Boundless Open Source Report Card

Boundless is an open company, with 'open' being a part of all that we do. Our commitment is built on a foundation of open source, open collaboration, open standards and open education. We maintain over 200 repositories on [GitHub](#) and encourage everyone around the globe to participate in our projects. We feel it is important to be transparent about contributions as part of the community, so we have compiled this report card to summarize our level of commitment.

Support to Open Projects

Throughout our history we have been an active leader in the open source community, working with our partners, customers, users, and you! Boundless employs Committers across a wide variety of FOSS4G projects, to include several Steering Committee members. You can find the full list of communities and projects we work with on our website, but some of the more popular projects are listed below:

- [OpenLayers](#) - A high-performance, feature-packed JavaScript library for all your mapping needs.
- [QGIS](#) - A professional desktop GIS for the management, analysis visualization and dissemination of geospatial data.
- [GeoServer](#) - A proven geospatial application server for publishing data as OGC web services
- [GeoNode](#) - a geospatial content management system for the search, discovery and collaboration of spatial data
- [GeoGig](#) - A tool for distributed versioning, and replication & synchronization workflows for spatial data

Boundless continually strives to develop innovative, open geospatial solutions. As such we manage several additional projects ranging in size from small utilities and research projects, to larger components that support our core projects. Some of these include:
- [composer](#) - a WYSIWYG editor for creating map styles in GeoServer
- [Boundless SDK](#) - JavaScript SDK for creating web mapping applications using OpenLayers, React and Flux
- [geoserver-ext-gsr](#) - geoserver extension implementing ESRI GeoServices REST API.
- [qgis-milstd2525-plugin](#) - QGIS plugin offering a custom renderer and preview for MIL-STD-2525 symbology with SIDC attributes.
- [qgis-geogig-light](#) - A plugin for using and managing GeoGig repositories inside of QGIS, using the GeoGig API.
- [qgis-geoserver-plugin](#) - QGIS plugin to administer web services published to GeoServer
- [spatialconnect-android-sdk](#) - SDK for the management of mobile mapping applications on Android

- [spatialconnect-ios-sdk](#) - SDK for the management of mobile mapping applications on iOS

Project Support Details

In addition to our internal staff, Boundless is pleased to work with a diverse range of contractors and customers from around the globe. A quick review of the projects we support highlights that Boundless developers use a range of software programming languages including:
- Java
- Python
- JavaScript
- XML
- Scala

Using GitHub, issue trackers, and release notes we can start to compile some interesting data about the projects we support.

GeoGig

GeoGig completed its migration to the [LocationTech](#) working group under the [Eclipse Foundation](#). The Boundless team issued 1.0-RC2 in April, and 1.0-RC3 in August and has been featured with workshops at both FOSS4G-NA and FOSS4G 2016.
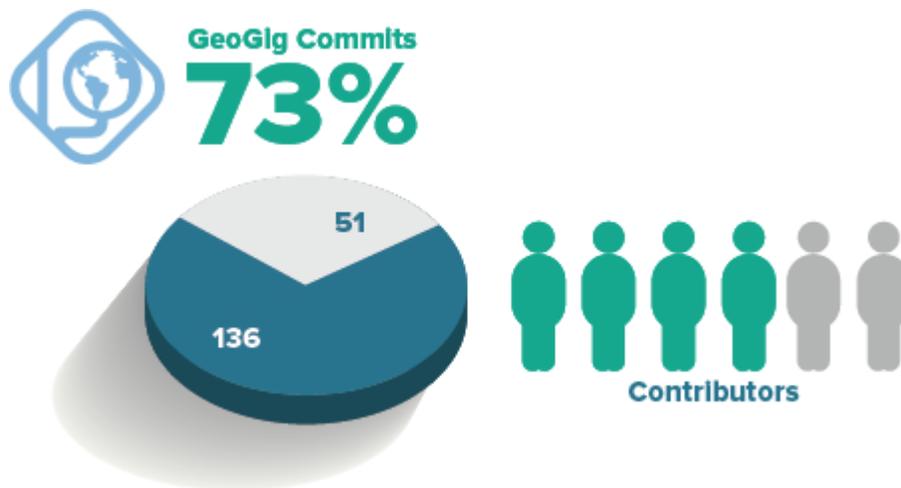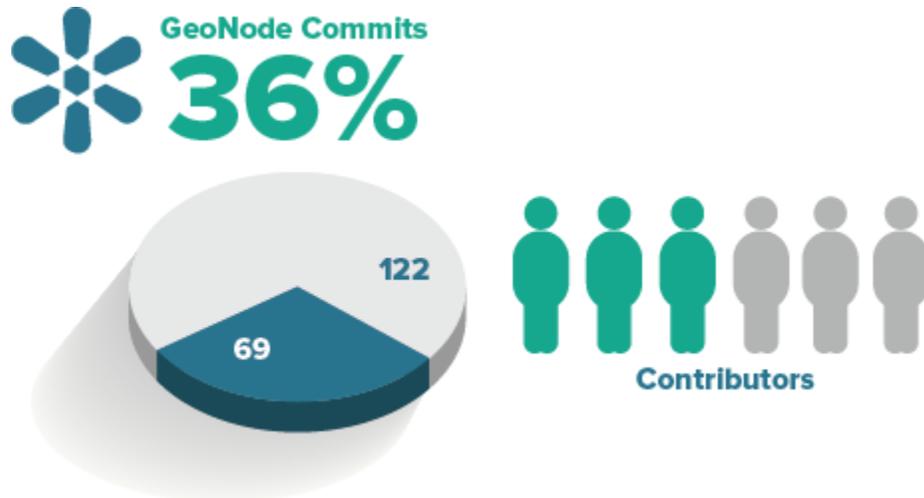

