INTRODUCTION

- Managing and deploying complex end-to-end application tasks is a difficult and challenging task.
- The team’s work is to bring the collaborative, single-command deployment experience to Nomad, HashiCorp’s workload orchestration and scheduler.
- Using Helm v3 as a reference, which is a package manager for Kubernetes.

OBJECTIVE

- Develop an open source command-line utility and API to support single-command application deployment and service catalogs (chart repositories) on Nomad.
- The scope of the project would be to release a workable version that can be integrated into the nomad ecosystem and society.

RESULTS

- Following images show the common user workflow for using our tool to deploy a task.
  - Vagrant file to provide test environment.
  - Commands to launch the reference application using backpack.
  - Visual results of the deployment.
  - Detail logs for instructions.

CONCLUSION & CONTRIBUTION

- Developed an open source command-line utility and API to support single-command application deployment and service catalogs (chart repositories) on Nomad.
- Tested this tool on wordpress, nginx, minio, horizontal-app-scaling to prove the validity of our tool and provide the detailed get started guide for potential users.
- Did User survey research to investigate the target users’ requirements and feedback on our proposed tool.