

Helm chart - How to Add/Install plugins

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Helm is feature rich framework for Kubernetes and it has one more pluggable feature know as Plugins. Helm Charts are build on the principle of pluggable component.

Hence Helm community maintains lots of additional plugin to ease out day to day operations.

You can check list of plugins here - [Helm Chart Plugins](#)

In this article we are going to focus on Helm diff plugin.

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1. Lets talk about - Helm Diff Plugin

There is one plugin which I found very useful in managing the release is **Helm Diff Plugin**. This plugin helps you with -

1. Finding the difference between the latest Helm revisions/versions
2. To know difference between Helm Release

2. Lets install the Helm Diff plugin

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Installing the Helm Diff plugin is really simple and it can be done with a single command -

```
1 helm plugin install https://github.com/databus23/helm-diff
```

BASH

After installation you can verify the plugin using the following command -

```
1 helm plugin list
```

BASH

It should return you with the list of plugins which you have installed in the past

```
1 NAME  VERSION  DESCRIPTION
2 diff  3.1.3    Preview helm upgrade changes as a diff
```

BASH

Since I have only installed the `diff` plugin so I am getting only one option here.

3. Let's play with Helm Diff Command

To get more understanding on the Helm Diff Plugin first we need to create a `HelloWorld Helm Chart` and then we need to have at least two releases of the same Helm chart so that we can compare the version difference.

3.1 Create your HelloWorld Helm chart.

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Rahul Wagh



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Creating a HelloWorld Helm Chart is fairly easy and you just need to run the following `helm create helloworld` command

```
1 helm create helloworld
```

BASH

3.2 Create Helm Release - myhelloworld

After the creation of the Helm Chart, lets create your first release .i.e. `myhelloworld`

```
1 helm install myhelloworld helloworld
```

BASH

3.3 Increase replica count

Alright after creation of your first release - Lets `upgrade myhelloworld` release.

So for upgrade part we are going to change the `replicaCount:` in `values.yaml`

Before proceeding further please do update the `replicaCount` to `2` inside `values.yaml`

```
1 replicaCount: 2
```

VALUES.YAML

3.3 Upgrade the release

Upgrade the release by simply running the following command

```
1 helm upgrade myhelloworld .
```

BASH

Now go and verify the upgrade. It should increase the revision count to 2

```
1 helm list -a
```

BASH

```
1 NAME           NAMESPACE   REVISION
2 myhelloworld   default      2
```

BASH

So now we have two releases for the `myhelloworld` and now we can run the Helm Diff.

4. Run Helm Diff command

Here is the command for `Helm Diff`

```
1 helm diff revision myhelloworld 1 2
```

BASH

Here 1 represents the first release and 2 represents the second release of `myhelloworld`

After running the `helm diff` command you will see the values.yaml showing the difference between replicas.

```
1 spec:
2 -   replicas: 1
3 +   replicas: 2
```

Please refer to the following screenshot -

Helm diff plugin

5. Uninstall the plugin

If you do not need plugin then you can uninstall the plugin with its name using the following command

```
1 helm plugin uninstall diff
```

BASH

It should return the following message

```
1 Uninstalled plugin: diff
```

BASH

You can also verify uninstallation by running the `helm plugin list` command

```
1 helm plugin list
```

BASH

And it should return an empty list

```
1 NAME VERSION DESCRIPTION
```

BASH

Conclusion

In this post we have seen -

1. What are the Helm Plugins
2. Where to find the Helm Plugins
3. How to install the Helm Plugins
4. How to use Helm Plugin `diff`
5. Finally how can uninstall the Helm Plugin `diff`

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