

Konveyor Move2Kube

Accelerate your journey to Kubernetes/Openshift

Toolkits and Web Services Overview



Migration Toolkit for Applications

Tools and services that help customers migrate and modernize applications to run on OpenShift



Migration Toolkit for Containers

Tools and services that help users migrate containers between OpenShift clusters



Migration Toolkit for Virtualization

Tools and services that help customers migrate to OpenShift Virtualization

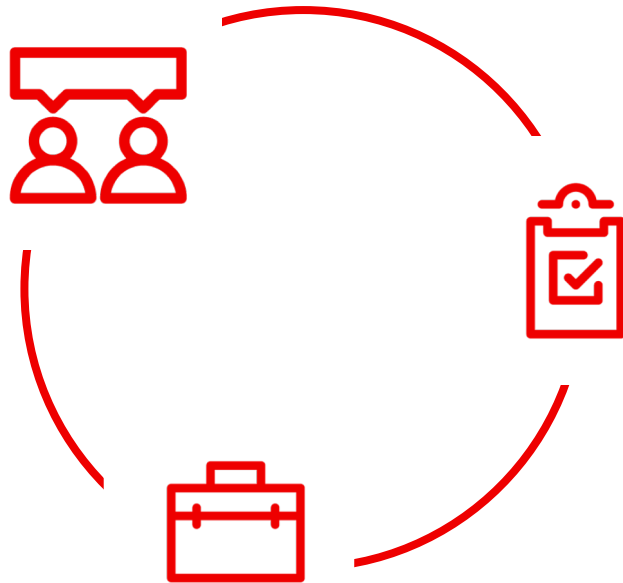


Move2Kube

An open source project that can increase the efficiency of moving from Swarm and Cloud Foundry to Kubernetes

