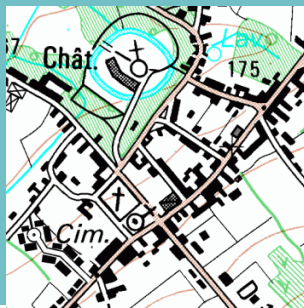


What's New in OCAD 12?



OCAD AG
Mühlegasse 36
CH-6340 Baar / Schweiz
www.ocad.com

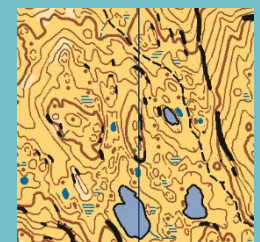
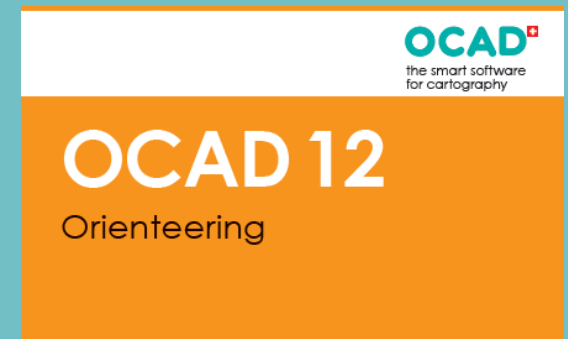
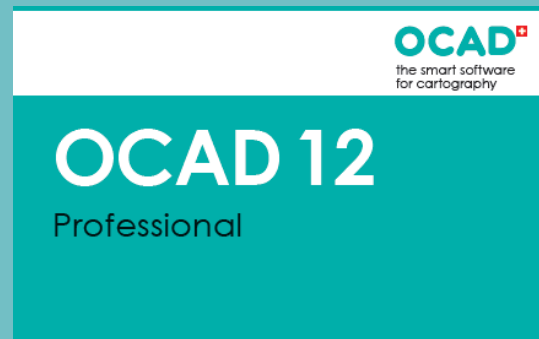
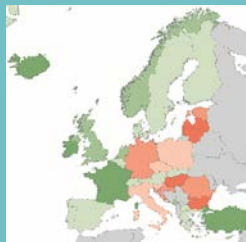
Folie 1
ICOM 2016 - Strömstad
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OCAD 
the smart software
for cartography

OCAD Product Family



Prix Carto



Who we are ?



OCAD AG
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OCAD⁺
the smart software
for cartography

Where we are ?

Cartographic Companies (private and public institution)



Orienteering Clubs

R & D

- Gian-Reto Schaad
- Hubert Klauser
- Markus Fuchs-Winkler

Support

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- Hubert Klauser
- P-O Derebrant SWE

Sales

- Thomas Gloor
- Rahel Lozano
- Sabine Hauswirth

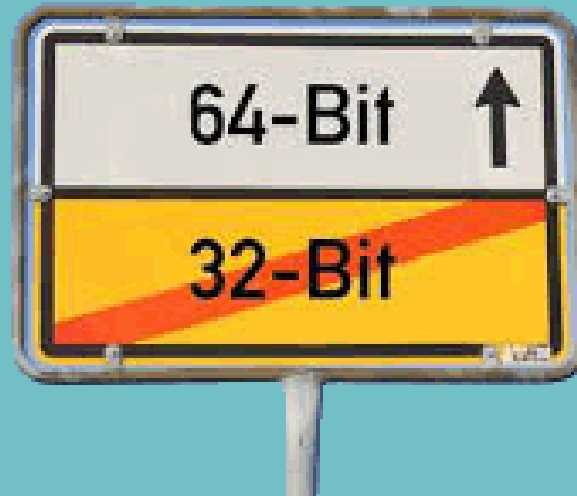
Delegate of the board (Thomas Gloor)

Board (PR: Ruedi Kellenberger, Stefan Aschwanden, Otti Bisang, Hans-Uli Feldmann, Thomas Gloor, Fritz Rufer und André Schöpfer)

111 Share Holders

General

- 64-bit version and 32-bit version
- Redrawing of screen improved (e.g. text)
- **Improved file format** for better performance



Graphic User Interface (GUI)

- **Docking Panels** (detach from windows frame)
- New Buttons, e.g.
 - **Background Manager**
 - Symbol Status Manager
 - Lasso
 - Zoom to Selected Object
 - Show Ruler
 - Show Ruler Guides
 - **Google StreetView**



Graphic User Interface (GUI)

- **Pan with mouse wheel down**
- Zoom in/out with Ctrl + (shift) +/-
- **Change view mode in status bar**
- Faster drawing of text objects (hide objects from a certain scale/resolution)

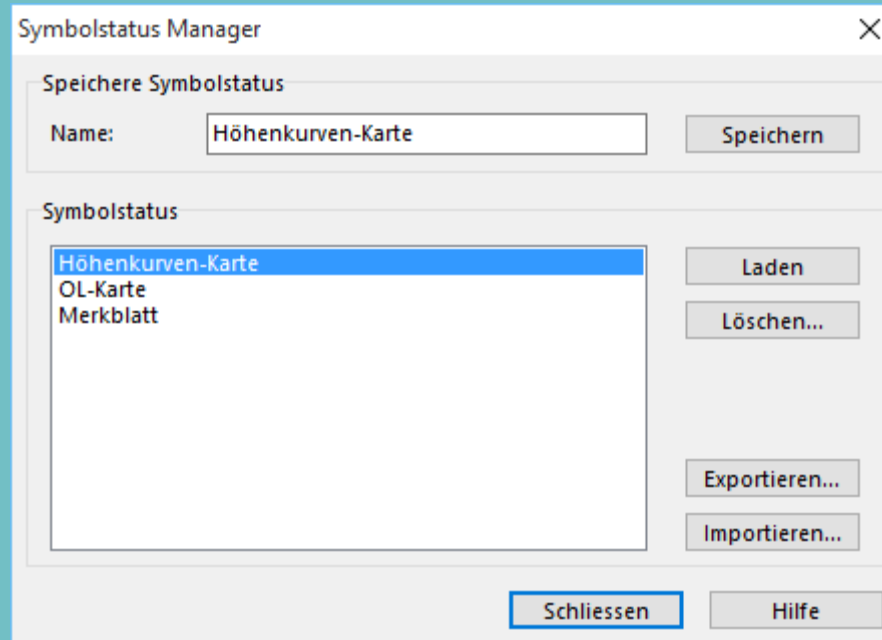
Symbols I

- Irregular pattern
- Option **not to cut structure** elements at border
- Earth bank: Equal Tags and line width of decreasing symbol features



