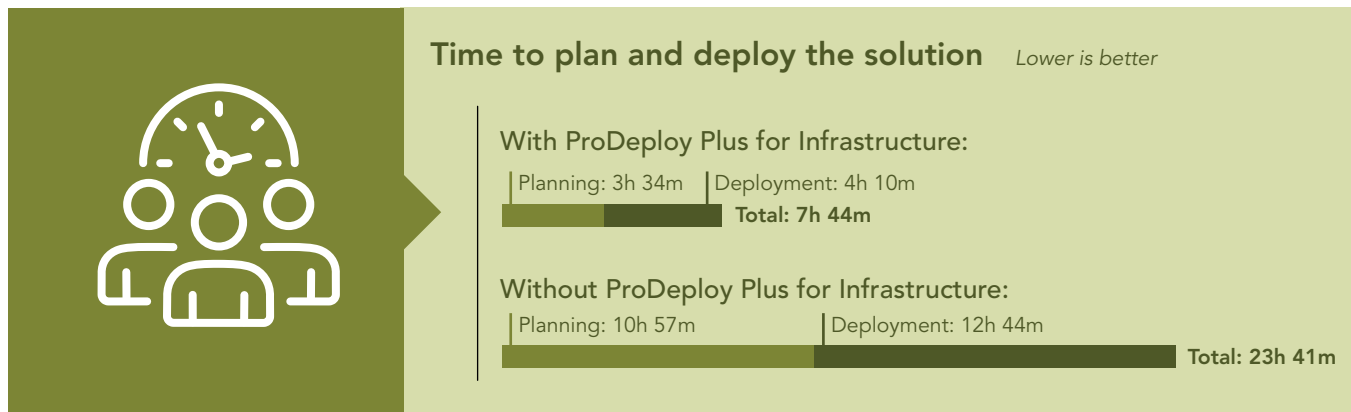


Figure 2: Time to plan and deploy our solution with and without Dell ProDeploy Plus for Infrastructure. Source: Principled Technologies.

Without ProDeploy Plus for Infrastructure, our admin had to spend **nearly 11 hours, approximately one and a half business days**, planning the deployment of the solution in Figure 1. Both deployments (with and without ProDeploy Plus for Infrastructure) needed a project-planning phase, but as Figure 2 shows, the Dell planning team saved our IT staff nearly 16 hours compared to deployment without ProDeploy Plus for Infrastructure. Organizations of any size could save time and effort with ProDeploy Plus for Infrastructure.

*For detailed configuration information of the solution, see the **science behind the report**.



Save hands-on time for your IT admins with a Dell Technologies-certified engineer

When using the ProDeploy Plus for Infrastructure service, our admin spent 3 hours and 34 minutes during the deployment planning process, and that completed their involvement. Further planning and the deployment did not require any member of our staff. The Dell Technologies-certified engineer spent 4 hours and 10 minutes during one business day physically installing and configuring the PowerEdge servers, networking components, PowerStore array, and software.

As Figure 3 shows, **without ProDeploy Plus for Infrastructure, our admin spent 19 hours and 53 minutes planning, installing, and configuring the solution over three business days after our pre-planning stage.**

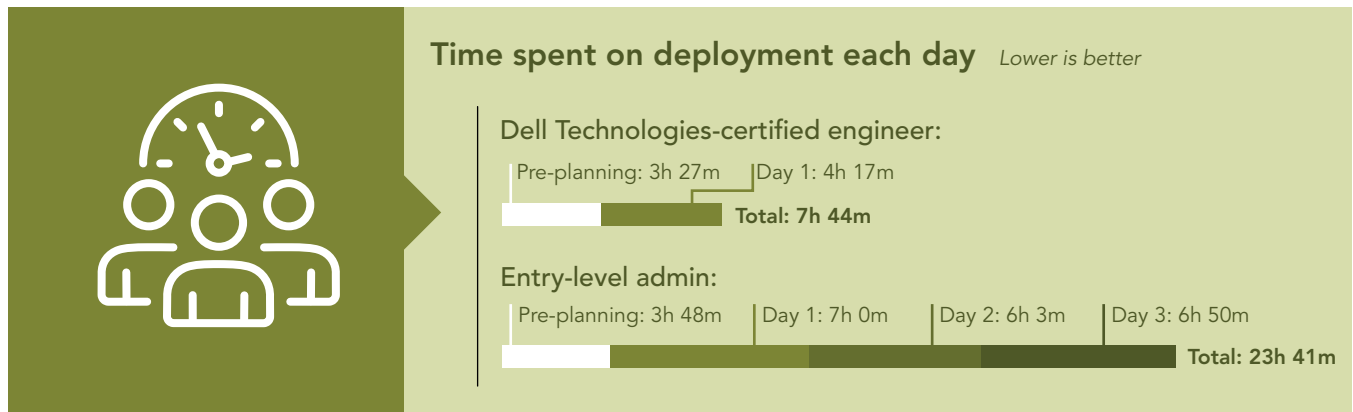


Figure 3: Time, in business days and hours and minutes, for a Dell Technologies-certified engineer and our admin to deploy the Dell solution. Source: Principled Technologies.

