

GPX_2_KML_4_Orga

Version and licence

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About

Convert GPX files exported from Garmin Basecamp in one go into a meaningful KML file that can be imported by Maps.me or Organic.Maps.

Use:

Planning:

Planning is done in Garmin Basecamp.

- Waypoints shall be named without special characters (ä/ö/ü etc)
- Waypoints may include a description
- Waypoints description may contain links
- Tracks shall be named without special characters (ä/ö/ü etc)
- Routes will not be considered as routes do not have reasonable track values.
- Export data via Basecamp File -> Export function.

Conversion

GPX_2_KML_4_Orga has no user interface. You just take your exported GPX and drag & drop it onto the exe. As a result you have a converted KML with the same name in the same directory as the GPX. If there are any errors, you will be informed.

Attention

There are some errors with the color codes in Organic.Maps (not sure for maps.me). It reflects the wrong color to the hex codes. You need to exchange the codes as follows:

- Cyan <-> Yellow (Cyan has hex color code for yellow, yellow for cyan)
- DarkCyan <-> DarkYellow
- Blue <-> Red
- DarkBlue <-> DarkRed

Translation Table

GPX2KML uses a translation table to convert Garmin GPX points and track-colors into KML icons and colors. You can change the translation according to your needs.

Structure

```
{
  "tracks": {
    "Magenta": "pline0",
    "Cyan": "pline1",
```

```

        ...
        "Default": "pline0"
    },
    "trackwidth":
    {
        "pline0": "10",
        "pline1": "10",
        ....
        "pline7": "5"
    }
    ,
    "trackcolor":
    {
        "pline0": "FFFE01FE",
        "pline1": "FFFE01FE",
        ....
        "pline7": "FF606060"
    }
    ,
    "points": {
        "Default": "placemark-blue",
        "Gas Station": "placemark-yellow",
        .....
        "Residence": "placemark-green"
    }
}

```

Routes

Since routes do not have reasonable track values, they are not observed.

Tracks (Lines)

All values: tracks, trackcolor & trackwidth, must have the same number of items.

The assignment is done via all Garmin color names for tracks known to me. First the standards, then the colored dark "color". The Light "color" and the gray tones are bridged to black - you hardly can see them on the display.

Keep in mind Attention section above

```

"tracks": {
    "Magenta":    "pline0",
    "Cyan":       "pline1",
    "Green":      "pline2",
    "Red":        "pline3",
    "Blue":       "pline4",
    "Yellow":     "pline5",
    "DarkMagenta": "pline6",
    "DarkCyan":   "pline7",
    "DarkGreen":  "pline8",
    "DarkRed":    "pline9",
    "DarkBlue":   "pline10",
    "DarkYellow": "pline11",

```

```

    "LightGrey":    "pline12",
    "LightGray":   "pline12",
    "DarkGrey":     "pline12",
    "DarkGray":    "pline12",
    "Black":        "pline12",
    "White":        "pline12",
    "Default":      "pline0"
  },
  "trackcolor": {
    "pline0": "FFFE01FE",
    "pline1": "FFFFFFF0",
    "pline2": "FF00FF00",
    "pline3": "FF0000FF",
    "pline4": "FFFF4040",
    "pline5": "FF00F0F0",
    "pline6": "FF600060",
    "pline7": "FF808000",
    "pline8": "FF006000",
    "pline9": "FF000060",
    "pline10": "FF600000",
    "pline11": "FF008080",
    "pline12": "FF000000"
  }
},

```

Points

The Organic.Maps implementation of KML does not use graphics as available in Garmin. The following icons are the ones I know:

Standards from Organic.Maps / Maps.Me:

```

placemark-red
placemark-blue
placemark-purple
placemark-yellow
placemark-pink
placemark-brown
placemark-green
placemark-orange
placemark-deeppurple
placemark-lightblue
placemark-cyan
placemark-teal
placemark-lime
placemark-deeporange
placemark-gray
placemark-bluegray

```

My implementation is based on many of the Garmin icons. The implementation done so far see in the actual json.

Example:

```

"points": {
  "Default"      : "placemark-deeporange",
  "Gas Station"  : "placemark-yellow",
  "Information"  : "placemark-cyan",
  "TracBack Point": "placemark-cyan",
  "Toll Booth"   : "placemark-cyan",
  "Ferry"        : "placemark-cyan",
  "Truck"        : "placemark-cyan",
  "Airport"      : "placemark-cyan",
  "Parking Area" : "placemark-cyan",
  "Residence"    : "placemark-green",
  "Summit"       : "placemark-brown",
  "Campground"   : "placemark-orange",
  "Lodge"        : "placemark-orange",
  "Lodging"      : "placemark-orange"
}

```

Defaults: In the sections

In the translation table there is a default value for the **tracks**. This is needed to assign undescribed color values that come from BaseCamp or MapSource to a color in the KML.