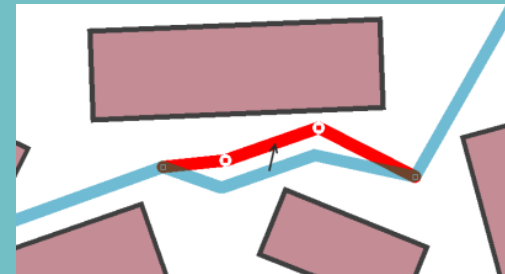
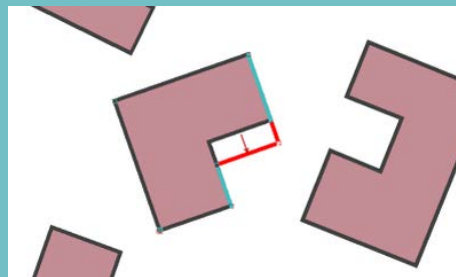
Symbols Status Manager

- Save status of symbol (protected, hidden)




Editing Segments

- Move **object's segments** with mouse down
- Show key line when moving vertex and the object
- Move object's segments by **keeping rectangular angles**



Editing Vertex

- Keep **rectangular angles** while moving a vertex by pressing Shift key
- Easier to catch and move object's vertex
- **Move vertex with arrow keys**(double click vertex)
- Remove vertices with CTRL +  + mouse move (brush)

Editing Objects

- Align objects horizontally
- Distribute objects equidistant
- Stretch or shrink objects

Editing Text

- Click **anywhere** in area or text object to move it
- Select and mark entire text in text object with double click

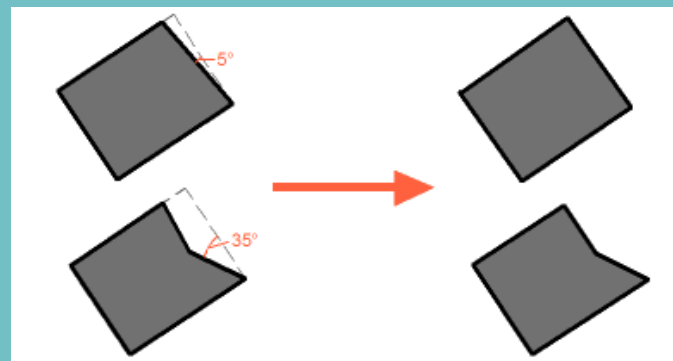
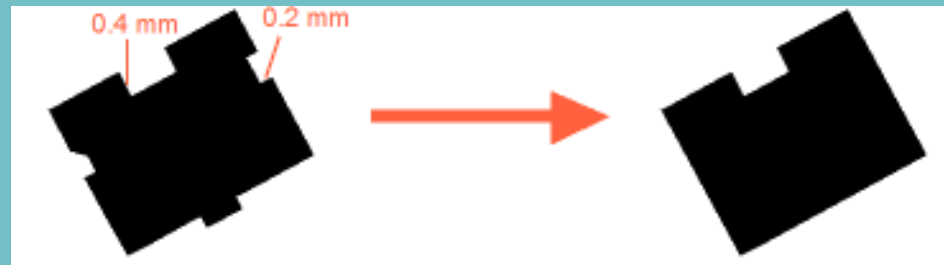
Time Stamp

- Time stamp for each object
- Show creation and modification date in object information
- Select objects by date
- Change the creation date of the selected objects



Generalization of Buildings

- Generalize buildings (geometry simplification, replace with rectangle)
- Make objects rectangular



Generalization of (Contour) Lines

- Smooth objects: Extended with angle and curvature parameter
- Polyline to curve: Extended with tangent length, angle and continuity parameters

Topology

- Remove duplicate vertices from selected objects
- Cut intersections off
- Add points objects at intersections

Map / Import

- New interactive local transformation
- Colors: New search box
- Shortcuts for Map menu items added
- SHP import without data base (Orienteering Edition)

Background Maps / WMS

- Support background maps **bigger than 2.1 GB**
- Move background maps up and down with drag and drop
- PDF background maps (GhostScript)
- WMS download image in maximum resolution for offline use

Layout

- New opacity option
- New formatting (bold, italic, alignment) options for layout text objects
- Delete layout
- Shortcuts for layout menu

DEM

- Import wizard
- Import wizard starts with drag and drop DEM file(s) into the OCAD drawing area
- Import only a user-defined extent
- Create contour lines: Improved (faster)
- Create hill shading:
 - preview option
 - option for interpolation

DHM-Import-Assistent

DHM-Import-Assistent

DHM-Assistent
Einstellungen

Dateien analysieren

Minimum Ostwert:	674000
Maximum Ostwert:	674500
Minimum Nordwert:	236000
Maximum Nordwert:	236500
Punkte pro Quadratmeter:	23.23

Format der Importdateien

Grid 0 m

Rohdaten (Punktwolke) 0.25 m

Punkte:	5'806'724
Zeilen:	2001
Spalten:	2001
Minimale Höhe:	366
Maximale Höhe:	556

DHM erstellen
Dateiname: 6740_2360.ocdDem ...

GeoTIFF mit DHM Rohdatenpunkten speichern ?

