



Unifying operations in multi-cloud with Nutanix

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\$236B

Public cloud market by 2020, up from \$146B in 2017 – Forrester ^{*1}

37%

Projected growth for IaaS market in 2017, the highest for cloud services – Gartner ^{*2}

80%

of organizations committed to hybrid architectures by 2018 – IDC ^{*3}

1. "The Public Cloud Services Market Will Grow Rapidly To \$236 Billion in 2020". Forrester. September 1, 2016.
2. "<http://www.gartner.com/newsroom/id/3616417>
3. "Enterprise Adoption Driving Strong Growth of Public Cloud Infrastructure as a Service, According to IDC." Press release. IDC. July 14, 2016.



Nutanix Customer Journey



Modernize IT
with HCI



Build an Enterprise
Cloud



Multi-Cloud Services
for Apps and Data

Unify operations across
public and private clouds

Secure and automate
applications, and consolidate
storage

Deliver enterprise apps
and VDI from any site

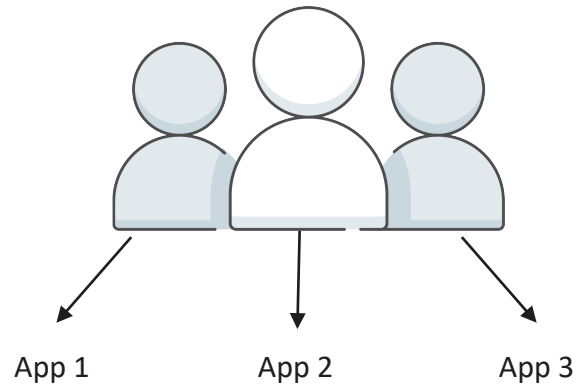


Application Lifecycle Management getting more complex in Hybrid Cloud Environment



