OCAD 10: OCAD Script Specification

the smart software for cartography

1. Introduction

This document describes the OCAD XML Script specification.
Open and Execute XML scripts by choosing the item *XML Script* is in *File* menu.
A *log file* is saved at the same path as the XML Script itself.

2. XML Script General

File

Node <OcadScript>	Parameter	Data type	Values / Description
File.Open	File	String	ocd file name
File.Close	Enabled	Boolean	true, false
File.Save	Enabled	Boolean	true, false
File.SaveAs	File	String	ocd file name
File.MultipleFileImport	Directory NewOffset Horizontally Vertically Angle MapScale GridDistance LayerField	String Enum. types Integer Integer Double Integer Double String	Directory of import files enabled, disabled
File.ExportOim	File	String	html file name
File.Exit	Enabled	Boolean	true, false Close OCAD Program

View

Node <OcadScript>	Parameter	Data type	Values / Description
View.EntireMap	Enabled	Boolean	true, false
View.MoveTo	X Y	Double Double	

Map

Node <OcadScript>	Parameter	Data type	Values / Description
Map.OptimizeRepair	Enabled	Boolean	true, false
Map.ChangeScale	NewScale	Integer	e.g. 10000
	EnlargeReduceSymbols	Boolean	true, false
Map.ConvertLayer	CrtFile	String	crt file name
Symbol.LoadSymbolsFrom	File	String	ocd file name (with symbols to be loaded) The option *'replace existing colors and symbols'* is used

Database

Node <OcadScript>	Parameter	Data type	Values / Description
Database.Dataset.Remove	Dataset	String Integer	all for all databases 3, 2, 1 , … for only one or several databases
Database.Assign.Symbols	Dataset CntFile	String Integer String	all for all databases 1, 2, 3 , … for only one database Condition table file
Database.Assign.Texts	Dataset TextField Symbol ReplaceExistingObjects	String Integer String String Boolean	all for all databases 1, 2, 3 , … for only one database ex. 101.0 true, false (Default)
Database.Assign.Angles	Dataset AngleField	String Integer String	all for all databases 1, 2, 3 , … for only one database
Database.CreateObjects	Dataset SelectSymbol Condition HorizontalCoordinate VerticalCoordinate Unit TextField HorizontalOffset VerticalOffset	Integer Double String String String Enum. types String Double Double	1, 2, 3, … Number of dataset Symbol number. ex. 207.0 SQL String (ex. SYMBOL LIKE 207.0) Database fieldname Database fieldname m, km Database fieldname

Example xml file:

```
<OcadScript>

  <File.Open>
    <File>C:\Albis\albis_leer.ocd</File>
  </File.Open>

  <File.MultipleFileImport>
    <Directory>C:\Albis\shp</Directory>
    <NewOffset>enabled</NewOffset>
    <Horizontally>670000</Horizontally>
    <Vertically>230000</Vertically>
    <Angle>20</Angle>
    <MapScale>20000</MapScale>
    <GridDistance>500</GridDistance>
    <LayerField>OBJECTVAL/LayerField>
  </File.MultipleFileImport>

  <Database.Assign.Texts>
    <Dataset>all</Dataset>
    <TextField>ID</TextField>
    <Symbol>101.0</Symbol>
    <ReplaceExistingObjects>true</ReplaceExistingObjects >
  </Database.Assign.Texts>

  <Database.Assign.Angles>
    <Dataset>all</Dataset>
    <AngleField>ID</AngleField>
  </Database.Assign.Angles>

  <Database.Assign.Symbols>
    <Dataset>all</Dataset>
    <CntFile>C:\Albis\cnt\Landeskarte.cnt</CntFile>
  </Database.Assign.Symbols>

  <Database.Dataset.Remove>
    <Dataset>all</Dataset>
  </Database.Dataset.Remove>

  <Map.OptimizeRepair>
    <Enabled>true</Enabled>
  </Map.OptimizeRepair>

  <View.EntireMap>
    <Enabled>true</Enabled>
  </View.EntireMap>

  <File.Save>
    <Enabled>false</Enabled>
  </File.Save>

  <File.SaveAs>
    <File>C:\Albis\Albis2.ocd</File>
  </File.SaveAs>

  <File.Close>
    <Enabled>true</Enabled>
  </File.Close>

  <File.Exit>
    <Enabled>false</Enabled>
  </File.Exit>

</OcadScript>
```