Similar is valid for Waypoints.

```

"tracks": {
  "Default":      "pline0"

"points": {
  "Default"      : "placemark-deeporange"

```

ColorTable: Name to Hex

This is not neccessarily the list of colors used by me - but you may give it a try!

This is a good site to check your colors: <https://www.color-hex.com/>

```

aliceblue = 'ffffff8f0'
antiquewhite = 'ffd7ebfa'
aqua = 'ff00ffff'
aquamarine = 'ffd4ff7f'
azure = 'ffffffff0'
beige = 'ffdcf5f5'
bisque = 'ffc4e4ff'
black = 'ff000000'
blanchedalmond = 'ffcdebff'
blue = 'ffff0000'
blueviolet = 'ffe22b8a'
brown = 'ff2a2aa5'
burlywood = 'ff87b8de'
cadetblue = 'ffa09e5f'
chartreuse = 'ff00ff7f'
chocolate = 'ff1e69d2'
coral = 'ff507fff'

```

```
cornflowerblue = 'ffed9564'
cornsilk = 'ffdcb8ff'
crimson = 'ff3c14dc'
cyan = 'ff00ffff'
darkblue = 'ff8b0000'
darkcyan = 'ff8b8b00'
darkgoldenrod = 'ff0b86b8'
darkgray = 'ffa9a9a9'
darkgrey = 'ffa9a9a9'
darkgreen = 'ff006400'
darkkhaki = 'ff6bb7bd'
darkmagenta = 'ff8b008b'
darkolivegreen = 'ff2f6b55'
darkorange = 'ff008cff'
darkorchid = 'ffcc3299'
darkred = 'ff00008b'
darksalmon = 'ff7a96e9'
darkseagreen = 'ff8fbc8f'
darkslateblue = 'ff8b3d48'
darkslategray = 'ff4f4f2f'
darkslategrey = 'ff4f4f2f'
darkturquoise = 'ffd1ce00'
darkviolet = 'ffd30094'
deeppink = 'ff9314ff'
deepskyblue = 'ffffbf00'
dimgray = 'ff696969'
dimgrey = 'ff696969'
dodgerblue = 'ffff901e'
firebrick = 'ff222b2'
floralwhite = 'fff0faff'
forestgreen = 'ff228b22'
fuchsia = 'ffff00ff'
gainsboro = 'ffdcdcdc'
ghostwhite = 'ffffff8f8'
gold = 'ff00d7ff'
goldenrod = 'ff20a5da'
gray = 'ff808080'
grey = 'ff808080'
green = 'ff008000'
greenyellow = 'ff2fffad'
honeydew = 'fff0fff0'
hotpink = 'ffb469ff'
indianred = 'ff5c5ccd'
indigo = 'ff82004b'
ivory = 'fff0ffff'
khaki = 'ff8ce6f0'
lavender = 'fffae6e6'
lavenderblush = 'fff5f0ff'
lawngreen = 'ff00fc7c'
lemonchiffon = 'ffcdfaff'
lightblue = 'ffe6d8ad'
lightcoral = 'ff8080f0'
```

```
lightcyan = 'ffffffe0'
lightgoldenrodyellow = 'ffd2fafa'
lightgray = 'ffd3d3d3'
lightgrey = 'ffd3d3d3'
lightgreen = 'ff90ee90'
lightpink = 'ffc1b6ff'
lightsalmon = 'ff7aa0ff'
lightseagreen = 'ffaab220'
lightskyblue = 'ffface87'
lightslategray = 'ff998877'
lightslategrey = 'ff998877'
lightsteelblue = 'ffdec4b0'
lightyellow = 'ffe0ffff'
lime = 'ff00ff00'
limegreen = 'ff32cd32'
linen = 'ffe6f0fa'
magenta = 'ffff00ff'
maroon = 'ff000080'
mediumaquamarine = 'ffaacd66'
mediumblue = 'ffcd0000'
mediumorchid = 'ffd355ba'
mediumpurple = 'ffd87093'
mediumseagreen = 'ff71b33c'
mediumslateblue = 'ffee687b'
mediumspringgreen = 'ff9afa00'
mediumturquoise = 'ffccd148'
mediumvioletred = 'ff8515c7'
midnightblue = 'ff701919'
mintcream = 'ffffaaff5'
mistyrose = 'ffe1e4ff'
moccasin = 'ffb5e4ff'
navajowhite = 'ffaddeff'
navy = 'ff800000'
oldlace = 'ffe6f5fd'
olive = 'ff008080'
olivedrab = 'ff238e6b'
orange = 'ff00a5ff'
orangered = 'ff0045ff'
orchid = 'ffd670da'
palegoldenrod = 'ffaee8ee'
palegreen = 'ff98fb98'
paleturquoise = 'ffeeeeaf'
palevioletred = 'ff9370d8'
papayawhip = 'ffd5efff'
peachpuff = 'ffb9daff'
peru = 'ff3f85cd'
pink = 'ffc0cb0ff'
plum = 'ffdda0dd'
powderblue = 'ffe6e0b0'
purple = 'ff800080'
red = 'ff0000ff'
rosybrown = 'ff8f8fbc'
```

```
royalblue = 'ffe16941'  
saddlebrown = 'ff13458b'  
salmon = 'ff7280fa'  
sandybrown = 'ff60a4f4'  
seagreen = 'ff578b2e'  
seashell = 'ffeef5ff'  
sienna = 'ff2d52a0'  
silver = 'ffc0c0c0'  
skyblue = 'ffebce87'  
slateblue = 'ffcd5a6a'  
slategray = 'ff908070'  
slategrey = 'ff908070'  
snow = 'fffafaff'  
springgreen = 'ff7fff00'  
steelblue = 'ffb48246'  
tan = 'ff8cb4d2'  
teal = 'ff808000'  
thistle = 'ffd8bfd8'  
tomato = 'ff4763ff'  
turquoise = 'ffd0e040'  
violet = 'ffee82ee'  
wheat = 'ffb3def5'  
white = 'ffffffff'  
whitesmoke = 'fff5f5f5'  
yellow = 'ff00ffff'  
yellowgreen = 'ff32cd9a'
```

