Open Source
Developing and Nurturing the Virtuous Cycle
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At a Glance

28K + Engineers World Wide

8000 + Apps

They almost ALL use OSS

Individuals Served

Through our businesses, we serve 141 million people residing in all 50 states in the United States and more than 130 other countries.

2018 Revenues

> $226B

We invest more than $3.3 billion annually in technology and innovation.

Workforce

Nearly 300,000 people worldwide.

Includes 85,000 clinical professionals worldwide.

- Member of the Dow Jones Industrial Average, a blue chip group of 30 companies deemed industry leaders.
- Listed in the Dow Jones Sustainability World Index and Dow Jones North America Index annually since 1999.

- Named one of America’s 50 most community-minded companies by The Civic 50 in 2018, a Points of Light initiative that highlights companies that improve the quality of life in the communities where they do business.

Our employees donated 2.5 million volunteer hours in 2018 to help build healthier communities
A Diversified Enterprise

HELPING PEOPLE LIVE HEALTHIER LIVES AND HELPING MAKE THE HEALTH SYSTEM WORK BETTER FOR EVERYONE

UnitedHealthcare

HEALTH BENEFITS

Complementary but Distinct Business Platforms

OPTUM

HEALTH SERVICES

FOUNDATIONAL COMPETENCIES

Clinical Insight  Technology  Data & Information

OUR UNITED CULTURE

Integrity  Compassion  Relationships  Innovation  Performance
OSS Virtuous Cycle – What? And Why?

Reduce Cost & Friction
Increase Velocity
Promote OptumTech Brand
Internal & External Influence

So that …
OSS Policy

- Consumption
- Contribution
- Participation

Describe “what” and “why” but not “how”.

So company is ready to pursue objectives.
OSS Process

- Keep it simple – use familiar tools (e.g. git)
- Automate. All. Things.
- Processes will evolve – roll with it
- Allow for exceptions - add value
- Invite all the stakeholders to the party

Procurement will support you
Security is your friend
IP Counsel will love you
OSS Consumption

- Modern Development needs
- Application Governance
- Low threshold for participation
- Create value – e.g. copyright attribution
- Assist Security – e.g. impact analysis

Use the numbers to build the case for OSS (1K Apps/13K components)
OSS Contribution

- Natural part of the cycle
- Lower investment – i.e. bug fixes
- Influence projects – reach an inflection point
- This is where the real talent resides
- Build the community – give and take
OSS Contribution

Official Open Source Program Office Approved Communities, Projects and Process for OSS Contribution

107 commits 7 branches 0 releases 15 contributors

- Approved-Communities.md: Merge branch 'master' into master
- OSS Project Contribution Workflow 2019 v 4.0.png: Update typo
- Optum-vs-Personal.md: Update Optum-vs-Personal.md
- README.md: Update README.md
- multi-gh-env-guide.md: fixed code block formatting issue

OSS-Community-Contribution

Policy, process and procedure for active contribution to OpenSource public projects

Maintainer for this Repo is Kevin Nelson (pknelson@optum.com) through the Open Source Program Office. The Repo issues function may be used for questions and or suggestions.

Key requirements for OpenSource community contribution include:
- each Optum participant must complete and attest to policy and process compliance through assigned course(s) in LeanSource
OSS Contribution

Open Source Public Commit Activity

<table>
<thead>
<tr>
<th>Year</th>
<th>Commits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>31-Dec-17</td>
</tr>
<tr>
<td>2018</td>
<td>31-Dec-18</td>
</tr>
<tr>
<td>2019</td>
<td>1-Jul-19</td>
</tr>
</tbody>
</table>

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OSS Contribution

Open Source Commits by Project

- Optum/kong-cluster-drain
- optum/giraffe
- Optum/kong-expired-token-clean-up
- pusher/wave
- Optum/kong-splunk-log
- Optum/kong-error-log
- Optum/kong-response-size-limiting
- Optum/kong-spec-expose
- Optum/kong-path-based-routing
- Optum/kong-upstream-jwt
- Optum/Retain-Keras
- Optum/mockitao
- helm/charts
- apache/beam
- Optum/ChaoSlingr
- danielqsj/kafka_exporter
- Optum/kong-oidc-auth
- Optum/kong-service-virtualization

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OSS Contribution

July 15, 2019 – July 22, 2019

Overview

4 Active Pull Requests

3 Merged Pull Requests

1 Proposed Pull Request

4 Active Issues

0 Closed Issues

4 New Issues

Excluding merges, 2 authors have pushed 3 commits to master and 4 commits to all branches. On master, 17 files have changed and there have been 148 additions and 40 deletions.

3 Pull requests merged by 2 people

- #523 Groups owner info enhancement 3 days ago
- #524 Copy button for rr pairs 3 days ago
- #522 For default response changes 5 days ago

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OSS Influence

- Influence your business partners - Reduce Costs
- Influence your internal tech community - Increase Velocity & Promote OptumTech Brand
- Influence projects – reach an inflection point - OSS Community Rep
- Influence corporate finance/procurement - Reduce Friction
- Influence corporate counsel - Reduce Friction