3. XML Script Partial Map

Node	Parameter	Data type	Values / Description
export	file	String	eg.: , c:\export\PartialMap1.ocd ‘ OCAD creates files PartialMap1_1_1.ocd, PartialMap1_1_2.ocd,…
export	coordSystem	Enumerated types	mm (paper), m (real world)
export	T, L, B, R	Float	top, left, bottom, right
export.loop	enabled horizontalPages verticalPages horizontalOverlap verticalOverlap	Bool Integer Integer Float Float	true, false number of pages in horizontal direction number of pages in vertical direction horizontal overlap in mm or m vertical overlap in mm or m

Example xml file:

```
<ocadScript>
  <partialMapScript>

    <export id="0">
      <file>c:\export\PartialMap1.ocd</file>
      <coordSystem>mm</coordSystem>
      <T>100</T>
      <L>0</L>
    <B>50</B>
      <R>50</R>
       <loop>
        <enabled>true</enabled>
        <horizontalPages>7</horizontalPages>
        <verticalPages>3</verticalPages>
        <horizontalOverlap>10</horizontalOverlap>
        <verticalOverlap>10</verticalOverlap>
       </loop>
     </export>

     <export id="1">
      <file>c:\export\PartialMap2.ocd</file>
      <coordSystem>mm</coordSystem>
      <L>0</L>
    <R>50</R>
     <B>50</B>
      <T>100</T>
       <loop>
        <enabled>false</enabled>
       </loop>
    </export>

  </partialMapScript>
</ocadScript>
```

```
// comment


// first export section
// export file
// paper oder real world coordinates
// export rectangle with Top Left
point and Bottom Right point

// the loop export several ocd files.
For this example 21 files.


// horizontal and vertical overlap.



// second export section









// export only one ocd file
```

4. File Print

Print parameters can be saved in a XML script.

Node	Parameter	Data type	Values
File.Print.Printer	Name DmPaperSize DmDefaultSource DmPrintQuality DmColor DmMediaType	String Integer Integer Integer Integer Integer	Eg. ‚HP Color LaserJet 2840 PCL' 9 15 600 2 272
File.Print.Portrait	Enabled	Bool	true, false
File.Print.SpotColor	Enabled	Bool	true, false
File.Print.PartialMap	Range L,R,B,T	Integer Float	1 Left, Right, Bottom, Top
File.Print.HoriziontalOverlap		Float	-12.74
File.Print.VerticalOverlap		Float	8.74
File.Print.PrintScale		Integer	Eg. 25000
File.Print.Copies		Integer	Number of copies
File.Print.Intensity		Integer	
File.Print.LineWidth		Integer	
File.Print.PrintGrid	Enabled	Bool	true, false

XML Script Export

AI (Adobe Illustrator), PDF

Node	Child	Data type	Values / Description
export	file	String	eg.: ‚c:\Export\Chlosterwald.ai'
export	format	Enumerated types	AI, PDF
export.partialMap	enabled coordSystem L, R, B, T	Bool Enumerated types Float	true, false mm (paper), m (real world) [only if partialMap=enable] left, right, bottom, top [only if partialMap=enable]
export	printScale	Integer	
export	colors	Enumerated types	normal, spotColors
export	combine	Bool	true, false [only if colors = spotColors]
export.spotColors	enabled	Spotcolor name	[only if colors = spotColors]

BMP, GIF, JPEG

Node	Parameter	Data type	Values / Description
export	file	String	eg.: ‚c:\Export\Chlosterwald.bmp‘
export	format	Enumerated types	BMP, GIF, JPEG
export	resolution	Integer	
export	anti-alias	Bool	true, false
export	colorCorrection	Bool	true, false
export.partialMap	enabled coordSystem L, R, B, T	Bool Enumerated types Float	true, false mm (paper), m (real world) [only if partialMap=enable] left, right, bottom, top [only if partialMap=enable]
export.tiles	enabled width height	Bool Integer Integer	true, false [only if enabled =true] [only if enabled =true]

