# Installing and Using IPFS Cluster

Initial Impression:

Ok, I know that ipfs cluster deals with replication and scaling. That being said my knowledge of IPFS Cluster is not being validated from the website. I'm not sure what I understand and where my knowledge gaps are. OK, diving in and installing!

#### Download:

In order to build and install IPFS Cluster follow the steps:

```
git clone https://github.com/ipfs/ipfs-cluster.git
export GOIIIMODULE=on # optional, if checking out the repository in $GOPATH.
go install ./cmd/ipfs-cluster-service
go install ./cmd/ipfs-cluster-ctl
```

Ok- given three links on the top of the page. IPFS distributions page, ipfs service cluster, and ipfs cluster ctl. I know that I have to use IPFS daemon in background in order to use cluster, but not clear on what is <u>ipfs-cluster-service</u> and <u>ipfs-cluster-ctl</u>. Whatevs- let me download them.

Downloaded service and ctl, but still do not know what those two commands do

Followed the instructions and it doesn't seem like I have ipfs-cluster-ctl on my machine.

## **Binary distribution**

IPFS Cluster provides pre-built binaries for several platforms on the IPFS Distributions page:

- ipfs-cluster-service
- ipfs-cluster-ctl

Going to try the binary distribution route.

# Things that are missing or confusing:

Installing from source is missing the cd/ command for different directories

In order to build and install IPFS Cluster follow the steps

```
git clone https://github.com/ipfs/ipfs-cluster.git
export G0111MODULE=on # optional, if checking out the repository in $GOPATH.
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go install ./cmd/ipfs-cluster-ctl
```

These commands ran without errors or traceback messages but 'ipfs-cluster-service' was not installed

Downloaded ipfs-cluster-ctl and ipfs-cluster-service. When I ran `ipfs-cluster-service -c` I got `zsh: command not found: ipfs-cluster-service`

Installing Prebuilt Binaries

#### **Binary distribution**

IPFS Cluster provides pre-built binaries for several platforms on the IPFS Distributions page:

- ipfs-cluster-service
- ipfs-cluster-ctl

You can download these binaries, make them executable and run them directly. They include all the necessary dependencies.

The prebuilt-binaries are only updated on new releases (with occasional release candidates). These releases aim to provide a stable distribution of IPFS Cluster.

Perhaps we should have a link explaining go packaging and \$PATH <a href="https://github.com/alco/gostart#faq8">https://github.com/alco/gostart#faq8</a>

We should include instructions on how to make binaries executable "You can download these binaries, make them executable and run them directly"

Downloaded, unpacked, `chmod +x` ipfs-cluster-ctl binaries and got this error message <a href="https://gist.github.com/pkafei/d63b9c11102a3a3c6f6207e53d08a9fb">https://gist.github.com/pkafei/d63b9c11102a3a3c6f6207e53d08a9fb</a>

Downloaded, unpacked, `chmod +x` ipfs-cluster-service binaries and got this error message <a href="https://gist.github.com/pkafei/836f384b754e1e87f2a97f85a8d6d6da">https://gist.github.com/pkafei/836f384b754e1e87f2a97f85a8d6d6da</a>

Tried to install via source

#### **Installing from source**

The following requirements apply to the installation from source:

- Go 1.11+
- Git

In order to build and install IPFS Cluster follow the steps:

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git clone https://github.com/ipfs/ipfs-cluster.git
export GO111MODULE=on # optional, if checking out the repository in $GOPATH.
go install ./cmd/ipfs-cluster-service
go install ./cmd/ipfs-cluster-ctl
```

Tried to install Cluster <u>via https://github.com/ipfs/ipfs-cluster.git</u>
Set GO Path using these instructions <u>https://github.com/golang/go/wiki/SettingGOPATH</u> and <u>https://github.com/alco/gostart</u>

Cd into \$GOPATH/src/ipfs cluster and `Make Install`

#### What Worked

#### **Installing from source**

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```

- 1. Install GO
- 2. Add `export PATH=\$GOPATH/bin:\$PATH` to your .bashrc or .zshrc file
- 3. Run 'source .zshrc'
- 4. Create 'src' directory in 'Go' path and 'git clone https://github.com/ipfs/ipfs-cluster.git'
- 5. 'cd ipfs-cluster' directory
- 6. 'make install' You don't need to use 'go install'

## **Configuration:**

Ok, not sure if this configuration is. Is this mandatory for me to get up and running or is this extra config for after I have gotten IPFS Cluster up and running. What are the bare minimum steps to set up a cluster?

The binary distributions seem like a hassle to download separately so I'll try to build from the ipfs cluster repo

IPFS Cluster peers are run with the 'ipfs-cluster-service' command.

### Things that are missing or confusing:

- I don't have an `.ipfs-cluster` folder. It looks like I can set a default one but running ipfs-cluster-service init
- What's actually in the configuration file should be displayed in the docs

#### What Worked

- 1. `ipfs-cluster-service init` #this creates a config file that I can find at /Users/protocollabs/.ipfs-cluster/service.json
- 2. 'ipfs-cluster-service daemon'

#### **Notes**

- Is there anything in the config section that needs to be changed right away?
- The different parts of the config should be introduced in a more approachable way

# **Starting**

### Notes:

• Starting multiple peers with fixed peerset should be the top part of the documentation

### What Worked

- 1. Ipfs daemon
- 2. Ipfs-cluster-service daemon
- 3. ipfs-cluster-ctl peers Is

### Things That are Missing are Confusing

- Does Raft need to go at the top of the page? Is it necessary to know about Raft in order to get started with Cluster?
- Why would we want to bootstrap peers individually?

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# **Demo Section**

I could be wrong but I didn't see anything in the docs that demonstrated how to work with IPFS Cluster as an end user

#### **Checking Your Pin**

1. 'ipfs-cluster-ctl add example.md'

16:22:08.112 INFO ipfshttp: IPFS Pin request succeeded: QmdbiSo8qPaeHuRPhxBznwXtWkgxWuSBznRVijQSasn5SN ipfshttp.go:306

2. `ipfs-cluster-ctl status QmdbiSo8qPaeHuRPhxBznwXtWkgxWuSBznRVijQSasn5SN`

QmdbiSo8qPaeHuRPhxBznwXtWkgxWuSBznRVijQSasn5SN:

> Portias-MacBook-Air.local : PINNED | 2019-05-14T16:22:08.112883+02:00