Höhenkurven erzeugen

Hypsometrische Karte erzeugen

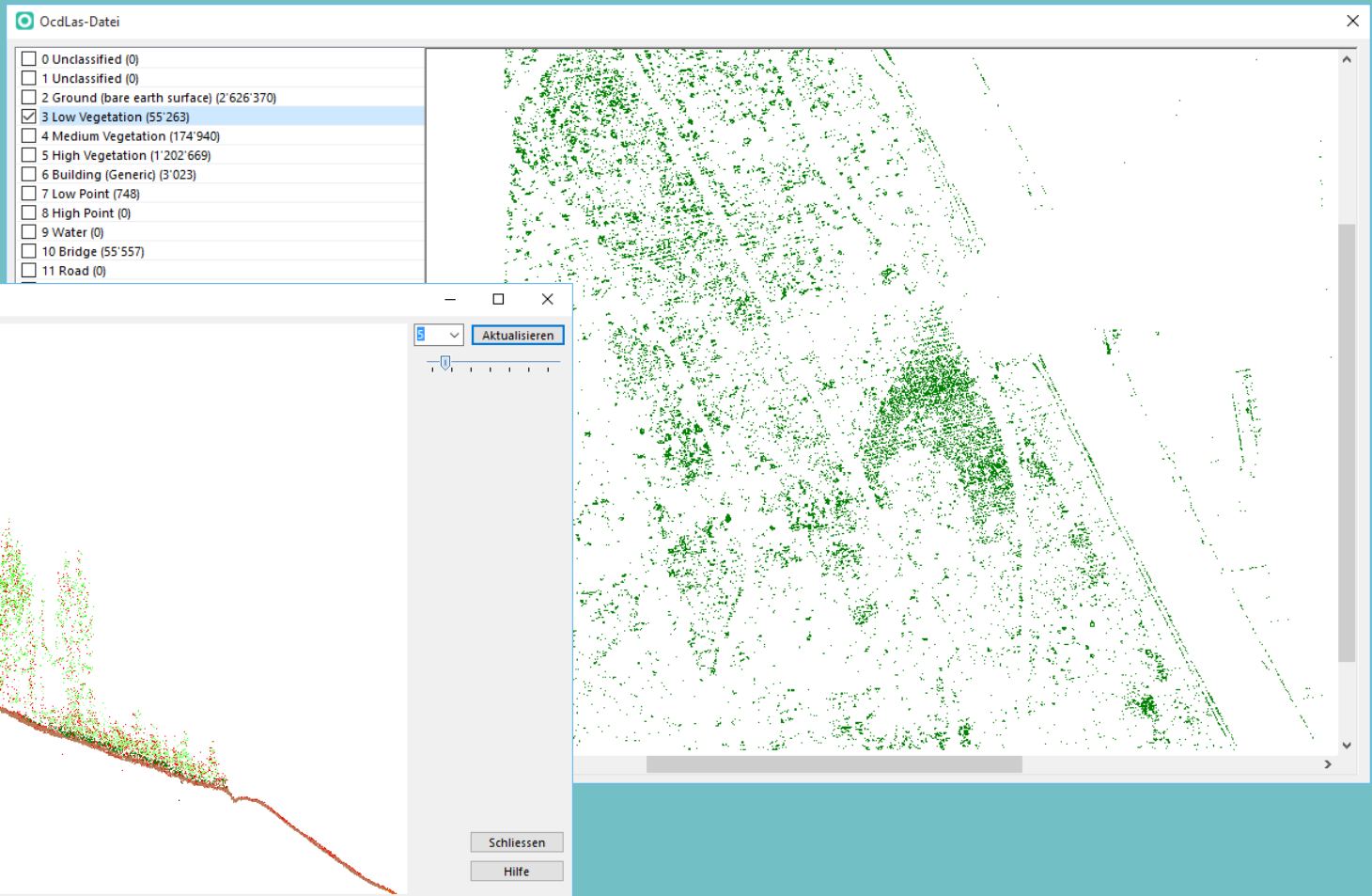
Reliefschummerung berechnen

Hangneigung berechnen

Vegetationshöhen klassifizieren

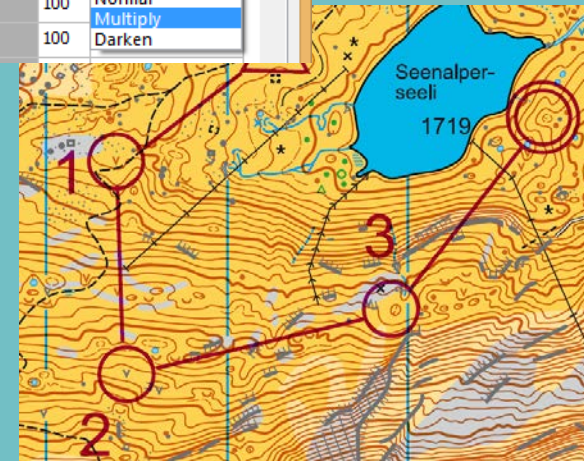
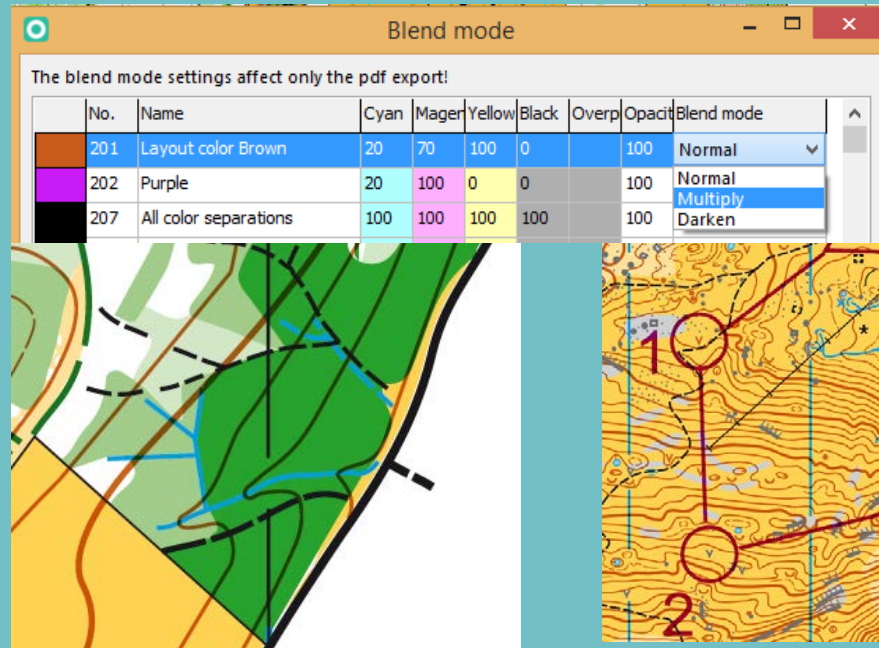
< Zurück Weiter > Abbrechen Hilfe

