

QUICKTAKE REVIEW

Although SOCET GXP's organization and toolset may be unfamiliar to commercial remote-sensing specialists, it provides a comfortable and effective environment for trained image analysts (IAs).

SOCET GXP begins with a view of the Workspace Manager, from which users can open and close a large number of images and get a comprehensive look at all currently loaded files in a familiar tree structure. From this tree structure, an IA can quickly see an overview thumbnail of an image as well as access metadata, the sensor model and the processing chain.

In testing, almost 100GB of image files were loaded, including several panchromatic QuickBird Basic scenes, which SOCET GXP automatically recognized and loaded. After loading, any combination of images can be viewed in one or more "Multiports," which are full-featured mono- and stereo-viewing windows with dockable toolbars, providing access to a wide array of functions.

Multiports display one image by default, but they can be manipulated to display four separate panels, each containing an unlimited number of images, graphics and terrain data. The flexible display allows an IA to integrate many views of the ground from a variety of sensors.

Processing Chain and Annotation

To effectively extract information from a sequence or collection of images, an IA must be able to enhance grayscale or color-composite images. In SOCET GXP, this capability goes beyond basic contrast enhancement. Fourier processing, morphological operators and user-designed convolution filters are accessible through the MultiPort.

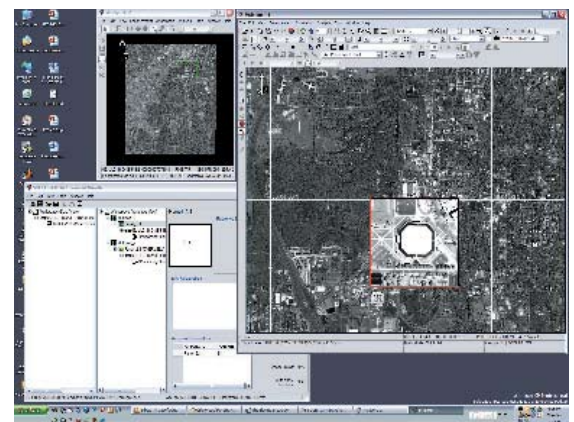
An important processing aspect that's often overlooked is the provenance of a processed geospatial image, which SOCET GXP addresses through a "processing chain" that's essentially a record of functions or events that have been applied to an image. If a series of enhancements or transformations have been performed, they can be saved as part of an internal processing-chain file, which can

be applied to any image in the workspace to initiate the same sequence of events.

Annotation capabilities in SOCET GXP are designed with government IAs in mind. In addition to a standard set of graphic elements (e.g., text boxes, arrows, ellipses, etc.), SOCET GXP is delivered with a large collection of icons accessible from the "Graphics Manager," representing everything from ground-control points to elements in air, ground, electronic and naval orders of battle. Predefined and formatted text fields such as classification, date/time group and release information allow IAs to quickly markup an image with required and informative annotations before dissemination.

File Formats and Documentation

SOCET GXP supports a large number of formats familiar to military and government users. It imports GeoTiff, various JPG2000 encryption formats, all NITF versions, TFRD, QuickBird, IKONOS, Landsat and specialized formats from platforms such as GlobalHawk. It's important to note that most formats



SOCET GXP uses MultiPorts to show multiple windows, including a main viewer, an overview window and a Workspace Manager.

include sensor-orientation information that SOCET GXP supports.

BAE Systems provides a browser-based help system and PDF files. The help is searchable, and it provides a clean and concise description of functionality and procedures. A large collection of example data is included, such as imagery from a variety of sensors and stereo pairs. Workflows in the documentation walk new users through most of the software's functionality.

REVIEWED BY

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SOCET GXP 2.1

PRICE

Contact company.

REQUIREMENTS

Windows: Microsoft Windows XP Professional (SP1/SP2), 2GB SDRAM, 120GB hard-disk space, graphics card, stereo-viewing hardware. Unix: 512MB RAM, CD-ROM, 24-bit PGX64 graphics card, Mouse-Trak Professional trackball.

COMPANY

BAE Systems
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WEB

www.baesystems.com/gxp



STRENGTHS

Strong annotation and area-of-interest tools; integrated support of sensor models; stereo feature extraction.

WEAKNESSES

Browser-based help.

