



The Vision Series 2010

New features

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VisionPlus 2010

Tooltips on Object

- Displaying of information on the attributes of a selected item. For example when selecting a parcel's segment, the tooltip shows the name of the lot, the parcel number, the sector number and the "data linkage".

Added Option

- Changing the appearance and order of the *info-project's* description.

Building Manager

- Drawing part of a building, of an annex to a building or a gallery without having to close the figure.
- The new feature Dynamic Site Buildings can move and rotate a building. Setbacks adjust automatically. An offset skating box is drawn around the building, displaying the points of its extremities. When the building switches position, all elements are being redrawn in the right place. The result is saved in the description file.

Parcel Manager

- Identification of a point on the parcel to set the orientation of the parcel or lot number
- Added feature — Constrain on distances with imperial units
- Drawing of curve centers
- Development of a mechanism to display a parcel's closure. This difference is calculated based on the theoretical distances and theoretical course directions.
- Test on the total distance of cumulated segments.
- Fix imposed radius' value
- Displaying of the rope's direction in a sinuous line
- Option when clicking points to select, also fixes measurements from referenced plans.
- Automatic creation of nodes when parcels are created from element
- Tests to ensure the parcels integrity are added under the command button "Integrity Test". They provide the following: common segments between two adjacent parcels with different imposed measures, different origin between points and end of segments of parcels, difference between radius and curves.
- Defining of multiple parcels from a line's offset of a larger parcel.
- Drawing of a parcel number, a name of parcel and the area with a block or cell.
- Display of directions in bearing units defined by northeast and northwest cardinalities from 0 ° to 180 ° decimal or degrees, minutes, seconds.
- Drawing of the points symbols according to parcels' line directions.
- Many options of parametric data for Metes and bounds descriptions.

Points Manager

- In the Modify points function, the inclusion of these features (properties) 'Status of Fixed Points', 'Pcode', 'Control Codes', "Notes", "Date Modified" and "String Number". Those features allow you to query a point in the drawing, and possibly modify it and also create new points.
- The Pcode can now have up to 15 alphanumeric characters.
- Displaying of a drawing point's detail such as number, code, elevation, notes and strings.

String and Connectivity Manager

- Option to move up or down a point in the list.
- Control code instruction with English standards : ST, CL, PC, PT, DNC, RECT, CLRECT, JPT and JNC.
- Grouping of string and connectivity chains.
- Use of group of strings in the function "Export Strings".
- Inversion in the definition of a string.
- Setting for drawing curves by spline or 3 points

Note Manager

- Attachment and visualization of digital photos in the CAD file. On each point of VisionPlus, it is now possible to attach a digital picture taken at the scene and manage it from the notes manager.

New block and New Cell 'Parcel' and 'Point'

- Creation of an entity called "Parcel" containing the area, name and number
- Creation of an entity called "Point" containing the point number, pcode and elevation.

Map Sheets

- Drawing lines and writing map sheets text where each level corresponds to a different color.

Graphic Controls

- Implementation of several interactive graphic controls in many of VisionCogo user interfaces in order to be able to click points on the graphical CAD.

Dimension

- Being able to design dimensions (arrows and numbers) between the following drawing entity: Object (label line), Object-Object, Object-Point, Point-Point.
- Added function to draw directions and distances of lines and curves.

Points Drawing

- "By Block" mode is added to drawing point functions. Users can customize the block "point" to fix the place of point numbers, the pcode, elevation and other static elements of the block.
- Option "Delete notes" is added to the user interface "Drawing / Points"
- The option of selection of points using "Fence" mode is added to help select the points to draw.
- Drawing lines in the function "Tools / Direction" and "Tools / Traverse angle."
- Consolidation of functions "Drawing / Points / Draw" and "Drawing / Points / Delete" in a single user interface.
- Drawing block points on different layers.

Updated Batch Files for Project File

- Batch file convert from subdirectories.
- Update existing package standards from the standard model.
- Batch Add a standard selected in the working files.

Convert Coordinate System

- Lat, Lon. into MTM SCRS, MTM SCRS into Lat, Lon ,and MTM Nad83 into MTM SCRS
- Unit of angle in the function « Convert Latitude, Longitude ».
- Implementation of the "next free point" and "constant shifting" of the point number.
- Elimination of the boundary points numbers of 10000 points in the function Utility / Conversion / Conversion of coordinates.
- Define a header in the ASCII file based on the information contained in the project info.

