

Repository Analysis Report for Neutron

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1 Introduction

In this report, I investigated an open source project (openstack/neutron) from GitHub and studied module-level file changes of its master branch in the past six month. For the study, two questions are focused:

1. What are the top-12 most frequent changed modules?
2. How many commits occurred in the past six month?
3. How much line changes (addition and deletion) occurred in the past six month?

For this report, commit records are collected through GitHub API and visualized by a python script.

2 Result

According to my script, there are **472 commits** occurred in the past six month. These commits include at least one file change under the */neutron* directory of the studied project. These commits have **40987 line changes** in total, where **35204** of them are **additions** and **13883** are **deletions**.

module	total	add	total
test	25394	18394	7000
plugins	6539	4265	2274
db	5679	4050	1629
agent	3763	2886	877
services	2720	1748	972
extensions	949	897	52
objects	935	722	213
cmd	933	929	4
quota	560	178	382
common	486	338	148
conf	469	390	79
api	385	234	151

Table 1: Details for Top-12 Most Frequent Modified Modules under */neutron*

And the top-12 most frequent modified modules are listed in table1. In addition, I also visualized the portion of addition and deletion for the 12 modules. From the charts, it is observed that tests, plugins and db are the top-3 most frequent addition/deletion modules.

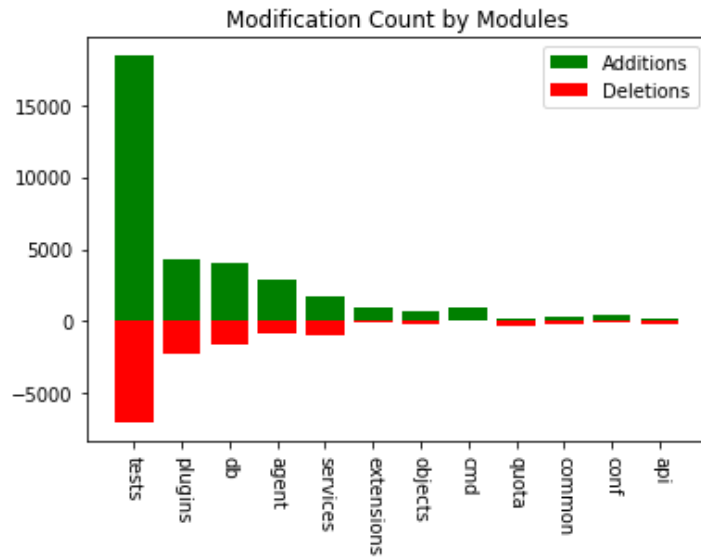


Figure 1: Top-12 Most Frequent Modified Modules under /neutron

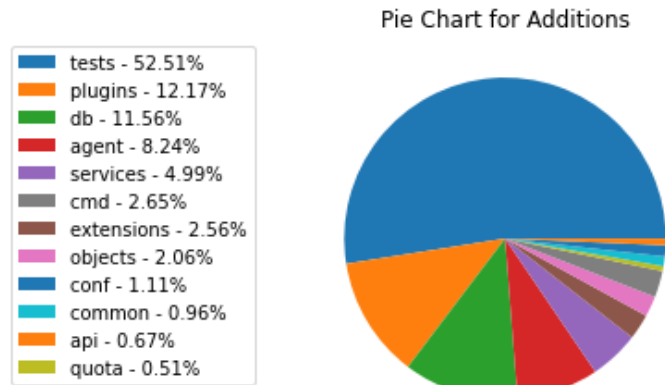


Figure 2: Pie Chart for Addition of the Top-12 Modules

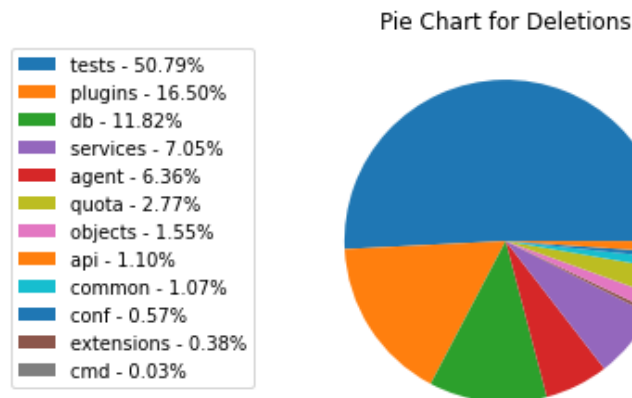


Figure 3: Pie Chart for Deletion of the Top-12 Modules