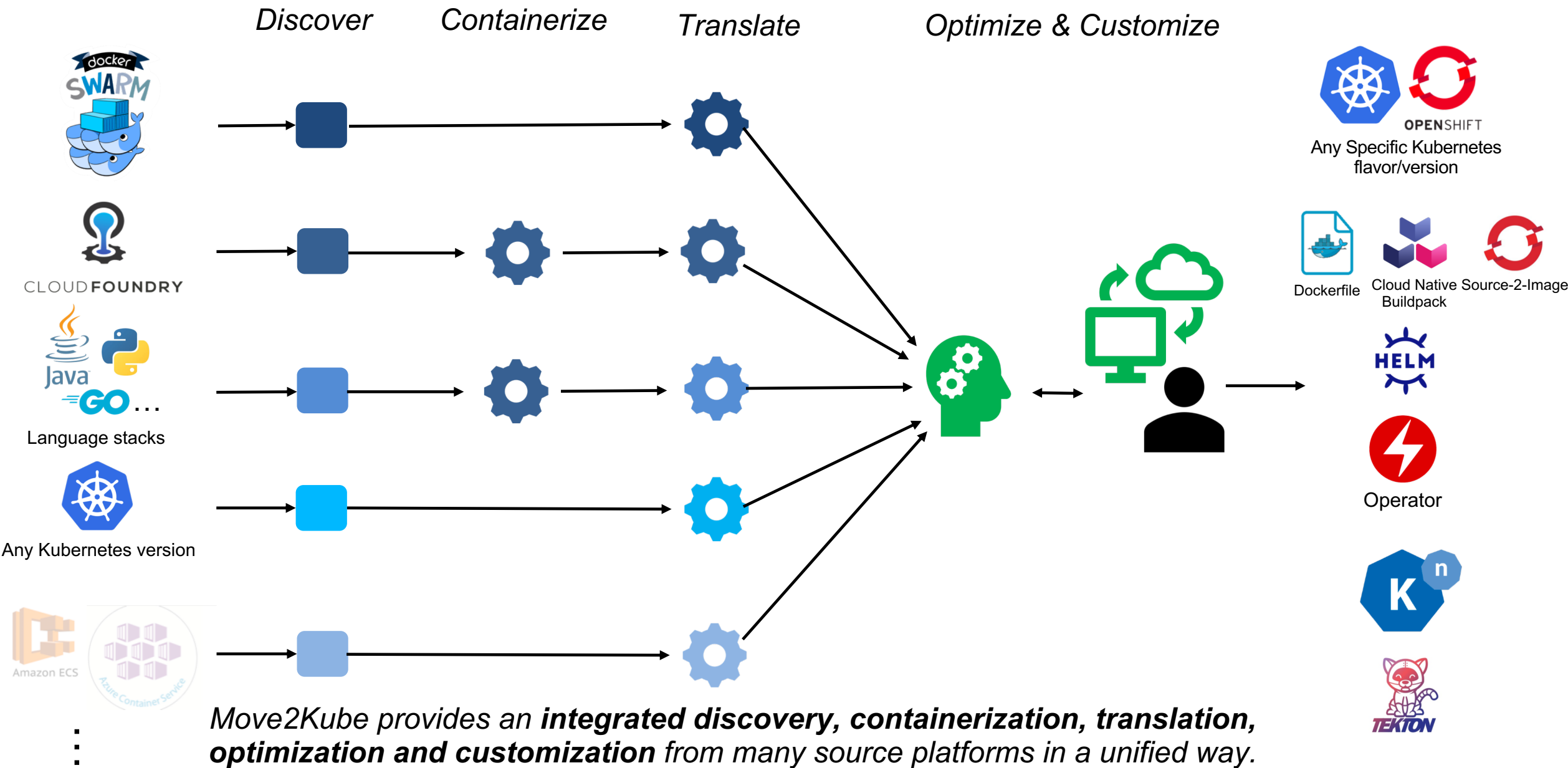


Accelerating Digital Transformation the Open Source Way



The **Konveyor Community** is a group of **people passionate** about helping others **modernize and migrate** their applications **to the hybrid cloud** by building **tools, best practices**, and providing advice on how to **break down monoliths, adopt containers, and embrace Kubernetes**.

Move2Kube: Accelerate+Optimize move to Kubernetes



Usage modes

Command line tool

```
ashok@move2kube-demos ashok$ move2kube plan -s samples/unified-flow/
INFO[0000] Planning Translation
INFO[0000] [*source.DockerfileTranslator] Planning translation
INFO[0000] [*source.DockerfileTranslator] Done
INFO[0000] [*source.ComposeTranslator] Planning translation
INFO[0000] [*source.ComposeTranslator] Done
INFO[0000] [*source.CfManifestTranslator] Planning translation
INFO[0000] [*source.CfManifestTranslator] Done
INFO[0006] [*source.KnativeTranslator] Planning translation
INFO[0006] [*source.KnativeTranslator] Done
INFO[0006] [*source.KubeTranslator] Planning translation
INFO[0006] [*source.KubeTranslator] Done
INFO[0006] [*source.Any2KubeTranslator] Planning translation
INFO[0020] [*source.Any2KubeTranslator] Done
INFO[0020] Translation planning done
INFO[0020] Planning Metadata
INFO[0020] [*metadata.ClusterMDLoader] Planning metadata
INFO[0020] [*metadata.ClusterMDLoader] Done
INFO[0020] [*metadata.K8sFilesLoader] Planning metadata
INFO[0020] [*metadata.K8sFilesLoader] Done
INFO[0020] [*metadata.QACacheLoader] Planning metadata
INFO[0020] [*metadata.QACacheLoader] Done
INFO[0020] Metadata planning done
INFO[0020] Plan can be found at [m2k.plan].
```

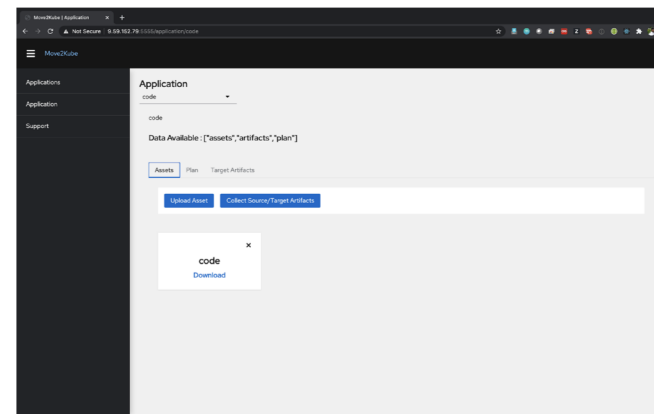


curl -L <https://raw.githubusercontent.com/konveyor/move2kube/master/scripts/install.sh> | bash -



go get -u github.com/konveyor/move2kube

Web Interface



Operator



<https://github.com/konveyor/move2kube>

One step usage

```
$ move2kube translate -s src/
```

Move2Kube



Target-artifacts



Edit CI/CD Pipeline



Deploy

Next Steps...