OcdLas file



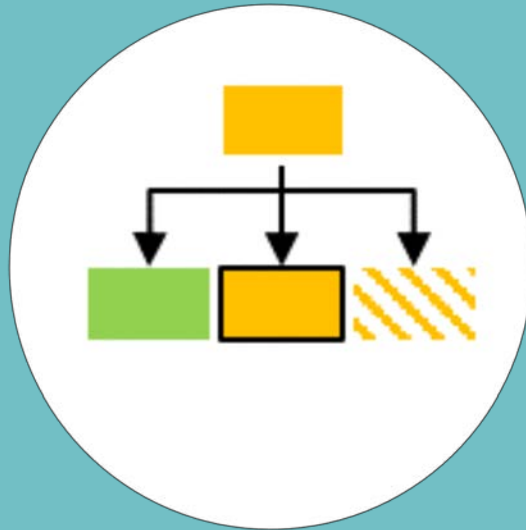
Export / Print

- Export height of waypoints and track points for GPX file
- Define printing frame according selected object(s)
- **Blend-Mode**



Multiple Representation

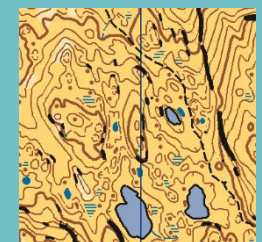
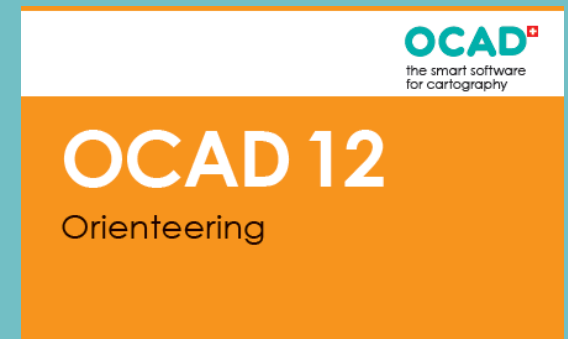
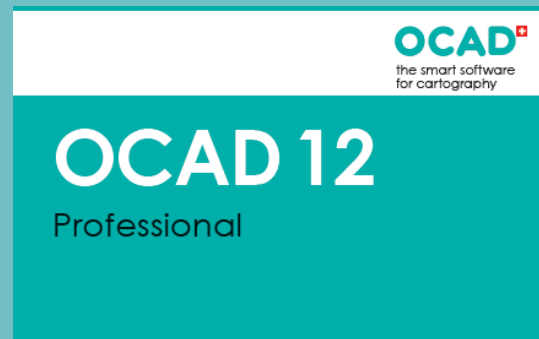
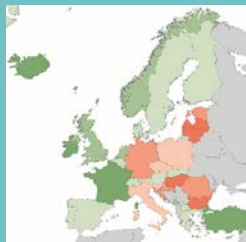
- Represent any objects in a different location (leaf margin adjustment)
- Represent any object with a different symbol (derivate of original map)



OCAD Product Family



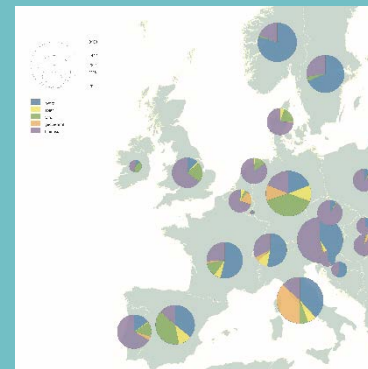
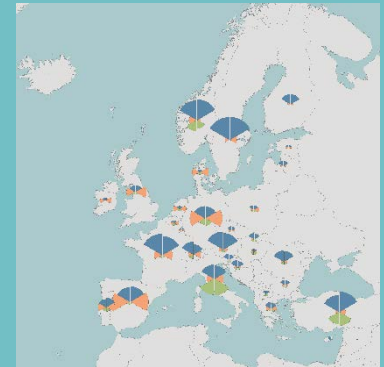
Prix Carto



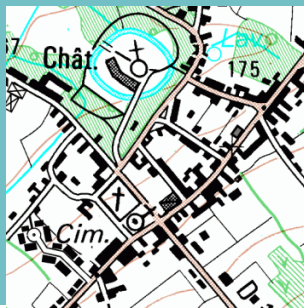
ThematicMapper

Step-by-Step wizard:

- 1 Statistical data
- 2 Geometry data
- 3 Join data
- 4 Visualization Method
- 5 Charts Properties
- 6 Additional Map Features



We do whatever it takes to make you maps perfect



Drawing

- Show object length in status bar while drawing and editing
- Show area complementation while drawing area objects
- Enlarge line text objects automatically while writing

Select

- Selection by Lasso
- Select symbols by
 - type (point, line...)
 - status (protected, hidden)

File

- Set map scale when creating new file
- Load symbol description from text file when create a new file

Editing Fill / Surround

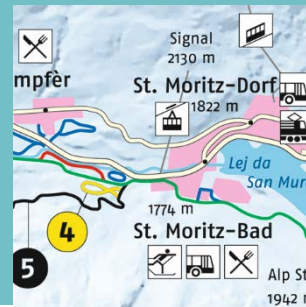
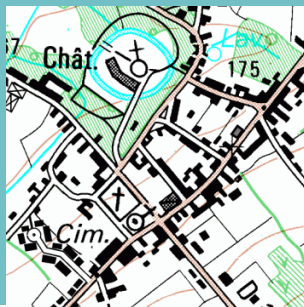
- Fill: Extended to fill text or point object with line or area symbol

