

Revision and Product Generation Software

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The U.S. Geological Survey (USGS) developed revision and product generation (RevPG) software for updating digital line graph (DLG) data and producing maps from such data. This software is based on ARC/INFO, a geographic information system from Environmental Systems Resource Institute (ESRI). RevPG consists of ARC/INFO Arc Macro Language (AML) programs, C routines, and interface menus that permit operators to collect vector data using aerial images, to symbolize the data on-screen, and to produce plots and color-separated files for use in printing maps.

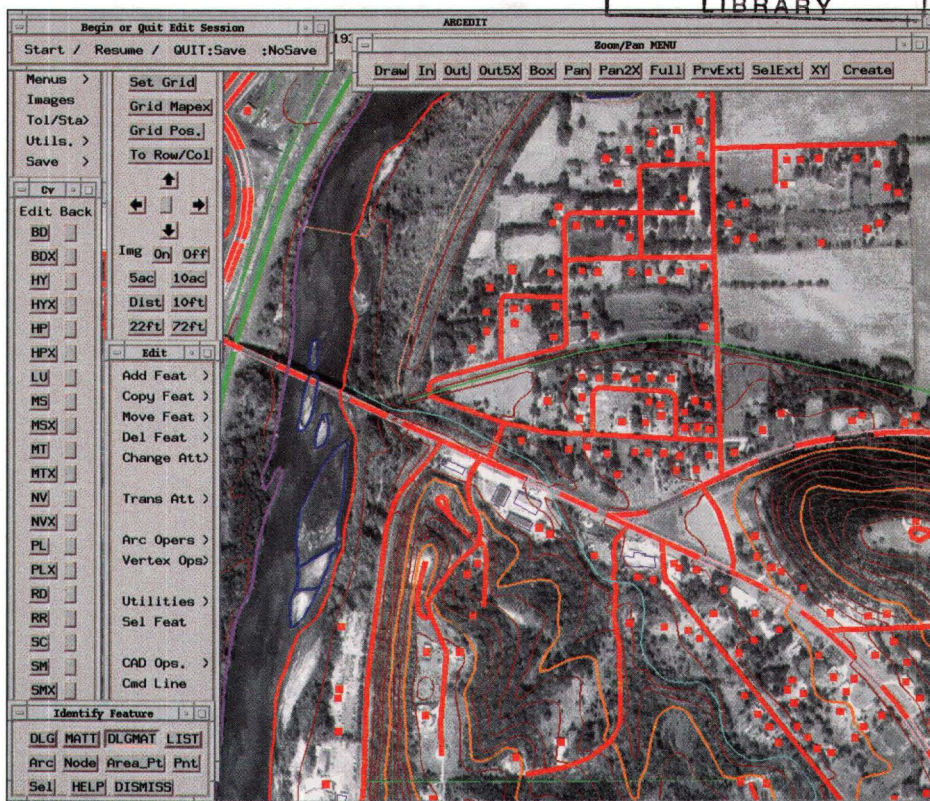
Background

The USGS mission includes meeting the mapping requirements of various Federal, State, and public users. Through the National Mapping Program, the USGS has developed digital tools and techniques to accomplish this mission. In the 1970's, the USGS began to digitally capture graphics as points, lines, and polygons, using numeric codes to represent their attributes. The files generated in this manner are called DLG's. Recently, a means was sought to update these and other vector data sets using digital ortho-photo quadrangle (DOQ) images. DOQ's are high-altitude aerial photographs that have been scanned and geographically corrected. The USGS developed RevPG software to collect and revise DLG data using a DOQ image as an on-screen backdrop, and to make updated maps from these data.

Capabilities

RevPG has the following primary capabilities:

- loading and registration of DLG and DOQ images;
- tools to edit DLG data to reflect changes observed in the DOQ;
- symbolization of elements derived from their numeric attributes;
- query functions and queued edit functions;
- feature conflict detection and resolution; and
- options for electrostatic plots and film plots.



Availability

Under a Cooperative Research and Development Agreement, the USGS and ESRI have recently completed porting RevPG to several Unix environments. The system requirements are ARC/INFO 6.1.1, 7.0.2, or later versions; DG/UX, SunOS/Solaris, HP/UX, AIX, IRIX, or Ultrix/OSF operating systems; a minimum of 28 megabytes of RAM and 21 megabytes of disk space, along with 100 megabytes of swap space.

A limited number of CD-ROM's containing RevPG will be made available on request.

Information

Complimentary copies of RevPG on CD-ROM are available. To request a copy, contact:

USGS Information Services, MS 317
Box 25286, Denver Federal Center
Denver, CO 80225
303-202-4200; Fax 303-202-4693

RevPG can also be retrieved on Internet through
<URL: <http://mapping.usgs.gov/html/revpg.html>>

For more information about RevPG, contact:

USGS Mid-Continent Mapping Center
RevPG System Manager
1400 Independence Rd., MS 706
Rolla, MO 65401
Phone: 573-308-3542
Fax: 573-308-3652

For information on other USGS products and services, call 1-800-USA-MAPS, e-mail esicmail@usgs.gov, or fax 703-648-5548.

Receive information from the EARTHFAX fax-on-demand system, which is available 24 hours a day at 703-648-4888.

The address for the USGS home page is:
<URL: <http://www.usgs.gov/>>