AutoCAD and MicroStation Compatibility Cersion

- VisionPlus 2010 si compatible to AutoCAD version 2000 to 2010 , and MicroStation V8, XM, et V8i et PowerDraft V8, V8i.

"Offset / Chaining / Distance / Side"

- Adding a field elevation to calculate the Z coordinate of points created.
- Proportional elevation on alignment.
- Calculation of the coordinate Z in proportion to the distance located on the alignments (on-line location or alignment).

Standard Vision+

- Standard Vision is improved in regard to fonts, the list of line types, text types, blocks or cells, models of contact list and the tree element. This standard is now called Vision +.

Change scale on Object

- Changing the scale factor of all selected objects to a drawing, from their insertion point.

Grid scale factor

- Calculation of the combined factor by selecting existing points in the file description.

Spinning Points

- Use of fence to rotate points

Alignment 3D

- Definition of a 3D alignment composed of lines, curves, spirals and vertical curves.
This function offers the possibility of drawing this type of alignment, calculating offsets, calculating the new points by distance and offset calculation, and export the definition of these alignments in a LandXML file format and also define vertical curves.

Fieldwork Manager

- In the field data calculation function the calculated points are inserted dynamically in a group of points.
- Cases of special situations during import field data from a notebook of *Field Genius* (resection, multiset, offset, shot, GPS). The data review will process the information in the comments field data.
- Import of observations and of connectivity strings from "Field Genius" and "TDS".
- Adding a viewer in function field data calculation.
- Exporting points, lines and plots to field data collector (Field Genius and others).
- Display of difference in coordinate of the duplicate points in the comments field.
- Definition of a backside different than the backside recorded in the data field calculation listing.
- Conversion of multiple data files to the field description file, eg *. gre, *. gsi, *. sok, *. ter.
- Creating a group of chains or connectivity strings into the field data calculation module and / or into import points module "ASK-> MDB".
- Adding a "Viewer" to view the observations of the field data.
- Adjustment and compensation of a traverse from a point and a reference direction.

VisionCivil 2010

Profile and Section

- New management and standard profiles and sections.
- Profiles of many alignments.
- Dimensioning with numbers of points, and stationing elevations.

Dynamic Pad

- Dynamic visualization of created pads. Radius on corners and surface intersections.

Automatic Update on Object Changes

- Changes on demand of all objects affected by modifications in one or many objects like : points, alignments, surfaces, lines, breaklines, etc.

Many Layers for a Surface

- Up to 10 layers for a surface definition.

Setting by Object

- Ability to customize elements based objects such as profiles and sections.
- Import Vision DTM parameters from a standard model file.

Tin

- Algorithm to define tetrahedra surfaces in the form of solid surfaces such as tunnels and overhangs.
- Settings to limit the length of the triangles.
- Selection of multiple triangles for deletion.

Volume

- Calculation of volume using four different methods.

Template on Alignment

- Implementation of 3D alignment using a template on sections of a model using the volume calculation by stationing.
- Editing of dynamic templates.
- Table of gradient changes depending on materials.

Pipe Module

- Drawing alignments as sewer or water with a coding table constraint.

Alignment 3D

- Definition of an alignment in 2D or 3D using lines of horizontal and vertical curves, spirals with their superelevation.
- Calculating and profile drawing with 3D object alignment.
- Drawing of a section with the 3D object alignment.

Creating Surfaces from Data Field Calculation Observations

- Import items such as "random" and / or points and lines such as breaklines interior surface and exterior surface to automatically set surfaces with points and breaklines.

Standards Update

- New standards for 3D elements for a contour line , for triangulation and for text annotation.
- Import standards in an existing drawing.

Contours

- New parameter to specify the numbers of significant digits on the primary and secondary contour lines.
- Adding a title report in a custom list.

AutoCAD and MicroStation Compatibility Versions

- VisionCivil 2010 is compatible with AutoCAD version 2000 to 2010 , and MicroStation V8, XM, and V8i and PowerDraft V8, V8i.