Breitholz

Breitholz

Use of OCAD Beyond Mapping

Experience of JWOC 2014 by Gian-Reto Schaad

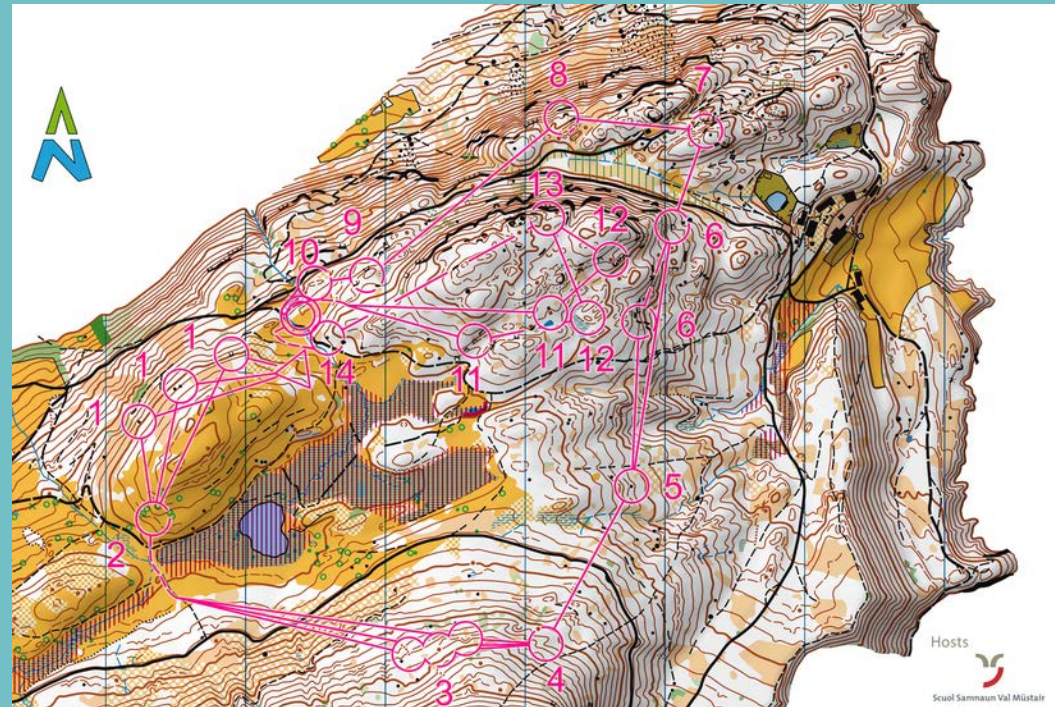


Competition



Arena Production

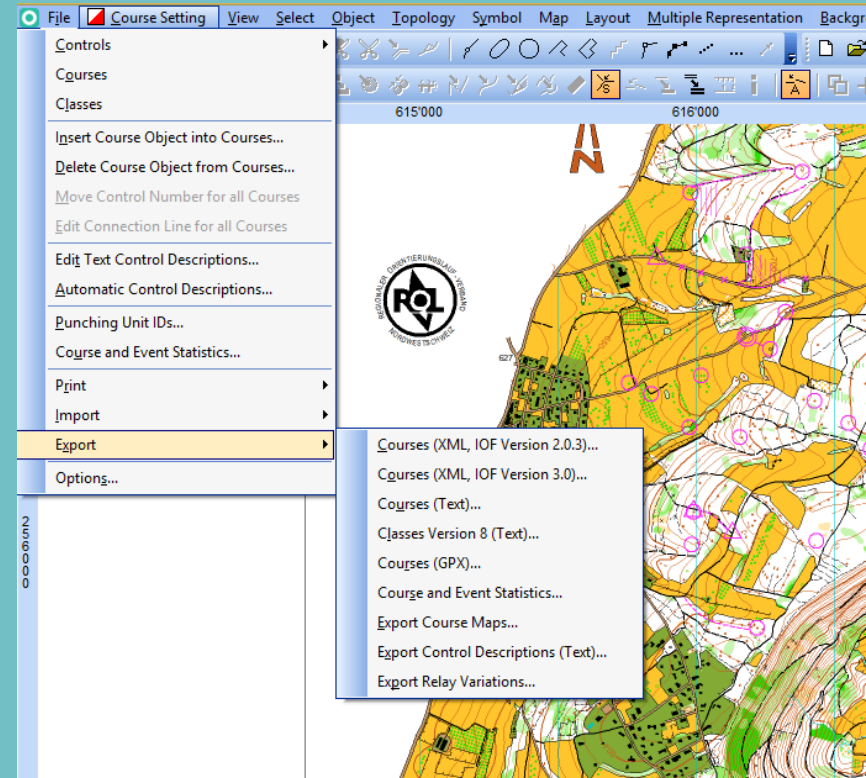
- Hill-Shadings (for better 3-D representation)
- Framing (better visibility of the courses for GPS tracking)