[GeoGig Commits April to October 2016](#)

As one of the last significant technical hurdles for LocationTech incubation, the project recently completed a migration from BerklyDB to [RocksDB](#) to mitigate IP issues. Boundless is adding contributors to the project to help test RocksDB and prepare for the final 1.0 release.

GeoNode

Since releasing [Exchange](#) in August, Boundless has continued to ramp up participation in the GeoNode project. The majority of contributions have been focused at the maintenance and bug fixes levels, as well as helping out with the GeoNode 2.5 release.

Three Boundless staff, Daniel Berry, Travis Brundage and Sara Safavi, recently obtained "committer" privileges allowing them to review and approve new contributions to the core code base.

[GeoNode Commits April to October 2016](#)

Boundless also helped organize two very popular sprints in 2016: one hosted by Boundless in New Orleans that garnered a great turnout, and one coinciding with FOSS4G 2016 in Bonn, Germany. We have also been actively promoting the project through presentations at [FOSS4G-NA](#), [FOSS4G](#), the [Texas GIS Forum](#) and to the [United Nations Open GIS Initiative](#).

Boundless would like to congratulate the GeoNode project on graduating from OSGeo incubation, and wishes to thank CEO, Andy Dearing, for arranging the code base to be donated to the foundation.

GeoServer

GeoServer continues to remain a core component of Boundless Suite and also plays a major role in Boundless Exchange. The chart below illustrates Boundless commit activity over the last six months, but it is important to note that in that time we also donated two significant modules back to the community:

- Vector Tiles Extension - enabling GeoServer to generate mapbox vector tiles for use in OpenLayers.
- YSLD - an alternate text friendly representative of GeoServer styling

Boundless remains busy taking on a wide range of GeoServer activities, from organizing a maintenance code-sprint, to managing 10 releases so far this year.
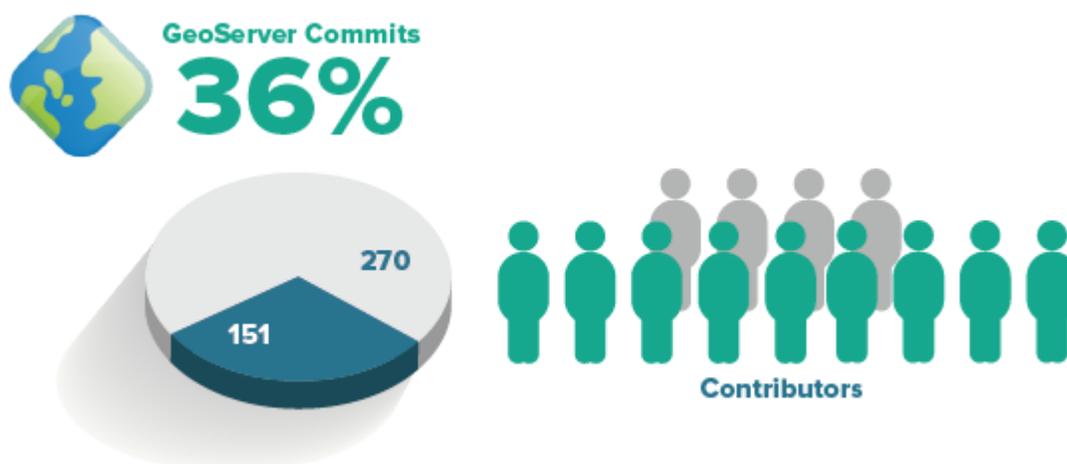
GeoServer Commits April to October 2016

