

VP map Series

HYBRID BRIDGE TO GIS & FM



Universal Scan-to-GIS desktop



Transfer Maps, Plans, Image Data to GIS



Exact Georeferencing and Calibration



Vectorization and Polygon Conversion



VPmap Series

HYBRID BRIDGE TO GIS & FM

Scanning



Seamless GIS Integration

Large format scanners deliver digital "raster" images in good quality. However, for an effective document transfer to GIS specialized software is indispensable - the perfect solution is VPmap Series.

Georeferencing, image correction, data reduction and interactive or automatic conversion: with VPmap Series you can avoid the tedious procedures associated with traditional digitizing most elegantly and efficiently.

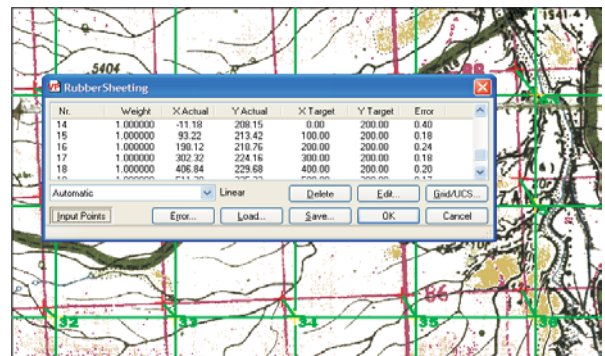
Merging Maps



Color Reduction and High Precision Calibration

Without any losses colors and color areas can be combined directly. Also, extract information from colors most rapidly: single colors or color patterns can be separated and exported individually.

Exact and high-speed calibration is essential for digital map processing. VPmap Series offers multiple options for selecting the most suitable method: polynomial or triangular, full manual control or automatic input support, import coordinate values, assign point positions from a reference source or select a map projection.



Georeferencing



Georeferencing with GeoTIFF

VPmap Series supports georeferencing options with a full set of GeoTIFF settings. Having defined a coordinate system, map projection, and datum, all objects, raster and vector, will contain accurate placing information on export.

Managing Colors



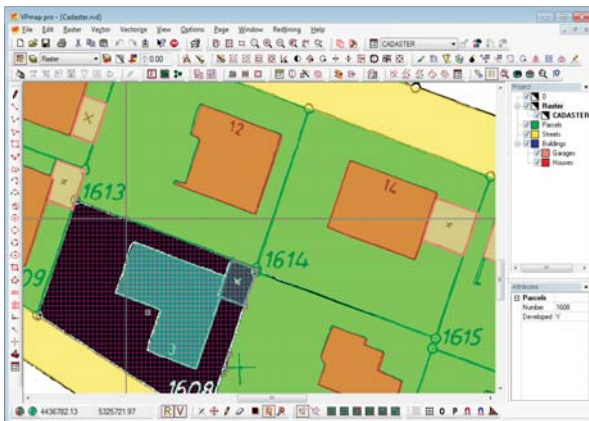
Paper maps, satellite images, and aerial photography are a major data source for GIS. Fully equipped, easy to use, and independent from any target GIS platform, VPmap Series provides accurate integration, calibration, and conversion of original maps and plans with two product alternatives:

VPmap

VPmap pro

Quick Conversion

A unique set of recognition features assists in digitizing scanned maps, plans or aerial images. Even multi-colored altitude lines will be converted easily into splines and polylines.



Plus, with exceptional recognition methods, area locations convert into polygon objects. A single click is all you need to quickly capture land use, property, building, groundfloor, or room detail features. Any topical information can be recorded conveniently using automatic or manual attribute

assignment. Automatic correction routines are available to match bordering outlines of converted objects.

VPmap pro also includes automatic raster to vector conversion, especially for cadastral or contour maps. Save time and benefit from softelec's internationally reputed vectorization technology.

Mosaicing

Raster maps can be split into many "tiles" to enable a fast display focused on a region of interest. Or use automatic "Mosaicing" to assign equal and georeferenced tiles across a map or a satellite image.

