Airship Project Documentation

Airship Team

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AIRSHIP 2

Airship is a collection of components that declaratively configure, deploy and maintain a Kubernetes environment defined by YAML documents. Airship is supported by the OpenStack Foundation.

ABOUT THIS DOCUMENTATION

This Airship 2 documentation in v2.0.0 branch currently serves as a draft only.

1.1 Airship 2 Basics

Basics.

1.2 Try Airship 2

Try Airship 2

1.2.1 Airship in a Pod (AIAP)

Airship in a Pod (AIAP)

1.2.2 Quick start Guide

Quick start Guide

1.3 Deploying Production Ready Airship 2 Cluster

Deploying Production Ready Airship Cluster

1.3.1 Airship 2 Cookbook

Airship 2 Cookbook

Site Authoring Guide

Site Authoring Guide

Site Deployment Guide

Site Deployment Guide

1.4 How to Use Airship 2

How to Use Airship 2

1.4.1 Operations Guide

Operations Guide

1.4.2 General User Guide

General User Guide

1.4.3 Troubleshooting Guide

Troubleshooting Guide

1.5 Release Notes

Release Notes

1.5.1 Version N Release Notes

Version N Release Notes

1.5.2 Version N-1 Release Notes

Version N-1 Release Notes

1.6 Airship 2 Training

Airship 2 Training

1.7 How to Contrubute to Airship

How to Contrubute to Airship

1.7.1 Developers Guide

Thank you for your interest in Airship. Our community is eager to help you contribute to the success of our project and welcome you as a member of our community!

We invite you to reach out to us at any time via the Airship mailing list or on our Slack workspace.

Welcome aboard!

1.7.2 Airship 2 Development

Development is underway on Airship 2: the educated evolution of Airship 1, designed with our experience using Airship in production. Airship 2 makes the Airship control plane ephemeral, leverages entrenched upstream projects such as the Cluster API, Metal Kubed, Kustomize, and kubeadm, and embraces Kubernetes Custom Resource Definitions (CRDs). To learn more about the Airship 2.0 evolution, see the Airship 2 evolution blog series.

Each Airship 2 project has its own development guidelines. Join the ongoing Airship 2 development by referencing the airshipctl or the airshipui documentation.

Pushing code

Airship uses the OpenDev gerrit for code review. Refer to the OpenStack Contributing Guide for a tutorial on submitting changes to Gerrit code review.

Next steps

Upon pushing a change to gerrit, Zuul continuous integration will post job results on your patch. Refer to the job output by clicking on the job itself to determine if further action is required. If it's not clear why a job failed, please reach out to a team member in IRC. We are happy to assist!

Assuming all continuous integration jobs succeed, Airship community members and core developers will review your patch and provide feedback. Many patches are submitted to Airship projects each day. If your patch does not receive feedback for several days, please reach out using IRC or the Airship mailing list.

Merging code

Like most OpenDev projects, Airship patches require two +2 code review votes from core members to merge. Once you have addressed all outstanding feedback, your change will be merged.

Beyond

Congratulations! After your first change merges, please keep up-to-date with the team. We hold two weekly meetings for project and design discussion:

Our weekly #airshipit IRC meeting provides an opportunity to discuss project operations.

Our weekly design call provides an opportunity for in-depth discussion of new and existing Airship features.

For more information on the times of each meeting, refer to the Airship wiki.

1.8 Airship 2 Reference

Airship 2 Reference

1.8.1 FAQs

FAQs

1.8.2 Airship Glossary of Terms

A

Airship:

A collection of interoperable and loosely coupled open source tools that Provide for automated cloud provisioning and life cycle managemente in a completely Declarative and predictable way. The focus of this project is the implementation of a declarative platform to introduce openstack on kubernets, and the lifecycle Management of the resulting cloud.

B

Bare metal provisioning:

Openstack ironic.

C

Container orchestration platform:

set of tools that any organization that operates at scale will need.

D

E

F

G

H

I

J

K

Kubernetes:

An open-source container-orchestration system for automating application deployment, scaling, and management.

L

Lifecycle management:

The process of managing the entire lifecycle of a product from inception, through engineering design and manufacture, to service and disposal of manufactured products.

M

N

Network function virtualization infrastructure:

Network architecture concept that uses the technologies of IT virtualization to virtualize entire classes of network node functions into building blocks that may connect, or chain together, to create communication services.

O

Openstack ironic (OpenStack bare metal provisioning):

An integrated OpenStack program which aims to provision bare metal machines instead of virtual machines, forked from the Nova baremetal driver.

Orchestration:

Automated configuration, coordination, and management of computer systems and software.

P

Q

R

S

Software defined networking (sdn):

Software-defined networking technology is an approach to network management that enables dynamic, programmatically efficient network configuration in order to improve network performance and monitoring making it more like cloud computing than traditional network management.

T

U

V

W

X

Y

z

1.8.3 How To Videos

How To Videos

1.8.4 Airship 2 Cheat Sheets

Airship 2 Cheat Sheets

1.9 Airship 2 Architecture

Airship 2 Architecture

1.9.1 airshipctl

airshipctl

1.9.2 SIP

SIP

1.9.3 ViNO

ViNO

1.10 Other topics

1.10.1 Treasuremap

Treasuremap

1.10.2 Jarvis (airship/charts)

Jarvis (airship/charts)

1.11 Other Resources

- Airship Blog
- Airship Website
- Airship Wiki

GET INVOLVED

2.1 Join our mailing lists

Receive Airship announcements and interact with our community on our mailing lists.

2.2 Join our weekly calls

Airship is constantly evolving. Contribute to the Airship design process and day-to-day community operations in our
weekly calls.

2.3 Join our Slack workspace

Get in touch with Airship developers and operators in our Slack workspace.