Event Software

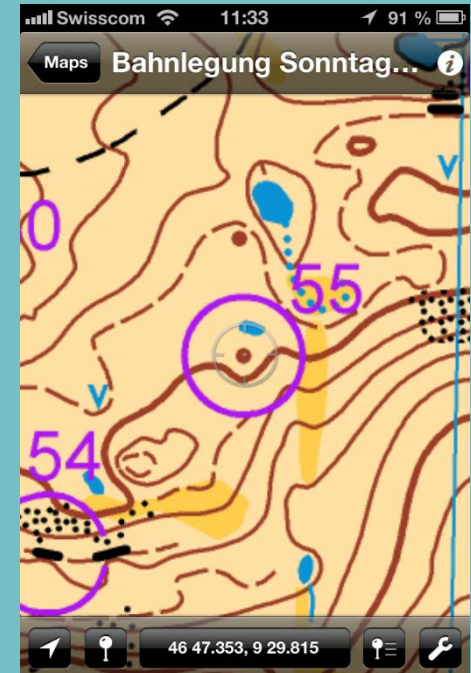
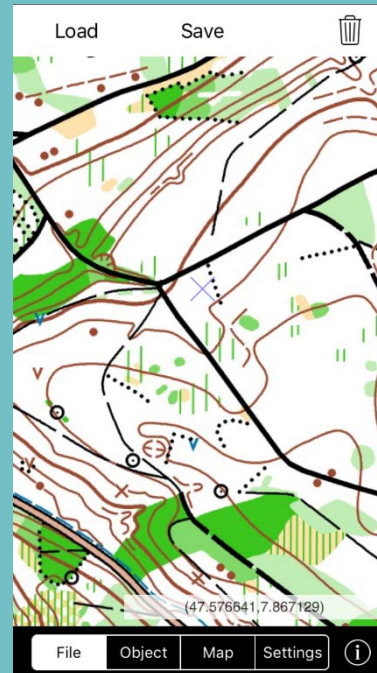
- Export courses and classes in IOF XML (3.0)

```
-<CourseData iofVersion="3.0" createTime="2016-08-22T17:01:59.177+02:00" creator="OCAD 12.1.4.1037">
  -<Event>
    <Name>Event Example</Name>
  </Event>
  -<RaceCourseData>
    -<Map>
      <Scale>10000</Scale>
      <!-- extent of ocad map-->
      <MapPositionTopLeft x="-146.6" y="76.6" unit="mm"/>
      <MapPositionBottomRight x="241.6" y="-291.1" unit="mm"/>
    </Map>
    -<Control>
      <Id>S1</Id>
      <MapPosition x="-14.3" y="1.2" unit="mm"/>
    </Control>
    -<Control>
      <Id>S2</Id>
      <MapPosition x="13.1" y="-98.2" unit="mm"/>
    </Control>
    -<Control>
      <Id>S3</Id>
      <MapPosition x="-1.0" y="-90.4" unit="mm"/>
    </Control>
  </RaceCourseData>
</CourseData>
```



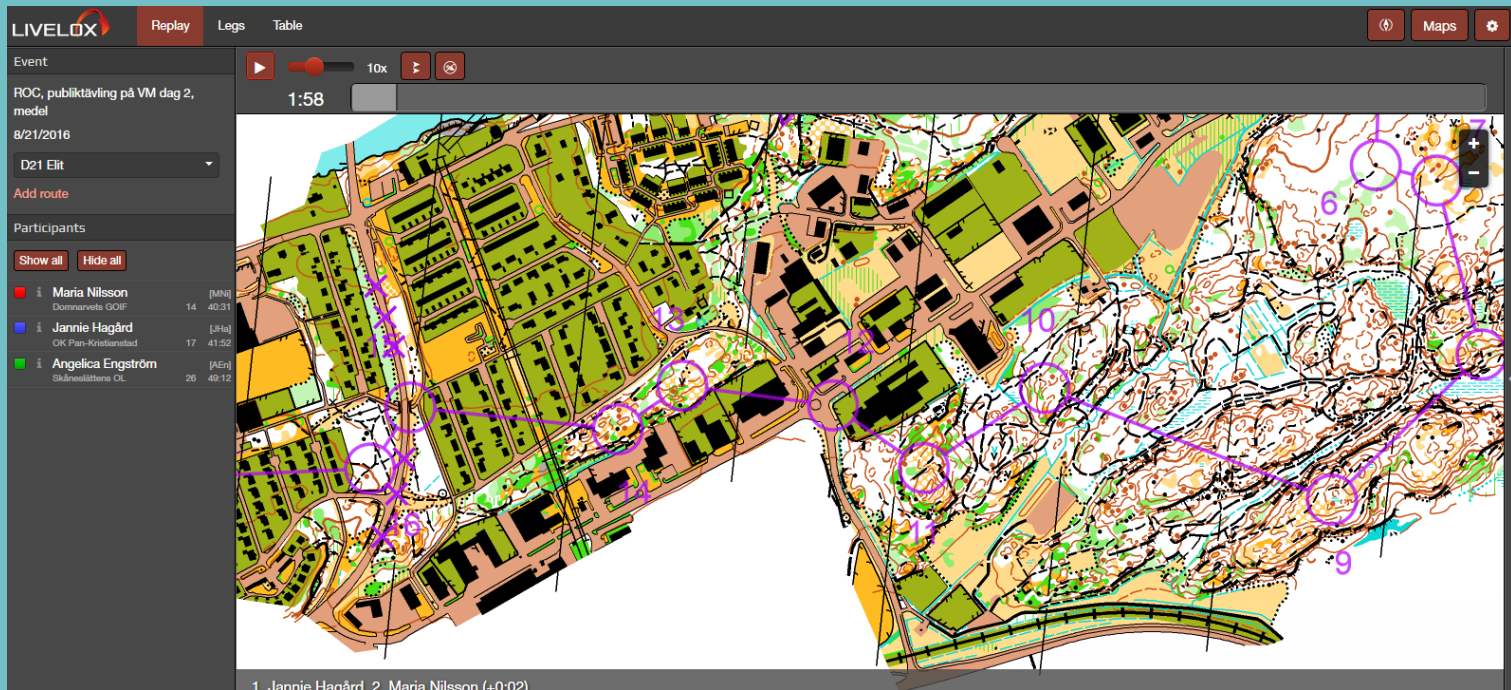
Course Setter / Rescue Service

- Control localization for non-orienteeers (e.g. rescue services or course setters)
- Garmin Custom Maps (GPS device)
- KML-File (Smartphone)