GIS and Facility Management Usability

VPmap Series supports the digital integration of maps and plans in all fields, such as infrastructure planning, cadastral records, land development, facility management and others. VPmap Series reduces the efforts of bringing out the information value of legacy documents.

Vectorization



Attributes



Mosaicing



Export to GIS





Hybrid Editing

Automatic Raster Cleanup (B/W and Color)
Exact Multi-Point Rubbersheeting and Georeferencing to Map Projections
Extensive Raster Merge Functions
Mosaic Creation
Raster Structure Improvement: Thinning, Thickening, Open, Close (B/W and Color)
Scale, Mirror, Rotate, Deskew Raster
Color Reduction, Color Separation, Color Filter, Conversion to B/W, Classification
Enhanced Direct Raster Selection (B/W and Color)
Raster Table Recognition (B/W and Color)

Interactive Tracing/Line Following

Interactive Tracing of Contours (Lines, Polylines, Splines)
Automatic Polygon/Polyline creation ("One-Click Area Recognition")
Trace Objects/Raster Overlay with Color Transparency
Elevation/Altitude Assignment to Contour Lines

Automatic Raster-Vector Conversion

Centerline, Outline, and Mixed Vectorization (B/W and Color)
Vectorization Wizard for Easy Settings
Recognition of: Lines, Circles, Arcs, Ellipses, Hatches, Text (OCR)
Automatic Layer Classification: Entity/Line Type/ Line Width/Color
Symbol Recognition

Attribute Assignment

Interactive and Automatic Assignment of Attributes (e.g. Position, Area, Text, etc.)
Extensive Attribute Management (SQL based)

Special Features

Symbol Library Manager
Intelligent Object Snap (Raster and Vector)
Rasterizing of Vector Entities
Hybrid Printing/Plotting
Customizable User Commands
Batch Processing

Scanner Interfacing

TWAIN Support for Generic Scanners
Direct Large Format Scanner Interface (Colortrac, Contex, GTCO, Océ, Vidar, Xerox)

Import Formats¹

Raster: TIF (Uncompressed, Group 3, Group 4, LZW, Packbits), GeoTIFF, PDF, MrSID, ECW/ERS (ER Mapper), JPG, JPEG 2000, EDMICS, CALS Group 4, IG4/IGS/RLC (Image Systems), Intergraph Raster, PCX, DCX, BMP, GIF, PNG, TGA, G3/G4/RNL (GTX), Sun Raster, BIL (GeoSpot), GIS/LAN (ERDAS), GOE (NOAA/NEDIS GOES), Core IDC, VIF, Landsat/NLAPS FAST-7

Vector: DXF, DWG, DGN, HPGL/2

Hybrid: RVD (softelec format), RasterDWG, CGM; PDF (limited)

GIS: RVD (softelec format), SHP/E00/GEN (ESRI), MIF/MID (MapInfo)

Export Formats¹

Raster: TIF (Uncompressed, Group 3, Group 4, LZW, Packbits), GeoTIFF, PCX, PDF, PDF/A, PNG, JPG, BMP, GIF, EDMICS, CALS Group 4, Intergraph Raster, IGS/RLC (Image Systems)

Vector²: DXF, DWG, IGES, DGN

Hybrid²: RVD (softelec format), DWG, RasterDWG, CGM, PDF, PDF/A, SVG

GIS: RVD (softelec format), DXF/DWG (AutoCAD Map 3D), SHP/AEP (ESRI), MIF/MID (MapInfo)

Operating System Environment¹

Windows XP, Vista, 7: stand alone 32bit/64bit

Integrated AutoCAD application for AutoCAD/Map 3D 2004 - 2012; AutoCAD/Map 3D 2010 - 2012: 64bit

"Floating license" network operation

¹ for detailed and updated list visit www.softelec.com

² inside AutoCAD: limited to available formats of applied AutoCAD version