GIS Migration Paths

Tools and strategies to move to open source GIS

FOSS4G 2019, Bucharest - August 29, 2019

Who am I?

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BSc in Computer Science

Developer, Consultant, Teacher, Student

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Open source Geo-spatial Experts at your doorsteps

Today's presentations

- 14:00-14:20
  - GIS Migration Paths - Tools and strategies to move to open source GIS
- 14:30-14:50
  - From proprietary GIS to OpenSource: overview of a software stack
- 15:00-15:20
  - It's open source, how could that possibly go wrong!?

What is to be migrated?

Tools

- Desktop GIS
- Mobile GIS
- Web GIS
- Server
- DBMS
- …

- Workflows
- Knowledge
- Documentation

Why?

- Freedom from lock-in
- Security and transparency
- Knowledge on what the software does
- Flexibility to change and improve
- Speed of improvements
- Contribute to the community

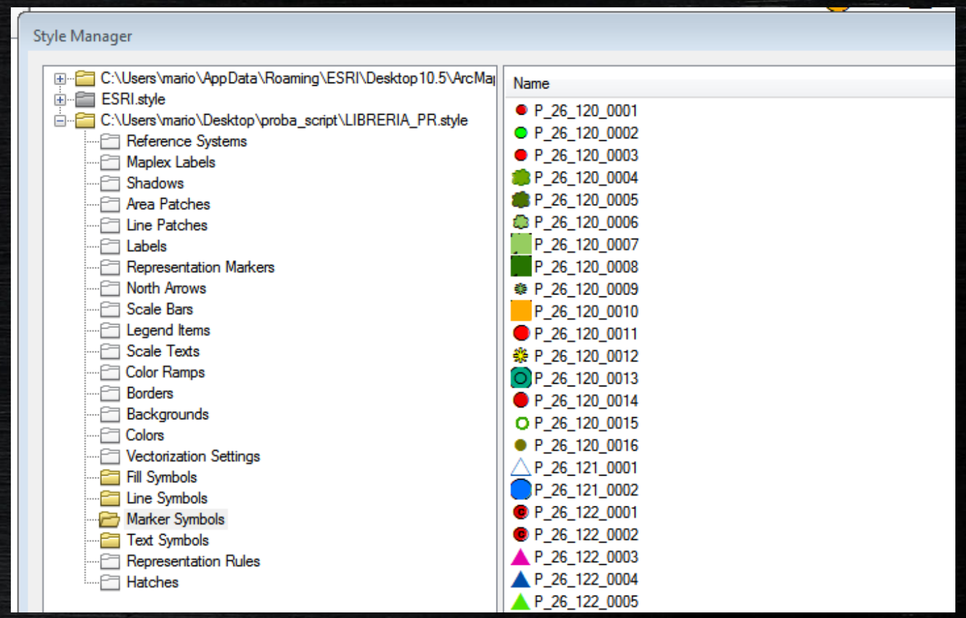
What obstacles do we face?

- Vendor lock-in
- Proprietary formats
- Vendor support
- Not knowing what the software does
- Staff training
- Staff's resistance to change
- Find new partners

What strategy to adopt?

Symbols example

The problem



- 1203 ESRI Symbols
- Points, Lines, Polygons
- Extensive use of ESRI Fonts

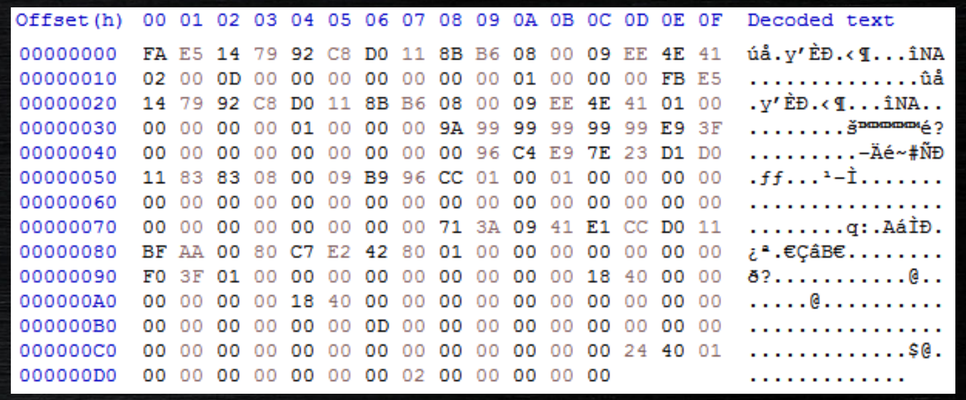
Requirements

- QGIS XML Library with all the symbols
- No proprietary fonts

Difficulties

- No tools with the required quality

ESRI Symbols



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- Difficult to interpret binary files
- Bad ArcGIS Python API for symbols

How Could We Do That?

By hand?

ESRI Style Specs

README.md

esri_style_specs

WIP specifications for ESRI .style files

Status

- RGB colors are a work in progress. The results are close, but with a color tinge.
- Fill symbols
  - complete support for Simple Fill layers
- Line symbols
  - complete support for Simple Line layers
  - near complete support for Cartographic Line layers. Arrows and custom dash patterns cannot be decoded yet.
- Marker symbols
  - complete support for Simple Marker layers
  - complete support for Character Marker layers

https://github.com/nyalldawson/slyr/

Features

- complete support for fill types
- complete support for line types
- complete support for marker types
- conversion of fonts to svg
- conversion of pictures
- complete support for colors
- conversion of color ramps
- available as python scripts or QGIS processing algorithms


DEMO

Conclusion

Thanks for your attention