All Basecamp waypoint definitions I'm aware of

```
Airport  
Alert  
Amusement Park  
Anchor  
Animal Tracks  
ATV  
Ball Park  
Bank  
Bar  
Beach  
Bell  
Big Game  
Bike Trail  
Binoculars  
Blind  
Block, Blue  
Block, Green  
Block, Red  
Blood Trail  
Boat Ramp  
Bowling  
Bridge
```

Building
Buoy, White
Campground
Camp Fire
Canoe
Car
Car Rental
Car Repair
Cemetery
Church
Circle with X
Circle, Blue
Circle, Green
Circle, Red
City (Large)
City (Medium)
City (Small)
Civil
Contact, Afro
Contact, Alien
Contact, Ball Cap
Contact, Big Ears
Contact, Biker
Contact, Bug
Contact, Cat
Contact, Dog
Contact, Dreadlocks
Contact, Female1
Contact, Female2
Contact, Female3
Contact, Goatee
Contact, Kung-Fu
Contact, Pig
Contact, Pirate
Contact, Ranger
Contact, Smiley
Contact, Spike
Contact, Sumo
Contact, Female3
Controlled Area
Convenience Store
Cover
Covey
Crossing
Dam
Danger Area
Department Store
Diver Down Flag
Drinking Water
Fast Food
Fishing Area
Fishing Hot Spot Facility

Fitness Center
Flag, Blue
Flag, Green
Flag, Red
Food Source
Forest
Furbearer
Gas Station
Glider Area
Golf Course
Horse Trail
Hunting
Kayak
Letter A, Red
Letter B, Red
Letter C, Red
Letter D, Red
Lighthouse
Marina
Man Overboard
Medical Facility
Mine
Movie Theater
Museum
Navaid, Amber
Navaid, Black
Navaid, Blue
Navaid, Green
Navaid, Orange
Navaid, Red
Navaid, Violet
Navaid, White
Number 1, Blue
Number, Blue
Number, Blue
Number 4, Blue
Oil Field
Parachute Area
Park
Parking Area
Pharmacy
Picnic Area
Pin, Blue
Pin, Green
Pin, Red
Pin, Yellow
Pizza
Police Station
Post Office
Private Field
Radio Beacon
Residence

Restaurant
Restricted Area
Restroom
RV Park
Scales
Scenic Area
School
Shelter
Shipwreck
Shopping Center
Short Tower
Shower
Ski Resort
Skiing Area
Skull and Crossbones
Small Game
Snowmobile
Square, Yellow
Stadium
Stop Sign
Street Intersection
Summit
Swimming Area
Tall Tower
Telephone
Toll Booth
Trail Head
Tree
Tree Stand
Treed Quarry
Triangle, Blue
Triangle, Green
Triangle, Red
Triangle, Yellow
Truck
Truck Stop
Tunnel
Ultralight Area
Upland Game
Waterfowl
Water Source
Wind Turbine
Wrecker
XSki
Zoo