Involved Usage

Plan generates a plan file containing a transformation proposal (including containerization options) for all services discovered from various sources.

Inputs: src – Directory containing source code and collected artifact files.

Outputs: Plan file

Analyze code & collected artifacts and correlate

Step 1:

```
$ move2kube plan -s src/
```

Optional:

```
$ move2kube collect
```

Scrape from source and target runtime environments

Collect crawls metadata about the source and target runtime environments such as:

- Supported object kinds in cluster
- Apps running in cloud foundry instance
- Meta-information from local docker images.

Inputs: The terminal context should have cf and kubectl logged in.

Outputs: Data from runtime instances as files.

Translate transforms the input source artifacts, as per the generated plan, into target artifacts containing:

Inputs: Plan file and src.

Outputs:

- Scripts for containerization.
- Helm chart and Operator.
- Docker compose file.

Optimize and Translate

Step 2:

```
$ move2kube translate
```

Move2Kube

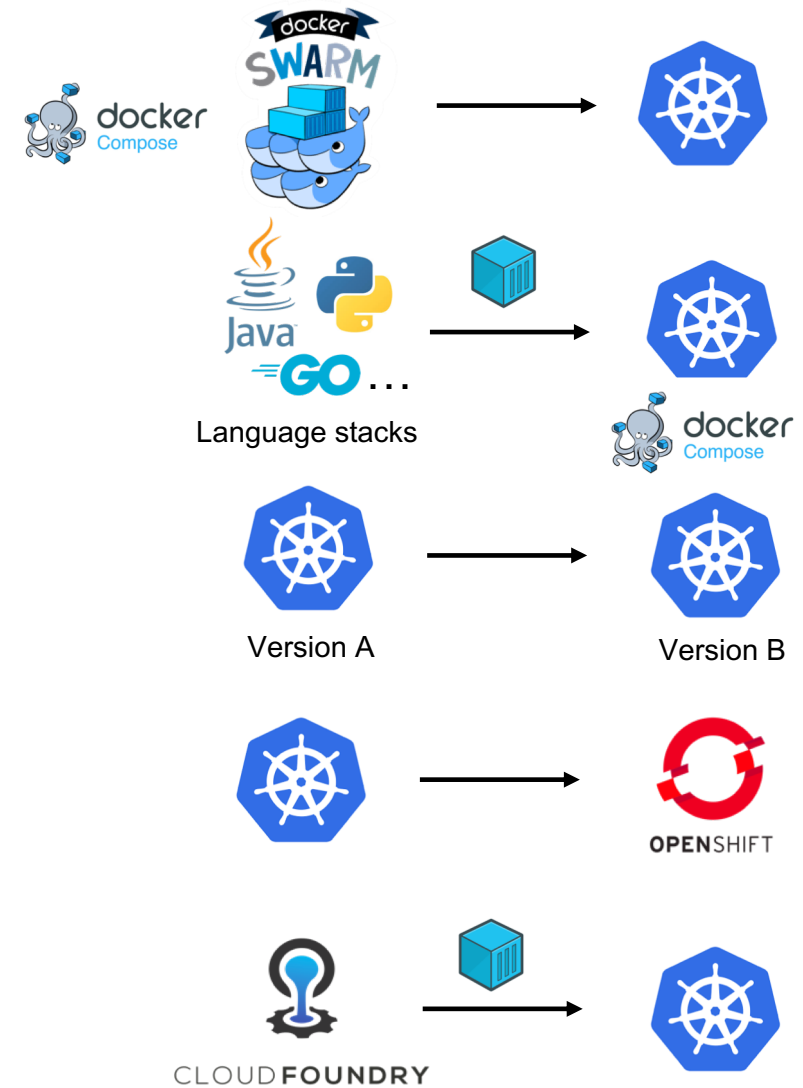
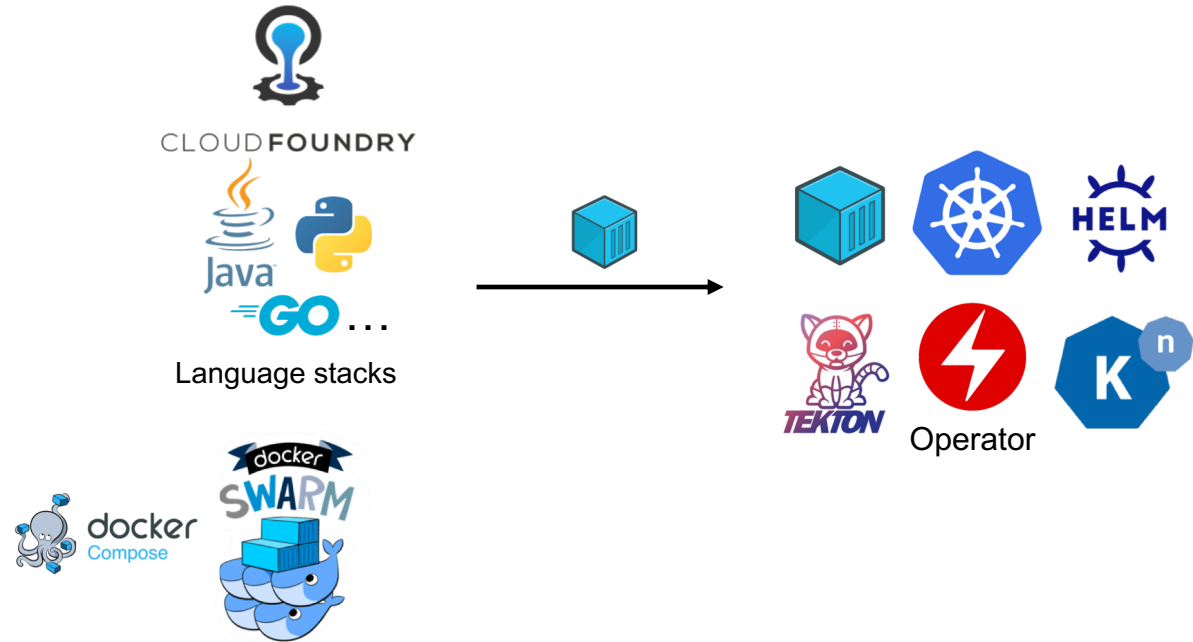
Target-artifacts

