The Missouri Department of Conservation calls on Dell ImageDirect to help reduce new system setup costs by up to 70 percent.

Founded in 1937, the Missouri Department of Conservation was the world’s first nonpolitical, science-based conservation agency with exclusive authority over forests and fish and wildlife. Today, the department uses IT to help the public discover, enjoy, and conserve Missouri’s fish and wildlife resources and the habitats they depend on.
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Todd Larivee, IT manager, Missouri Department of Conservation

Staff members at the Department of Conservation also make extensive use of IT to help the department deliver as many services as possible on a limited budget. “We use technology to help us connect with the public,” says Todd Larivee, IT manager at the Missouri Department of Conservation. “For example, the public can find outdoor recreational opportunities and information on promoting healthy resource management, and even buy their hunting and fishing permits through our Web site. We also operate a number of kiosks in our offices across the state that provide information about Missouri natural resources to the public.”

CLIENT SYSTEM REFRESH SCHEDULE TAXES IT STAFF RESOURCES

With an IT budget just slightly below the average for Missouri state agencies, the department’s IT staff is always looking to improve efficiency. They noticed the time spent configuring and installing the department’s large number of notebook and desktop PCs was unusually high.

The agency’s fleet of 1,650 notebook and desktop PCs is refreshed on a four-year cycle. While that policy ensures that employees have the most productive tools to perform their jobs, it also requires that the IT staff replace roughly 400 computers every year. Plus, the process grew more expensive each year as the department deployed increasingly complex software. “We had run up against labor and budget constraints, so something needed to be done,” says Larivee.

Analysis of the client refresh process uncovered several inefficiencies, starting with the time spent creating and managing system images. A system image includes the OS, drivers, applications, and other software that is installed on a new system; using a standard image to configure new systems can save time and reduce errors. But developing standard images for the Department of Conservation fleet was a complicated process. Creating images that worked on multiple hardware platforms required extensive research and testing of different application and driver combinations. Twice a year, Larivee and his team spent several days developing one (or sometimes two) standardized system images. Those images would slowly become outdated as the OS, application, and driver vendors issued patches and updates.

The out-of-date system images caused further inefficiency when new systems arrived from the factory. After installing the standardized system image, department technicians had to apply the additional patches and updates issued since the image was created. It took technicians up to
30 minutes per computer just to apply the image and the updates. Says Larivee, “At that rate, we were burning five weeks a year in staff time on new systems that hadn’t even left the IT bench.”

Once the systems were fully configured, Larivee and his team spent a great deal of time delivering the computers by car to their final destination at one of nine field offices across the state. While some systems were drop-shipped to field offices that were large enough to have their own IT staff, that was the exception rather than the rule. “We were using the equivalent of one full-time employee just in travel time every year,” says Larivee.

**DELL IMAGEDIRECT HELPS SIMPLIFY IMAGE MANAGEMENT AND SPEED DEPLOYMENT**

The IT team began investigating ways to increase the efficiency of its client PC deployment and configuration management process. “Our initial thought was to outsource some of the process, and we contacted Dell Services to see if it would be cost-effective to have them deliver the systems to our field offices and configure them on-site,” says Larivee. “The Dell Services consultant that we spoke to explained that the Dell ImageDirect service would solve most of our problems by automating the image management and installation process. We signed up for the program immediately.”

Dell ImageDirect helps reduce the time that the department’s IT team spends researching, creating, and managing system images. IT administrators now use a Web-based interface to create and manage custom images, and Dell technicians apply those images to systems during the manufacturing process. The systems arrive ready to use and typically do not require further configuration or software installation.

With the Dell ImageDirect service, department IT staff can save time by quickly and efficiently creating and customizing system images. IT administrators use a Web-based, icon-driven interface to create a parent image containing the OS and all standard applications, choosing applications from the Dell library or uploading their own. The IT administrators can also create a subset of system images based on the parent image. These “child” images can contain applications or other software specific to a department. Any changes made to the parent image will also appear in the child images, helping to streamline the process of applying updates consistently across department systems. In addition, ImageDirect facilitates driver management by creating a single image for all of the department’s current and future Dell OptiPlex™ and Dell Latitude™ systems.

Dell ImageDirect also helps reduce the amount of time that IT administrators must spend testing images and patching and updating new systems. Before deploying an image, Dell applies its knowledge and experience to validate the image, ensure image integrity, and confirm that it is virus free and contains the latest drivers and customer-selected security patches. The department’s IT team can then order systems direct from the Dell factory with the image already installed or download the image for installation.

