

CovFlow

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Goals

As part of the Covalent CLI:

<https://github.com/Teradata/covalent-tools>

Would like to add shortcut commands for common git branching, PR and other useful wrappers to make it easier to follow the Covalent model for git development.

References

- <https://git-scm.com/docs/git-branch>
- <https://github.com/nvie/gitflow/wiki/Command-Line-Arguments>
- <https://github.com/angular/angular-cli/wiki>

Requirements

- Commands for:
 - Creating a branch
 - Validation that prefix is one of the following
 - feature
 - fix
 - mock
 - Test
 - Validation that the branch name is
 - kebab and lower case
 - <= 3 words
 - Publishing a branch
 - Finish a branch
 - Squash and Merge a branch to develop ?
 - Delete the feature branch ?
 - Can supply a set of release branches to cherry pick to
 - test if can go into set of release branches
 - If yes do it
 - --force to do it for ones that can work and not the ones that don't

Proposed implementation

Example - Create branches:

```
$ cov flow feature start breadcrumbs-1053  
$ cov flow fix start pagination-firefox-1234  
$ cov flow mock start cloud-charts-page-4321  
$ cov flow test start paginate-change-page
```

- The “from” branch is not required. The develop branch is default.

The above commands are equivalent to:

```
$ git checkout -b feature/breadcrumbs-1053 develop  
$ git checkout -b fix/pagination-firefox-1234 develop  
$ git checkout -b mock/cloud-charts-page-4321 develop  
$ git checkout -b test/paginate-change-page develop
```

Example - Create branch from different branch than develop:

```
$ cov flow feature start breadcrumbs-1053 my-other-branch
```

The above command is equivalent to:

```
$ git checkout -b feature/breadcrumbs-1053 my-other-branch
```

Example - Publish:

Add option to not specify branch name or prefix and will just go from where you are

```
$ cov flow feature publish breadcrumbs-1053  
$ cov flow fix publish pagination-firefox-1234  
$ cov flow mock publish cloud-charts-page-4321  
$ cov flow test publish paginate-change-page
```

The above commands are equivalent to:

```
$ git push origin feature/breadcrumbs-1053
$ git push origin fix/pagination-firefox-1234
$ git push origin mock/cloud-charts-page-4321
$ git push origin test/paginate-change-page
```

Example - Finish:

```
$ cov flow feature finish breadcrumbs-1053 release-1.5.x release-1.6.x
release-1.7.x
```

The above command will:

- Squash and Merge breadcrumbs-1053 branch to develop
- Test if can Cherry Pick the Squashed commit from breadcrumbs-1053 and see if can Cherry Pick into release branches release-1.5.x release-1.6.x release-1.7.x
- If test is successful then it will Cherry Pick the Squashed commit from breadcrumbs-1053 and do the Cherry Pick into release branches release-1.5.x release-1.6.x release-1.7.x
- If test does not succeed then will not do any cherry pics
- Delete the breadcrumbs-1053 branch

Example - Finish with forcing and keeping:

```
$ cov flow feature finish breadcrumbs-1053 release-1.5.x release-1.6.x
release-1.7.x --force --keep
```

The above command will:

- Squash and Merge breadcrumbs-1053 branch to develop
- Test if can Cherry Pick the Squashed commit from breadcrumbs-1053 and see if can Cherry Pick into release branches release-1.5.x release-1.6.x release-1.7.x
- If test is successful then it will Cherry Pick the Squashed commit from breadcrumbs-1053 and do the Cherry Pick into release branches release-1.5.x release-1.6.x release-1.7.x
- If say release-1.5.x test fails but release-1.6.x release-1.7.x then the --force flag will tell it to go ahead and cherry pick to the branches it can
- The breadcrumbs-1053 branch will not be deleted with the --keep flag

Possible Enhancements

In design review decided not to do the tagging below:
cov flow release finish

```
$ cov flow release finish --tag 1.5
```

Rebase develop into master

Tag master as 1.5 (possible enhancement)

```
$ cov flow release finish 1.5.x
```

Rebase (Squash Merge ?) 1.5.x into master and develop

```
$ cov flow release finish release-1.5.x master
```

Roadmap and timeline

- Covalent 2.0.0