Edit CI/CD Pipeline

Deploy

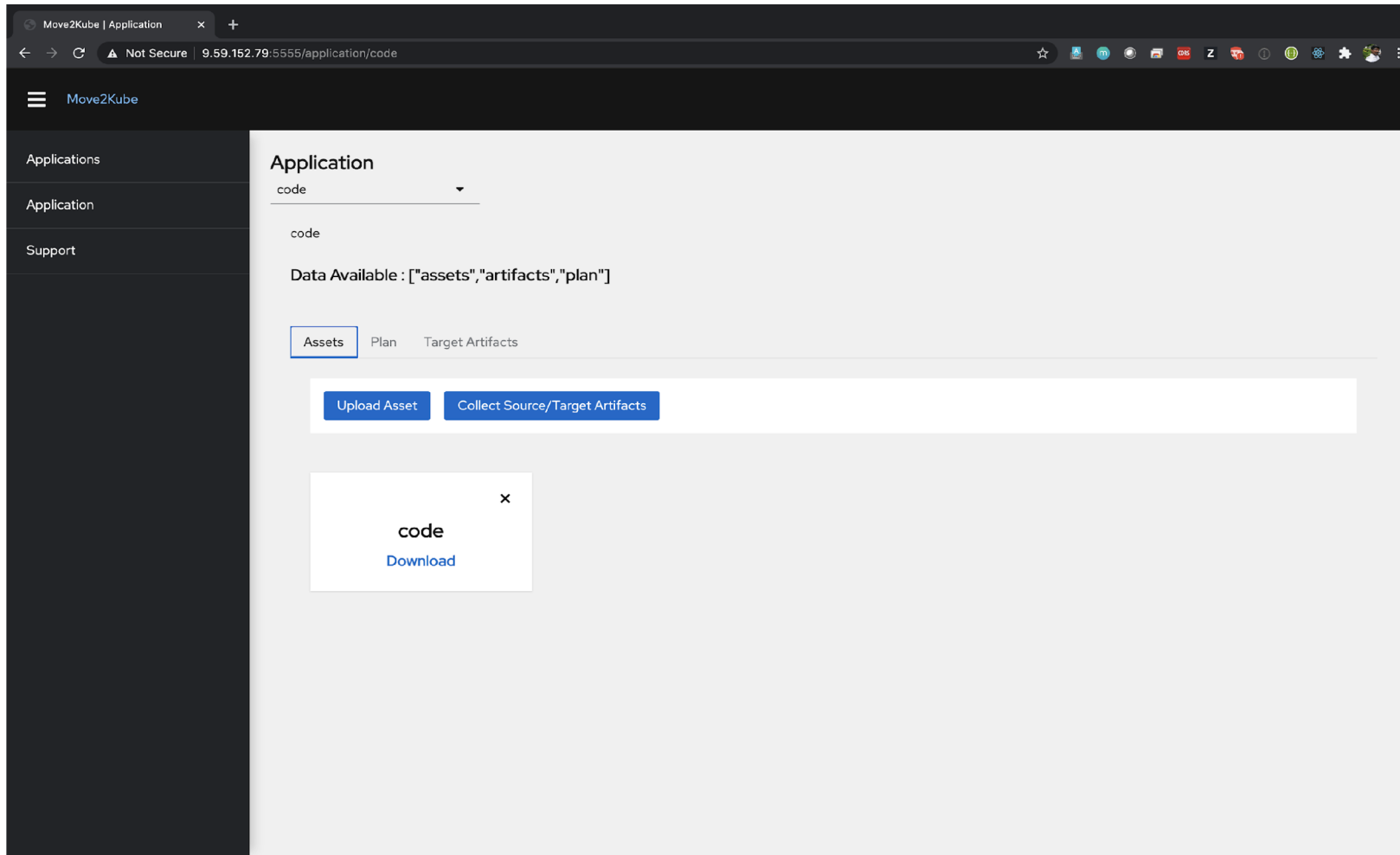
Next Steps...