**PREINSTALLED IMAGES HELP CUT CLIENT SYSTEM DEPLOYMENT COSTS BY UP TO 70 PERCENT**

The Dell ImageDirect service can help eliminate the time that the department’s IT staff spends configuring new systems—saving about five staff weeks over the course of a year. The bulk of the time is saved because administrators do not need to install images on most new systems. But the IT staff also saves time on systems that they must image by hand: because the images available through Dell ImageDirect are continually updated with the latest drivers and security patches, agency administrators no longer need to manually patch and update new systems that received an outdated image. “Dell has helped us eliminate the time we spend installing software on new systems, saving between US$12 and US$14 in staff time per notebook or desktop deployed into the field,” says Larivee. “In the past, we spent about US$20 in staff time just applying a software image and updates onto a PC. Now, with Dell ImageDirect, we pay roughly US$6 per system. Adding it up over the course of a year, we save around US$5,000.”

Larivee expects that the rapid system deployment made possible by Dell ImageDirect will help further improve the productivity of the Department of Conservation workforce. “The systems that we’re delivering to end users are more capable than the systems that we’re replacing, and the staff can use them to work more efficiently and accomplish more,” says Larivee. “The sooner we can get these systems into their hands, the better service they can deliver to the public.”

**DIRECT SHIPMENTS HELP ELIMINATE AN ESTIMATED US$20,000 IN TRAVEL TIME AND EXPENSES**

With the Dell ImageDirect service in place, the Department of Conservation now has new Dell systems shipped directly to field offices, saving fuel costs, vehicle depreciation, travel expenses, and roughly 300 hours of travel time each year. Larivee also expects that the direct shipments will help cut—or even eliminate—end-user downtime. “Soon, we expect that end users will just unpack the computer and plug it in,” says Larivee. “We can move their profile and data over automatically with Altiris Migration Suite, so unless there has been a major OS or application upgrade, the only difference that they’ll see when they start their new system is that it’s much faster. In just a few minutes, they can be right back to work.”

**AUTOMATING IMAGE MANAGEMENT SAVES APPROXIMATELY TWO WEEKS OF IT STAFF TIME PER YEAR**

The Dell ImageDirect service helps Department of Conservation IT administrators save approximately two weeks of work over the course of a year by helping to minimize or eliminate system image management tasks. For example, the IT staff no longer wastes time sorting through drivers and applications to find a combination that will work across multiple hardware platforms. Also, the
Dell ImageDirect service tests and validates the system images, taking over a task traditionally performed by the department’s IT staff. “The time that we save by using Dell ImageDirect to manage system images is time we can spend on tasks that make our end users more productive,” says Larivee. “For example, we can get help-desk incidents resolved, roll out new tools like Microsoft Office 2007 more quickly, and expand our use of Altiris Management Suite to enhance our service to our employees.”

**DEPENDABLE IMAGES HELP CUT CONFIGURATION-RELATED SUPPORT CALLS BY UP TO 10 PERCENT**

The consistent images provided by Dell helped the Department of Conservation reduce the number of support calls that result from incorrect initial system configurations—approximately 1 out of every 10 configuration-related help-desk complaints. “Dell ImageDirect delivers practically flawless software images, which has reduced the amount of tweaking we have traditionally performed on new PC configurations, and so far has helped eliminate support issues with incorrect drivers and driver conflicts,” says Larivee. “That saves us 1 to 2 support calls per week on average, or roughly 10 percent of our configuration-related support calls.”

**DELL IMAGEDIRECT HELPS AGENCY IMPROVE SERVICE TO THE PUBLIC**

Ultimately, the Dell ImageDirect service helps enable the Missouri Department of Conservation staff to spend more time serving Missouri citizens. “With the system images provided by Dell ImageDirect, our end users get new systems more quickly, they spend less downtime waiting while we transition them to their new equipment, and they have fewer support issues once they’re up and running,” says Larivee. “It is not an overstatement to say that Dell ImageDirect makes us a more efficient public agency. Dell is helping us deliver more services, faster responses, and better information to our constituents.”

For more information about Dell ImageDirect, go to DELL.COM/ImageDirect. For more information on this case study or to read additional case studies, go to DELL.COM/Casestudies.

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