An EPA-wide solution for obtaining and sharing Earth imagery

For many years, the EPA has used GIS for projects such as the Superfund site cleanup, wetland and pesticide analysis, air and water quality monitoring, endangered species protection, and emergency response. Aerial views provide a valuable visual backdrop that helps EPA staff set up projects, plan data collection, locate nearby facilities affected by chemical spills, and help others understand the problems being addressed.

High resolution imagery required

Until recently, finding and accessing image data have been bottlenecks. Like other imagery users, the EPA had to choose between two unsatisfactory solutions. Its staff could buy large datasets to use over a period of years, knowing that they would never use most of the data, or as needed, they could order smaller datasets that were still larger than they needed for a specific project, downloading them via FTP. In either case, EPA customers bought more data than necessary and wasted valuable time searching for the portion needed. Users had little assurance that they received the most recent or accurate images available.

Constantly in need of the most current high-resolution data available for analyzing changing environments, EPA staff members turned to commercial web services to provide easy access to the most relevant imagery data available.

Eliminate bottlenecks

In 2003, EPA staff around the country began using DigitalGlobe’s ImageConnect plug-ins for ArcGIS Desktop and ArcIMS to eliminate imagery bottlenecks. They purchased subscriptions to the service, which provided more Internet access to the petabyte of aerial and satellite imagery available on the company’s servers than previous methods. This enabled the EPA users to quickly find, view, compare, and download the necessary data. In 2005, EPA's management in Washington, D.C. responded to employees’ increasing demand for current high-resolution imagery by expanding DigitalGlobe data access to the entire agency. EPA employees could then integrate access within all of the ArcGIS desktop products, as well as inside EPA’s Enviromapper ArcIMS web viewers.

Company information

The Environmental Protection Agency (EPA) leads the nation’s environmental science, research, education, and assessment efforts. A majority of EPA’s staff are engineers, scientists, policy analysts, and legal staff who apply their technical skills in fulfilling EPA’s mission of protecting human health and the environment.
CASE STUDY

Environmental Protection Agency

DigitalGlobe’s ImageConnect allowed EPA to access and share current high-resolution imagery and metadata across agencies and applications.

Challenge
Accessing the most current high-resolution data available for analyzing the constantly changing environments they monitor.

Solution
EPA sought out the best satellite imagery tool to manage all of their monitoring and analysis activities and create efficiencies.

Results
DigitalGlobe’s ImageConnect allowed EPA to access and share current high-resolution imagery and metadata across agencies and applications.

INDUSTRY
» Civil government
» Humanitarian
» Natural resources

USES
» Environment
» Emergency planning
» Disaster relief
» Flood management

“The fact that we can share access to the service agency-wide and between multiple ESRI applications makes things a lot easier and cheaper for us. Also, obtaining images can now be done in a few minutes for anywhere in the region.”

DAVE CATLIN, EPA INTERNET GEOSERVICES