Useases



<https://github.com/konveyor/move2kube-demos>

Web UI



Clone <https://github.com/konveyor/move2kube-ui> and do `docker-compose up`

Requirements

Source	Artifact available	Features supported
Cloud Foundry	Manifest files	Containerization options from buildpacks, Deployment artifacts
	Manifest files, Source code	Containerization options based on buildpack/source code, Deployment artifacts
	Manifest files, Source code, Access to running instance	Containerization options based on buildpack/source code, Deployment artifacts, Metadata from runtime
	Access to running instance	Metadata from runtime, Containerization options based on buildpack, Deployment artifacts
Docker Compose/Swarm	Docker compose files	Deployment artifacts
	Docker compose files, Docker images	Deployment artifacts, Ability to enhance images to run in secure environments like Openshift.
Source Folders	Source code with no source metadata	Containerization options based on source code, Deployment artifacts
Any source	Access to target cluster	Ability to create artifacts customized for that particular cluster with the most preferred GroupVersion for the kind.

Command line support : Linux/mac/Windows (WSL)

Contributions are welcome!

Head over and submit PRs



<https://github.com/konveyor/move2kube>
<https://github.com/konveyor/move2kube-api>



React



<https://github.com/konveyor/move2kube-ui>



<https://github.com/konveyor/move2kube-operator>



<https://github.com/konveyor/move2kube-tests>



<https://github.com/konveyor/homebrew-move2kube>

github.com/konveyor/move2kube

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ashokponkumar Add default support for generic cluster types ✓ abafe03 2 hours ago 72 commits

cmd/move2kube	Fix bug with empty git domain. Set RootDir after loading plan. Added ...	2 days ago
docs	Adding document guides to extend Move2Kube	3 days ago
imgs	remove diagram	27 days ago
internal	Add default support for generic cluster types	2 hours ago
misc	Initial working version of move2kube	28 days ago
samples	Initial working version of move2kube	28 days ago
scripts	Fixed bug with paths and hashes. Use cobra instead of os.Args	8 days ago
types	More idiomatic code. Added clean to make ci target. Build before test...	2 hours ago
.dockerignore	add codecov	25 days ago
.gitignore	add codecov	25 days ago
.golangci.yml	Add golangci config	14 days ago
.travis.yml	move CI routine to a make target	5 days ago
Dockerfile	Fix license in Dockerfile	21 days ago
LICENSE	initial working version of move2kube	28 days ago
Makefile	More idiomatic code. Added clean to make ci target. Build before test...	2 hours ago
README.md	Add prerequisites to README.md	2 hours ago
USAGE.md	Updated usage instructions	15 days ago
code-of-conduct.md	Update slack ref in usage and code of conduct	20 days ago

About

Move2Kube is a command-line tool that accelerates the process of re-platforming to Kubernetes/OpenShift.

kubernetes openshift modernization ibm-research replatform hacktoberfest

Readme

Apache-2.0 License

Releases

1 tags

Create a new release

Contributors 8

Languages

Go 93.7% Shell 4.1% Dockerfile 1.5% Other 0.7%