U.S. Army Corps of Engineers

Building an infrastructure

The U.S. Army Corps of Engineers uses Adobe® Acrobat® Pro, Photoshop® Elements, and LiveCycle® Reader® Extensions ES2 to support collaboration, digital asset management, and form-based processes.

The 34,000 dedicated civilians and soldiers that make up the U.S. Army Corps of Engineers (USACE) work diligently to deliver engineering services to customers in more than 90 countries worldwide. Strengthening national security is at the heart of the USACE’s efforts to maintain America’s infrastructure and provide military facilities for service members worldwide. USACE uses a number of technologies to work and communicate across geographies and skill sets. Through an enterprise relationship with Adobe, all USACE personnel have access to Adobe Acrobat Pro, Photoshop Elements, and LiveCycle Reader Extensions ES2 solutions that support visual information sharing and document and form-based processes.

Laying the groundwork

In 2009, USACE established an enterprise contract for the purchase of Adobe Acrobat Pro software that provides universal access to the software while centralizing purchasing to reduce costs. USACE personnel use Acrobat Pro in a variety of document-based processes, such as approving engineering designs, tracking projects, exchanging spreadsheets, or managing vendor contracts and invoices. Acrobat Pro provides a standard way for everyone in the USACE to share, mark up, and digitally sign documents, regardless of platform or available desktop or design software.

Since moving to the enterprise contract, USACE has reduced IT maintenance and administrative costs because everyone throughout the agency is using the same version of Acrobat. In addition, predictable budget requirements result in more effective fiscal planning. The enterprise license has also reduced the per-seat license costs. The total cost avoidance from moving to an enterprise contract for Acrobat software for the agency is estimated at $6.6 million over a five-year period.

Building on success

Based on the savings from the Acrobat Pro enterprise license agreement, USACE established an enterprise contract for Adobe Photoshop Elements software. All USACE personnel, from managers to field technicians, can now use Photoshop Elements as an extension of their administrative toolset for activities such as producing briefing packages, preparing images for presentations, and viewing engineering files.

Giving all personnel access to image editing software also enables the sharing of creative assets and information among offices, without compatibility concerns. For example, people who work on maps can do basic cropping or color correction to focus viewers in on specific information. They can also add data on top of photos, such as using text or graphics to point out specific elements in aerial photos. These images can then be passed along to other offices and are often used to collaborate on mission-critical projects within communities.
In addition to saving $1.3 million in licensing costs in the first year, the Corps estimates it will reduce costs by $750,000 per year by reducing the number of purchase transactions from more than 500 to a single transaction each year.

**Challenge**
- Centralize procurement of Adobe creative software applications
- Support visual information sharing across the Corps
- Enhance document-based collaboration and communications
- Simplify forms creation and distribution

**Solution**
- Establish enterprise license agreements for the purchase of Adobe Acrobat Pro and Adobe Photoshop Elements software
- Enable all USACE personnel to upgrade to Adobe creative software as needed
- Extend functionality within Adobe Reader software with Adobe LiveCycle Reader Extensions ES

**Benefits**
- Saved $6.6 million over five years with Adobe Acrobat Pro enterprise agreement
- Saved $750,000 per year in purchase transaction costs for Adobe creative software
- Streamlined document-based processes and reduced reliance on paper
- Simplified forms creation and distribution

The enterprise license agreement provides USACE personnel with useful tools for accurately communicating visual information, while also providing immediate access to the software regardless of the purchasing cycle. In addition to saving $1.3 million in licensing costs in the first year, the Corps estimates it will reduce costs by $750,000 per year by reducing the number of purchase transactions from more than 500 to a single transaction each year.

For many Corps personnel, the Photoshop Elements solution will be all they need for basic handling of digital photos. If it’s determined that additional Adobe creative solutions are needed for an individual or location, the software can be purchased under the existing license agreement.

**Extending business processes**
Visual content is just one way the Corps communicates project-based information both internally and externally. Teams need to report on the status of projects or infrastructure implementations, and forms help with accurate and comprehensive data collection, statistical reporting, and authorization of information. This information is often used to set priorities, secure permits, and determine funding for vital infrastructure projects.

USACE is a widely dispersed organization that requires collaboration with state, local, and commercial entities, as well as worldwide contacts. Communicating transparently with civilian partners and the general public is a priority. USACE recognized that enabling the public sector to access forms electronically—rather than having to print, scan, fill, and mail back—would save time and money. To manage the sharing of information across projects, geographies, and sectors, USACE needed a ubiquitous forms solution that offered transparency and universal access.

Using Adobe LiveCycle Designer, a LiveCycle component available within Adobe Acrobat software, USACE personnel can create and deploy intelligent forms that meet the needs of various projects and provide a ubiquitous means to share information and gather data with outside sources. Subject matter experts can create the first draft of a form and deliver it to the forms design team, which then refines it and makes sure it follows licensing and policy requirements.

When the forms are complete, USACE can use Adobe LiveCycle Reader Extensions ES2 to extend functionality within Adobe Reader software, enabling users to enter data, save forms locally, and digitally sign documents. For example, field operations personnel need to collect data and report statistics on a regular basis. With LiveCycle Reader Extensions ES2, personnel can now access the appropriate forms using Adobe Reader and complete and submit the information electronically, improving the accuracy of the information while reducing the overall environmental footprint.
With Adobe LiveCycle ES, Acrobat Pro, and Photoshop Elements on every desktop, USACE is giving its personnel integrated tools for collaboration and visual communications. Personnel can also use the tools together to support communication goals.

For example, inspectors need to take pictures and report on statistical information for inspections and surveys. Using Photoshop Elements, inspectors can color correct images and even add text to photos before inserting them into reports created with Acrobat Pro. Similarly, a form focused on the analysis of a type of terrain can integrate pictures showing a certain slope or grade of landscape so personnel completing the form can accurately report information.

By giving all personnel a consistent software solution for producing visual content, the USACE enables them to more easily communicate information pertaining to infrastructure and environmental projects. Combining visual information in reports or forms and exchanging information electronically can enhance communications, whether that data is being reported among offices, states, or all the way up to congress.

For more information
www.adobe.com/products/acrobat
www.adobe.com/products/photoshopel