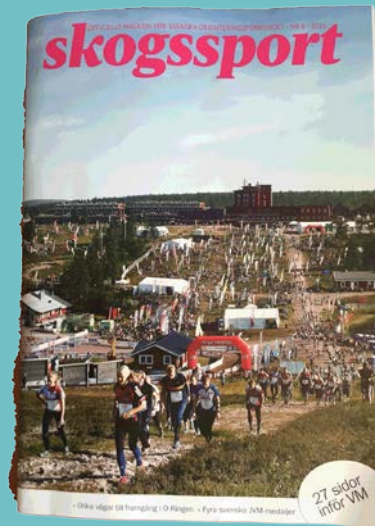
Route Analysis

- Livelox.com / Route Gadget, etc.
- Export JPG (map) and IOF XML (Courses, Controls)



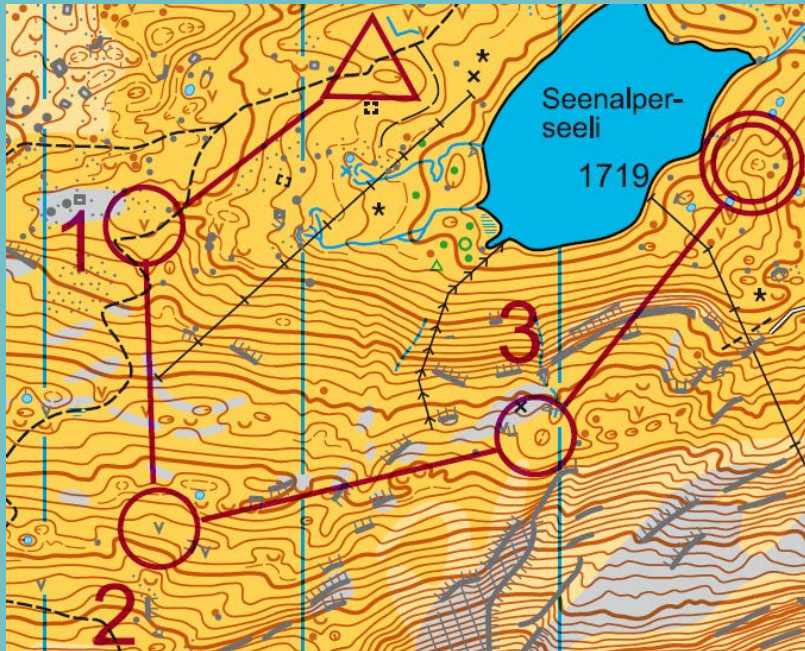
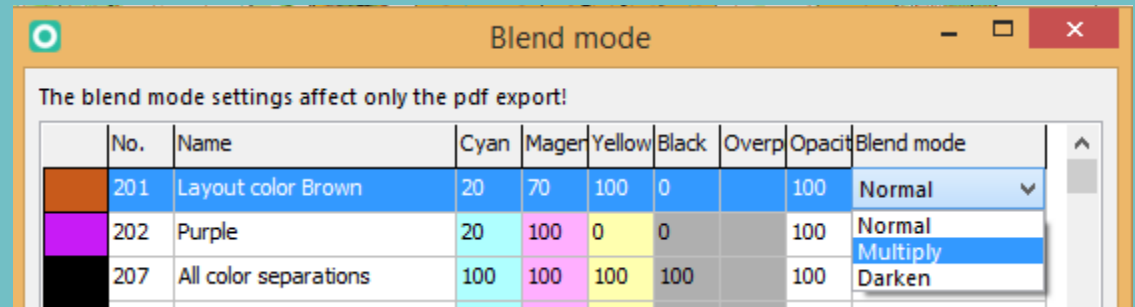
Media

- News production
- Printed magazines (also with hill shading)
- Web articles
- Route documentation



Printing

- Blend mode



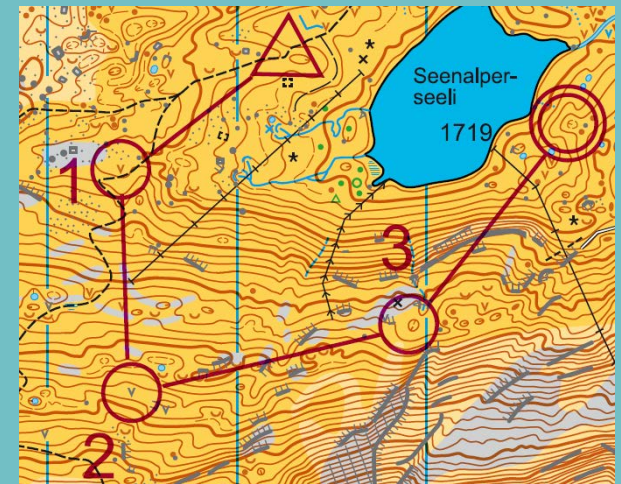
Printing

- Blend mode

Blend mode

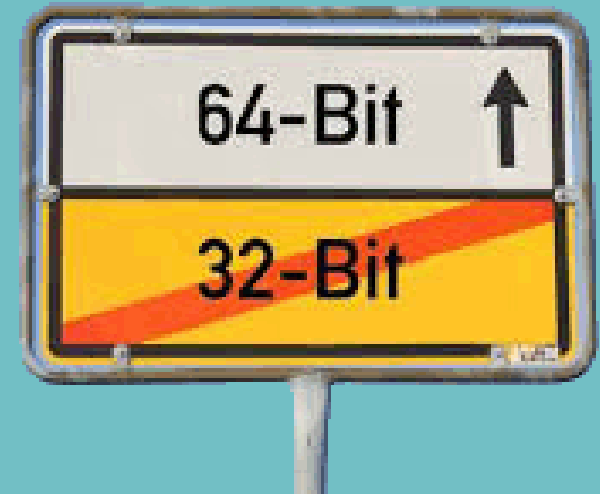
The blend mode settings affect only the pdf export!