Table 1 breaks down the deployment times by stage of installation and configuration in hours and minutes.

Table 1: Time, in hours and minutes, for a Dell Technologies-certified engineer and our admin to complete each stage of the deployment process. Source: Principled Technologies.

Stage	Our admin	Dell Technologies-certified engineer	ProDeploy Plus percentage less time
Planning	10:58	3:34	67.45%
Unboxing and racking	0:34	0:17	50.69%
Initial cabling	0:49	0:14	70.57%
Configuring storage	3:09	1:34	50.54%
Updating Ethernet switch firmware and OS	2:13	0:19	85.58%
Configuring Ethernet switch	2:24	0:07	95.00%
Updating server firmware	2:11	0:30	76.94%
Installing ESXi	0:34	0:35	N/A
Setting up vCenter	0:49	0:34	31.31%
Total deployment time without planning stage	12:43	4:10	67.21%
Total planning and deployment time	23:41	7:44	67.32%

Key takeaways from deployment:

- Following deployment best practices took longer for our admin because they had to consult deployment documentation for guidance. **ProDeploy Plus for Infrastructure leverages years of experience and expertise to optimize infrastructure deployment.**
- With ProDeploy Plus, unboxing and racking the PowerEdge servers, networking components, and the PowerStore array took **51 percent less time** compared to the time it took our admin.
- ProDeploy Plus **saved 35 minutes and followed industry best practices** when cabling the solution.
- Setting up and configuring the networking components with ProDeploy Plus **saved 4 hours and 10 minutes (90 percent less time).**
- ProDeploy Plus **saved 1 hour and 36 minutes (50 percent less time)** when configuring the Dell PowerStore.
- With ProDeploy Plus, installing the OS, updating the server firmware, setting up VMware vCenter®, and updating VMware ESXi™ **saved nearly 2 hours (53 percent less time).**

Day-by-day breakdown: ProDeploy Plus for Infrastructure vs. in-house deployment

Table 2 compares how the Dell Technologies-certified engineer and our admin spent their time during deployment. **The Dell Technologies-certified engineer completed the deployment in four hours and 17 minutes in one day whereas our admin spent nearly 20 hours over three days completing the same deployment tasks.** This means that an organization could have their new PowerEdge servers, networking components, and PowerStore array up and running **two days earlier** by using ProDeploy Plus for Infrastructure.

Key takeaway:

The Dell-certified engineer completed the hands-on Dell solution deployment in one business day.

Table 2: A daily comparison of deployment with and without ProDeploy Plus for Infrastructure.

With ProDeploy Plus for Infrastructure		Without ProDeploy Plus for Infrastructure	
Day 1		Day 1	
Planning		Planning (Day 1)	
Unboxing and Racking		Unboxing and Racking	
Initial Cabling		Initial Cabling	
Configuring Storage		Updating Ethernet switch firmware and OS	
Updating Ethernet switch firmware and OS		Updating server firmware	
Configuring Ethernet switch		Day 1 time	7:00
Updating server firmware		Day 2	
Installing ESXi		Planning (Day 2)	
Setting up vCenter		Configuring Ethernet switch	
Total time	4:17	Day 2 time	6:02
		Day 3	
		Planning (Day 3)	
		Configuring Storage	
		Installing ESXi	
		Setting up vCenter	
		Day 3 time	6:50
		Total time	19:52

Get additional post-deployment care from Dell Technologies

After installing and configuring the solution, both our in-house admin and the Dell Technologies-certified engineer completed post-deployment services. These were mostly checks to ensure things were running smoothly. However, **the Dell Technologies-certified engineer took some extra time to do things beyond deployment as part of the ProDeploy Plus service, including a knowledge transfer about the solution. They collected environment configuration across all components, verified the environment was healthy, and connected the new environment components back to Dell Technologies Services via our secure connect gateway, a service that enables secure remote monitoring and alerting.** For the knowledge transfer, the Dell Technologies-certified engineer walked us through the environment, confirmed our admin had all necessary information, and noted current software and firmware versions for maintenance and patching.



Conclusion

New data center resources can be great for your critical workloads and applications, but deploying those resources can burden IT staff. Organizations adding Dell Technologies solutions to their data center can use the deployment service Dell ProDeploy Plus for Infrastructure to simplify deployment and save time.

We found that Dell ProDeploy Plus:

- **Planned the deployment with minimal input from our in-house staff**, which freed them up to focus on organizational demands and other strategic initiatives during deployment
- Reduced deployment planning by **67 percent—down to just three hours and 34 minutes**—saving significant pre-deployment time for our admin as well as in totality
- Deployed our Dell Technologies solution in just **one business day, needing just four hours and 17 minutes**
- Reduced installation time by **nearly 16 hours, or two days**, compared to our admin—or in other words, deployed the solution **three times as fast**

With ProDeploy Plus for Infrastructure, your organization can realize a faster, more efficient deployment of Dell technology with minimal impact on your in-house IT staff.

Read the science behind this report at <https://facts.pt/oTcBN7v> ►



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This project was commissioned by Dell Technologies.