# Help with QGIS bug fixing



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### Outline

#### **About Us**

QGIS core development Public QGIS tools and plugins

### **Migration to Open Source GIS**

Current state Proprietary software Black box OS software

### **Case study - Newcastle City Council**

Business Case & Rational Evaluation and pilot study Full implementation PostGIS

#### **WebGIS and Geoserver**

#### **Conclusions**

## About Us

## **Lutra Consulting**

- Core QGIS developers
- General (GIS) software/web development
- Support
- Training

# **QGIS** features we developed

### **Development of:**

- Multi-threaded rendering (2.4)
- Legend re-factoring and support for virtual multi-canvas, multi-styling (2.6 - 2.10)
- Rule-based labelling (2.12)
- Trace digitizing and snap caching (2.14)
- For the upcoming 2.16 release:
  - Legend item widget tool
  - Enhancement to the "reshape" digitizing tool
  - Advanced "preset" settings for the Print Composer

# QGIS features we will be developing

#### **Future features:**

- Multi-threaded rendering phase 2
  - Better raster performance
  - Better WM(T)S performance
- Vector caching
- QGIS Python API documentation
- ▶ Help with Python 3 and QT 5 migration

# **Various plugins**















### Plan

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## **Current SDI**

#### **SDI environments:**

- Proprietary software
- Black boxes with Open source components
- ► Hybrid

# **Proprietary software**

#### **Pros and Cons**

- Advantages:
  - Unified platform
  - Support and documentation
  - Usability
- Disadvantages
  - Dependency
  - Overall cost
  - Flexibility

### **Black box OS software**

#### **Pros and Cons**

- Advantages:
  - ► Things work
  - Easy to migrate away
- Disadvantages
  - Similar cost to Proprietary Software
  - Not configurable/Customisable

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## **Business Case & Rational**

## Why migrate away:

- Performance issues
- Expensive software
- More number of users
- Unwanted extras

# **Evaluation and pilot study**

- Migrating some data to PostGIS
- Migrating power users to QGIS
- Identifying blockers
- Assessing data & service compatibility and interoperability

## **Desktopn GIS**

#### **Customised QGIS - based on the LTR**

- Resolving issues with the Active Directory
- Development of a QGIS plugin for gazetteer
- Integration with their OGC services
- Fixing bug (backport to QGIS project)







# **Training**

## Bespoke training for over 75 users

- Conversion from previous platform to QGIS
- Several new users

## **PostGIS**

## Migrating data

- OS Translator II
- ogr2ogr scripts

## **PostGIS**

## Migrating data

- Test server
- Main server
  - with back-up / restore script

## **PostGIS**

## **Sync tool with ArcSDE**

Waiting for ESRI support (1 year!)

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### Geoserver



### **WebGIS**

### A simple webmap to:

- Publish select council datasets to the public and council staff
- Provide a means for staff to self-serve address data

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## **WebGIS**

## Implementation:

- All running on MS Windows
- PostGIS
- Geoserver + Geoserver Printing module
- Bespoke back-end services for
  - Find my nearest
  - Gazetteer
  - Download
- OpenLayers3

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# If you are considering Open Source GIS

#### **Considerations:**

- Planning
- Pilot study
- Data and service interoperability
- Cost...nothing is free
- Support