The GeoServer ecosystem includes several prominent projects:
- GeoTools - the GeoTools library is used for data access and rendering. Boundless has contributed 27% of commits in the last six months, with six contributors taking part. Devon Tucker has obtained commit privileges on this project.
- GeoWebCache - provides the tile service protocols for GeoServer and can also be run as a separate application. Boundless has contributed 61% of commits in the last six months with three contributors.

OpenLayers

The OpenLayers project remains very active, with the Boundless team managing six of the last ten OpenLayers releases. Boundless was also instrumental in removing the Google Closure Library from the OpenLayers codebase, significantly improving ease of use so that mainstream tools and bundlers can be used with OpenLayers.

Boundless is particularly excited about its role in the addition of vector tile support inside of OpenLayers. By accessing pre-generated vector data (appropriate level of detail for each zoom level) OpenLayers can now render map output locally at high resolution - perfect for display in mobile devices. This functionality supports the MapBox vector tiles standard (with information provided by MapBox), the new GeoServer vector tiles extension, and other evolving vector tile standards.
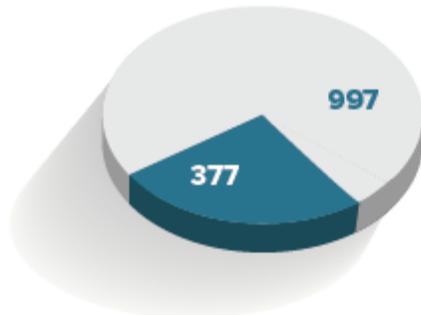
OpenLayers Commits April to October 2016

QGIS

Boundless increased its participation to the QGIS codebase in 2016. Beyond code contributions, there was an increase in support and participation for QGIS events, with almost the whole team attending the QGIS User's Conference and hackfests in Girona and Bonn.
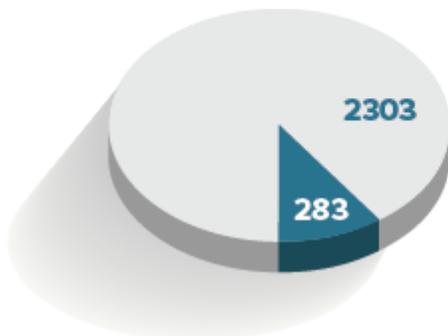
QGIS Commits April to October 2016

One of our key investments to QGIS was the addition of the QGIS authentication system. This QGIS 2.12 functionality is critical for enterprise adoption allowing both plugins and data sets to be enabled based on organizational security policies such as LDAP and PKI.

We continue to support the QGIS release cycle, taking part in the quality assurance initiative leading up to the QGIS 2.16 release. Boundless worked with OSGeo and the Windows packaging team to produce signed installers for the QGIS community.

Boundless also developed and released several new plugins available from the QGIS plugin manager:

- Lessons plugin: A plugin to create and run interactive learning lessons within QGIS
- Tester plugin. A plugin to assist in performing manual tests of QGIS elements (similar to a macro).
- Web App Builder. A plugin for creating web mapping applications through a wizard in QGIS without writing any code.

Finally, Boundless is hard at work helping to migrate QGIS elements to QGIS 3.0. In particular, the migration of the Processing framework to a new architecture. Important refactoring was completed supporting a new architecture for parameters. This will give more flexibility and robustness to analysis capabilities that will be available in QGIS 3.0.

About this Report

This is a small sampling of Boundless community activity. For more information follow the official Boundless blog, individual project blogs, social media accounts and release notes.

Boundless is committed to open source and is always looking for others to participate in the advancement of open geospatial software. If you would like to join the Boundless team please review the list of current openings.

The graphs illustrated above are derived from commit statistics pulled from GitHub for between April and October 2016:

	Total	Boundless	Percentage
QGIS	2586	283	10.9%
QGIS Docs	381	28	7.3%
GeoServer	421	151	35.9%
GeoNode	191	69	36.1%
GeoGig	187	135	72.2%
GeoTools	314	86	27.4%
OpenLayers	1374	377	27.4%