SOCET GXP® v4.2
Release Enhancements
Advanced geospatial exploitation and customized product creation combined into one comprehensive solution

SOCET GXP® v4.2 brings exciting new capabilities to your desktop, expands and refines existing functionality and workflows, and leverages the power of the GXP Platform™ to work in a geospatial world that is becoming increasingly cloud-based.

The enhancements in SOCET GXP v4.2 further the functionality for image analysis, photogrammetry, remote sensing, video exploitation, cartography, feature extraction, 3-D visualization, and more. New items such as the Helicopter Landing Zone tool, Anaglyph Stereo exploitation, Bookmarks, spell check, and Persistent Attribution will increase both the productivity and efficiency of your geospatial team.

Combining SOCET GXP v4.2 with the GXP Platform will enable even greater productivity with our Publish to GXP Xplorer® function, streaming imagery directly into SOCET GXP, and utilizing the Workflow Improvement Module (WIM) to discover relevant data directly in the Multiport.
Coordinate systems and sensor modeling

SOCET GXP continues to deliver an ever-expanding list of coordinate systems and sensor models enabling a wide range of data to be used in your geospatial workflows.

New coordinate systems
- Irish National Grid OSNI 1952
- Irish Transverse Mercator Grid IRENET95
- Madagascar Laborde Tan 1925
- Netherlands East Indies Equatorial Zone
- New Zealand Transverse Mercator 2000 (NZTM2000)
- Nord Maroc
- Sud Maroc
- Nord Tunisie
- Sud Tunisie
- Voirol 1960 North Algeria
- Voirol 1960 South Algeria
- New datums
- ETRS89
- OSNI 1952 Datum

New sensor models
- Community Sensor Model (CSM 3.0.2)
- KOMPSAT-5
- MSP 1.5
- PALSAR-2
- Replacement Sensor Model (RSM)
Analysis updates

Utilization of the new Helicopter Landing Zone (HLZ) tool and Line of Sight updates will make your terrain analysis more powerful. Bookmarks give you the ability to access your areas of interest even faster.

- HLZ tool
- Line of Sight overlap calculations
- Inverse Line of Sight
- Anaglyph Stereo exploitation
- Mean image smoothing filter
- 2-D and 3-D Bookmarks
- Hazard Estimation Zone tool
- Pixel Matrix Viewer for quickly identifying digital numbers
- Post Matrix View for identifying highest and lowest points over an area
- Image Splitter
- Image Redaction
- 3-D terrain shading by elevation
- 3-D light controls
Production updates

The new ability to export editable text to PowerPoint® will make the quality control process even more efficient. SOCET GXP adds new format support for reading Geographical Markup Language (GML) files and includes a new export directly to COLLADA.

- GML import is supported
- Export terrain, imagery, and 3-D features direct to COLLADA
- Vertical Scalebars
- Editable text during PowerPoint export
- Optional notes during PowerPoint export
- Show All / Hide All options for Colorization
- OpenFlight Export option to specify either BMP or TIFF for textures
- OpenFlight Export option to export bottom facets

Feature updates

Feature extraction enhancements transform the way features are collected and updated. A new ability to stream Web Feature Services and update those features directly in SOCET GXP eliminates the need to move large databases around from user to user. The new Persistent Attribution capability streamlines attribute creation for similar features.

- Support for PostGIS database connections
- Spatially Enabled Exploitation (SEE) supported on 64-bit
- Persistent Attribution for feature extraction
- Attribute Sets allow users to pre-define groups of attributes for a feature class
- Improved minaret tessellation
- Enabled unions of complex features
- Scalable Vector Graphic (SVG) icon support
- Connect to Web Feature Service (WFS) layers
- Connect to and edit Web Feature Service-Transactional (WFS-T) layers
- Auto-attribution files now work with SOCET for ArcGIS®
Infrastructure updates

New capabilities make working with SOCET GXP easier than ever. The addition of spell check and transparency for text boxes makes product creation more efficient. Additional operating system support and an updated Ribbon interface modernize SOCET GXP for the next generation.

- Microsoft Windows® 8 / 8.1 / 10 support
- Sortable tables in the Workspace (Data View) and Image List
- Updated Ribbon interface
- New icons for an updated look and feel
- Super Tooltips provide quick functionality descriptions
- Split buttons to allow consistent access to recently used colors
- Common Properties window for modifying multiple graphic types at one time
- Spell check with over 25 languages including a user-customizable dictionary
- Multiple template directories allowed in Preferences
- Transparency available in text boxes
- User-defined word wrap for text boxes
- Ability to search Preferences
- Customizable Status Bars
- Reset Preferences
- Undo / Redo history
- Rename panels
- Drag and drop panels
Application program interface (API) updates

The API continues to evolve with new functionality added to work with enhancement chains. In addition, a whole new set of user controls can be added and manipulated within the SOCET GXP Ribbon from custom applications.

» Methods for interacting with enhancement chains
» Methods added to dynamically set RibbonX controls
» New RibbonX controls can be added for user created applications
  – Button
  – Combo Box
  – Dialog box Launcher
  – Double-Spin Box
  – Edit Box
  – Label Control
  – Menu
  – Separator
  – Slider
  – Spin Box
  – Toggle Button
» Contextual Ribbon tabs can be added through the API
» Custom Ribbon buttons can support both a script and a client notification
**Additional functionality included from SOCET GXP v4.1 software patches**

**SOCET GXP**

- New 5-meter uncompressed Controlled Image Base (CIB)-like production
- Publish directly to GXP Xplorer
- Point / radius search in the WIM
- Public Key Infrastructure (PKI) support when streaming data into SOCET GXP or connecting through the WIM
- Allow connections to secure GXP Xplorers
- Support for JPIP/S
- Better performance during seam line editing and reshaping
- Sentinel-IA Level I SLC (complex slant plane) sensor model
- Sentinel-IA Level I GRD (detected ground plane) sensor model
- Kompsat-3 sensor model
- TanDEM-X complex sensor model
- Web Map Tile Service (WMTS) streaming support
- AGS REST (Esri Map Server) streaming support
- AGS REST (Esri Image Server) streaming support
- Independent rotation on linking
- New point cloud tab added to the 3D Multiport Ribbon
- Shading of LiDAR point clouds by intensity
- Embed colorization directly into a LiDAR point cloud

**GXP InMotion™**

- Support for MISB ST I107 (Metric Geopositioning Metadata Set)
- Support for SISB ST I010
- Better metadata corruption detection and correction
- Reduced latency when playback of video streams
- Improved loading times for HD videos
- GXPVID-3492 Improved streaming of HD videos; no smears/pixelation
- GXPVID-3500 allow for extremely large pause buffer up to ½ available disk space