EPS

Node	Child	Data type	Values / Description
export	file	String	eg.: ‚c:\Export\Chlosterwald.eps ‘
export	format	Enumerated types	EPS
export.partialMap	enabled coordSystem L, R, B, T	Bool Enumerated types Float	true, false mm (paper), m (real world) [only if partialMap=enable] left, right, bottom, top [only if partialMap=enable]
export	printScale	Integer	
export	colors	Enumerated types	normal, spotColors
export.spotColors	enabled	Spotcolor name	[only if colors = spotColors]

SVG (Scalable Vector Graphics)

Node	Child	Data type	Values / Description
export	file	String	eg.: ‚c:\Export\Chlosterwald.svg ‘
export	format	Enumerated types	SVG
export.partialMap	enabled coordSystem L, R, B, T	Bool Enumerated types Float	true, false mm (paper), m (real world) [only if partialMap=enable] left, right, bottom, top [only if partialMap=enable]
export	printScale	Integer	
export	compressFile	Bool	true, false

TIFF

Node	Parameter	Data type	Values / Description
export	file	String	eg.: ‚c:\Export\Chlosterwald.tif‘ If spotColors is enabled and colorsCombine=false then the filename is ‚c:\Export\Chlosterwald. Spotcolor name.tif ‘
export	format	Enumerated types	TIFF
export	resolution	Integer	
export	anti-alias	Bool	true, false
export	colorCorrection	Bool	true, false
export.partialMap	enabled coordSystem L, R, B, T	Bool Enumerated types Float	true, false mm (paper), m (real world) [only if partialMap=enable] left, right, bottom, top [only if partialMap=enable]
export.tiles	enabled width height	Bool Integer Integer	true, false [only if enabled =true] [only if enabled =true]
export.geoRefTiff	enabled pixelSize createWorldFile	Bool Float Bool	true, false in meter [only if enabled =true] true, false [only if enabled =true]
export	colors	Enumerated types	normal, spotColors
export	colorsCombine	Bool	true, false [only if colors = spotColors]
export.spotColors	enabled	Spotcolor name	[only if colors = spotColors]
export	colorMode	Integer	0 = 32 bit CMYK 1 = 24 bit RGB 2 = 256 colors 3 = grayscale 4 = 8 bit CMYK 5 = 1 bit black/white 6 = halftone screen
export	compression	Integer	1 = no compression 2 = CCITT 4 = FaxG4 5 = LZW

DXF

Node	Parameter	Data type	Values
export	file	String	eg.: ‚c:\Export\Chlosterwald.dxf ‘
export	format	Enumerated types	DXF
export	printScale	Integer	
export	convertOem	Bool	true, false
export	convertUnicode	Bool	true, false
export	objectsSelSym	Bool	true, false
export	exportAsSplines	Bool	true, false
export	coordinates	Enumerated types	mm, m

Shape

Node	Parameter	Data type	Values
export	file	String	eg.: ‚c:\Export ‘ (only path name)
export	format	Enumerated types	SHAPE
export	Enabled	Integer	0 = point objects 1 = line objects 2 = area objects 3 = text objects
export	Dataset	Integer	All = Dataset - All objects eg.: 2 (Objects in dataset with index = 2)

Example

The following example export an AI file and some BMP tiles. Each exportScript node can contain many children.

```
<ocadScript>
  <exportScript>

    <export id="1">                          // first export section
      <file>c:\export\test.ai</file>         // export file
      <format>AI</format>                    // file format
      <partialMap>                           // entire or parial map
        <enabled>true</enabled>
        <coordSystem>mm</coordSystem>
        <L>0</L>                             // coordinates for the partial
        <R>50</R>                            map
        <B>50</B>
        <T>100</T>
      </partialMap>
      <printScale>10000</printScale>         // export scale
      <colors>normal</colors>                // cmky or spot colors
    </export>

    <export id="2">                          // second export section
      <file>c:\export\exp.bmp</file>
      <format>BMP</format>
      <resolution>300</resolution>           // raster resolution
      <anti-alias>true</anti-alias>
     <colorCorrection>true</colorCorrection>
      <partialMap>
        <enabled>false</enabled>
      </partialMap>
      <tiles>                                // tiles export
        <enabled>true</enabled>              // tile dimensions
        <width>500</width>
        <height>500</height>
      </tiles>
    </export>

  </exportScript>
</ocadScript>
```


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