Google's Journey to Collections

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Collections are a distribution format for Ansible content. They can be used to package and distribute playbooks, roles, modules, and plugins.
Current World
<table>
<thead>
<tr>
<th>Rank</th>
<th>Repository</th>
<th>Contributors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Microsoft/vscode</td>
<td>19k</td>
</tr>
<tr>
<td>2</td>
<td>facebook/react-native</td>
<td>10k</td>
</tr>
<tr>
<td>3</td>
<td>tensorflow/tensorflow</td>
<td>9.3k</td>
</tr>
<tr>
<td>4</td>
<td>angular/angular-cli</td>
<td>8.8k</td>
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<tr>
<td>5</td>
<td>MicrosoftDocs/azure-docs</td>
<td>7.8k</td>
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<tr>
<td>6</td>
<td>angular/angular</td>
<td>7.6k</td>
</tr>
<tr>
<td>7</td>
<td>ansible/ansible</td>
<td>7.5k</td>
</tr>
<tr>
<td>8</td>
<td>kubernetes/kubernetes</td>
<td>6.5k</td>
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<tr>
<td>9</td>
<td>npm/npm</td>
<td>6.1k</td>
</tr>
<tr>
<td>10</td>
<td>DefinitelyTyped/DefinitelyTyped</td>
<td>6.0k</td>
</tr>
</tbody>
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Source: 2019 GitHub State of the Octoverse
Ansible 2.7
10/2017
Ansible 2.8
5/2019

Google Cloud
The Users
User Migration Story

1 ansible-galaxy collection install google.cloud

1 hosts: localhost
2 collections:
3   - google.cloud
4   ...

Google Cloud
The Code
Repo

- As an Ansible partner, we've got a repo in the ansible.org
- Basic folder structure + a galaxy.yml metadata file
As an Ansible partner, we've got a repo in the `ansible` org

Basic folder structure + a `galaxy.yml` metadata file
Modules/Plugins

- Now live in collection
- Copy and paste the modules into their new home
Module Utils

- module_utils now live inside of the collection
- You have to change imports on every module/plugin
- Very well-documented change
- **Challenge:** very easy to forget
Documentation

- It's still part of the module
- Collection has a README now
- Modules still have YAML docs
- **Challenge**: documentation home is coming soon
Integration Tests

- Ansible-test now works with collections
- Could be a cleaner experience
- **Challenge**: how do you know what modules it's running?
Migration Process Automation

- `ansible-galaxy collection init`
- Ansible built out `ansible/content_collector`
- The migration process isn't automated at the moment.
- **Challenge:** May be challenging to those without knowledge of full ecosystem.
The Process
Issues

- ansibot tries to label issues
- My @-mentions are plentiful
- **Challenge:** How to move these to collection repo?
Issues

- Every collection can have its own set of issues now
- **Challenge**: What does the community want?
Making a PR (now)

- Write the PR (preferably using Magic Modules)
- Make a PR against ansible/ansible
- ansibot hopefully labels + mentions the proper reviewers
- Tests run in Shippable
- Wait for reviewer (core or otherwise)
- shipit (or go back to beginning)
- ansibot ships the PR
Making a PR (collections)

- Write the PR (preferably using Magic Modules)
- Make a PR against ansible/ansible_collections_google
- Tests run
- Get approved and merged.
Code Review

- GitHub > ansibot
- My GitHub mentions are saved
- My favorite part of the migration
Code Review

- **Quicker turn-around**
- **Challenge**: how do we keep our standards in line with the community?
Sanity Tests (Shippable CI)

- Ansible-test now works with collections
- Exact same set of tests as ansible/ansible
- **Challenge:** some bugs. Can't use for CI just yet.
- **Challenge:** should these tests remain the same for collections?
Galaxy

- Home for roles
- Now also a home for collections
- **Challenge:** When to upload to Galaxy?
- **Challenge:** Discoverability
galaxy.ansible.com/google/cloud
Galaxy - Upload Process

- Two CLI commands (build + publish)
- Super easy.
- Super automatable.
Deprecation

- Unclear how current deprecation schedule moves over
Automation Hub

Find and download all Ansible Content Collections that are supported by Red Hat or from our certified partners.
The Magic
The Future
What can we do now?

- More frequent releases
- More granular changelogs
- Pick your releases
Thank You!

cloud.google.com
galaxy.ansible.com/google/cloud

@rambleraptor