No.	Name	Cyan	Mager	Yellow	Black	Overpl	Opacit	Blend mode
201	Layout color Brown	20	70	100	0		100	Normal
202	Purple	20	100	0	0		100	Normal
207	All color separations	100	100	100	100		100	Darken



Mapping

- 32-bit and 64-bit
- Wizard for Analyzing LiDAR-Data
- Generalization of Buildings
- Generalization of Contour Line
- Move object's segments with mouse down
- WMS
- Irregular pattern
- Google StreetView



DHM-Import-Assistent

DHM-Import-Assistent

DHM-Assistent
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Maximum Ostwert:	674500
Minimum Nordwert:	236000
Maximum Nordwert:	236500
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Dateiname: 6740_2360.ocdDem ...

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Hypsometrische Karte erzeugen

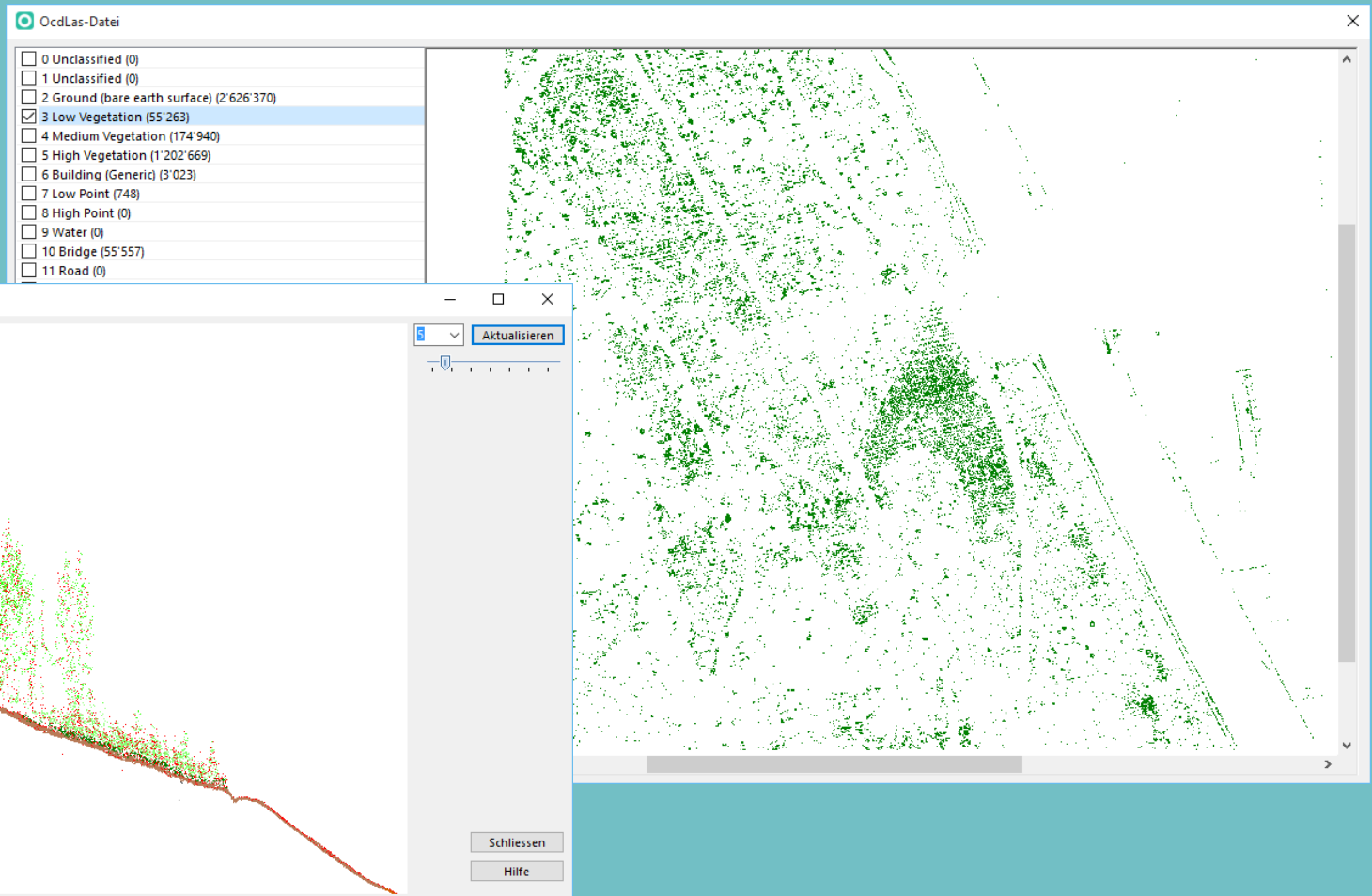
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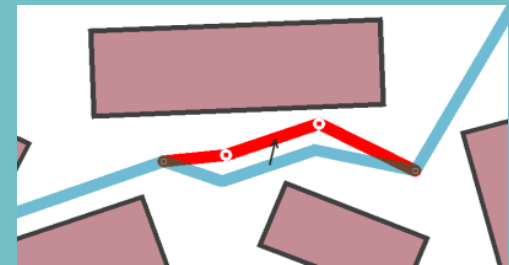
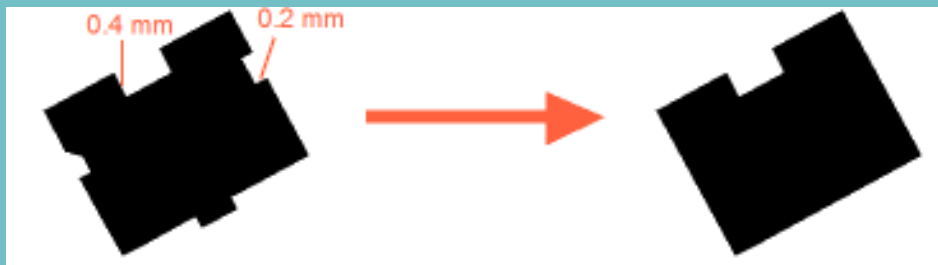
< Zurück Weiter > Abbrechen Hilfe

OcdLad file



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Board (PR: Ruedi Kellenberger, Stefan Aschwanden, Otti Bisang, Hans-Uli Feldmann, Thomas Gloor, Fritz Rufer und André Schöpfer)

111 Share Holders

28 years ago, the very first digital orienteering map