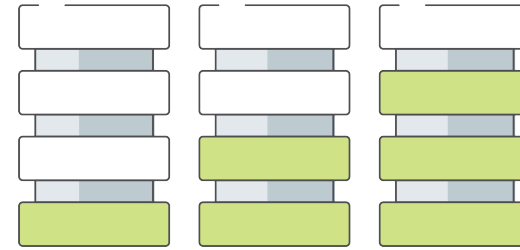
Numerous Applications

Results in complexity



Fragmented Ownership

App ownership is fragmented



Knowledge Silos

Leads to lack of productivity



Hybrid Clouds

Introduces management challenges



Application Automation Platform for Hybrid Cloud

Multi-Cloud Application Automation and Lifecycle Management



Virtualization



Compute



Storage



Networking



Virtualization



Compute



Storage



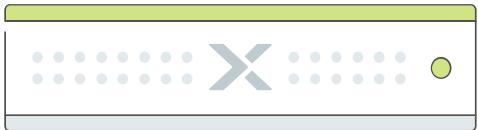
Networking



Application Automation Platform for Hybrid Cloud



Nutanix Calm



Nutanix



Traditional 3-tier Stack



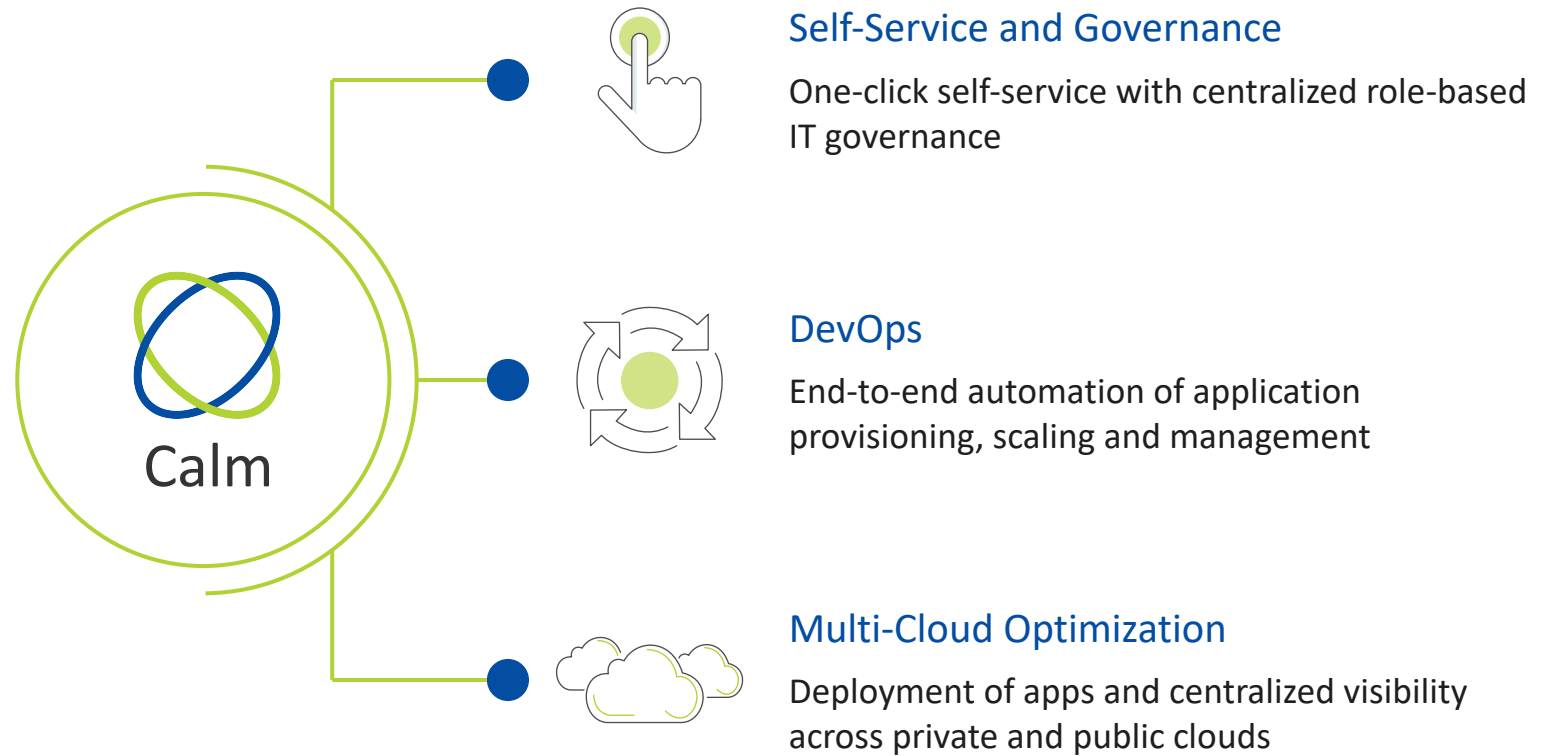
Public Cloud



Private Cloud



Automate
Empower
Relax



Automate
Empower
Relax

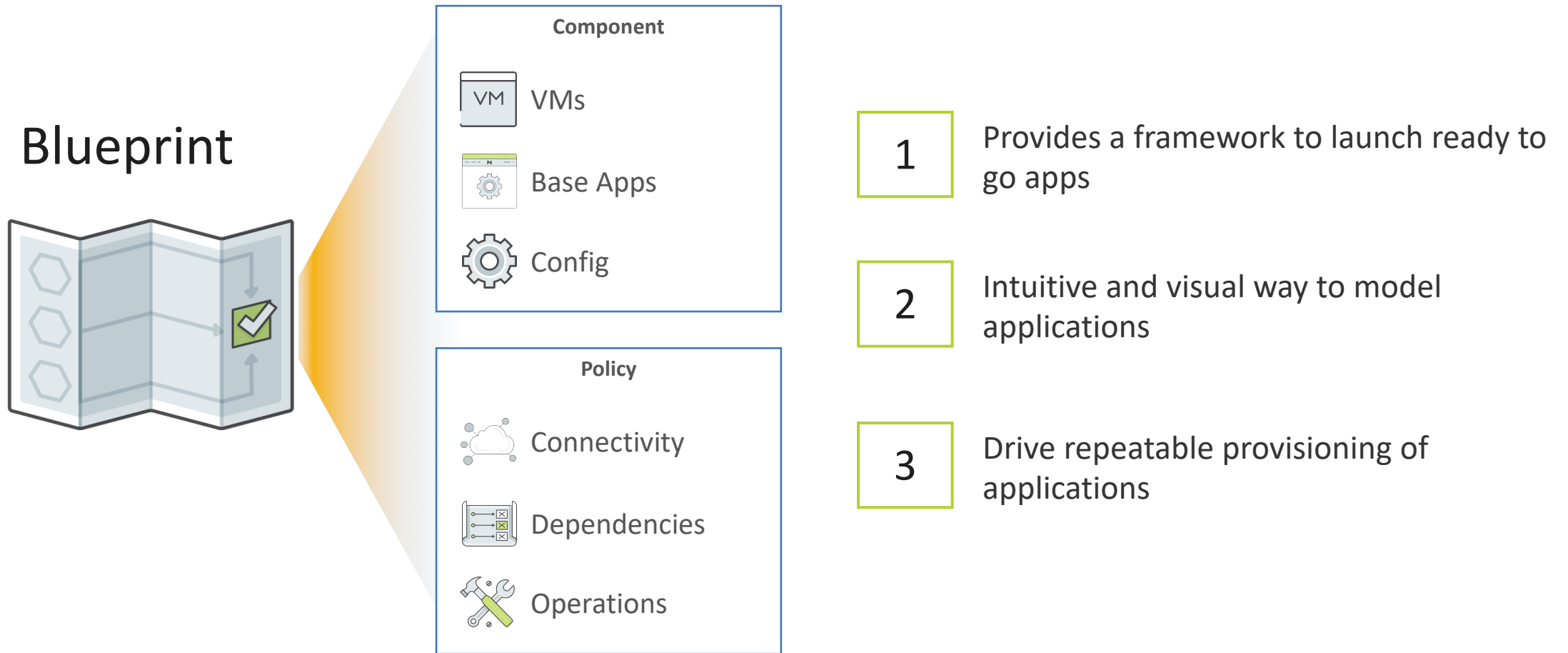


Self-Service and Governance

One-click self-service with centralized role-based IT governance





















Calm Blueprints



Use Case : Self Service App Provisioning

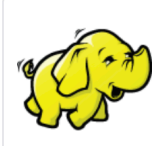


 MySQL Master Slave Nutanix	 MySQL Single Node Nutanix	 Docker Registry Open Source Nutanix	 Xtract for VMs Nutanix	 Puppet Open Source Nutanix	 Redis Cluster Nutanix
 CouchDB Nutanix	 Veeam Nutanix	 TensorFlow Nutanix	 Chef Nutanix	 Jenkins Nutanix	 Hadoop Nutanix
 Kafka Nutanix	 HYCU X DPaaS on Nutanix Nutanix	 MongoDB Sharding Nutanix	 ElasticSearch Nutanix	 Postgresql Nutanix	 Aviatrix Nutanix



Use Case : Self Service App Provisioning





Hadoop

by Nutanix

Version

3.0.0

[Launch](#) [Clone](#)

Overview • Actions Included • Change Log

Hadoop is an open source, Java-based programming framework that supports the processing and storage of extremely large data sets in a distributed computing environment. It is part of the Apache project sponsored by the Apache Software Foundation. This blueprint creates 1 master node and 2 slave nodes running Hadoop.

License:

- Apache License 2.0

Hardware Requirement:

- By default, three VM's with 4 vCPU, 8GB RAM

Resources Installed:

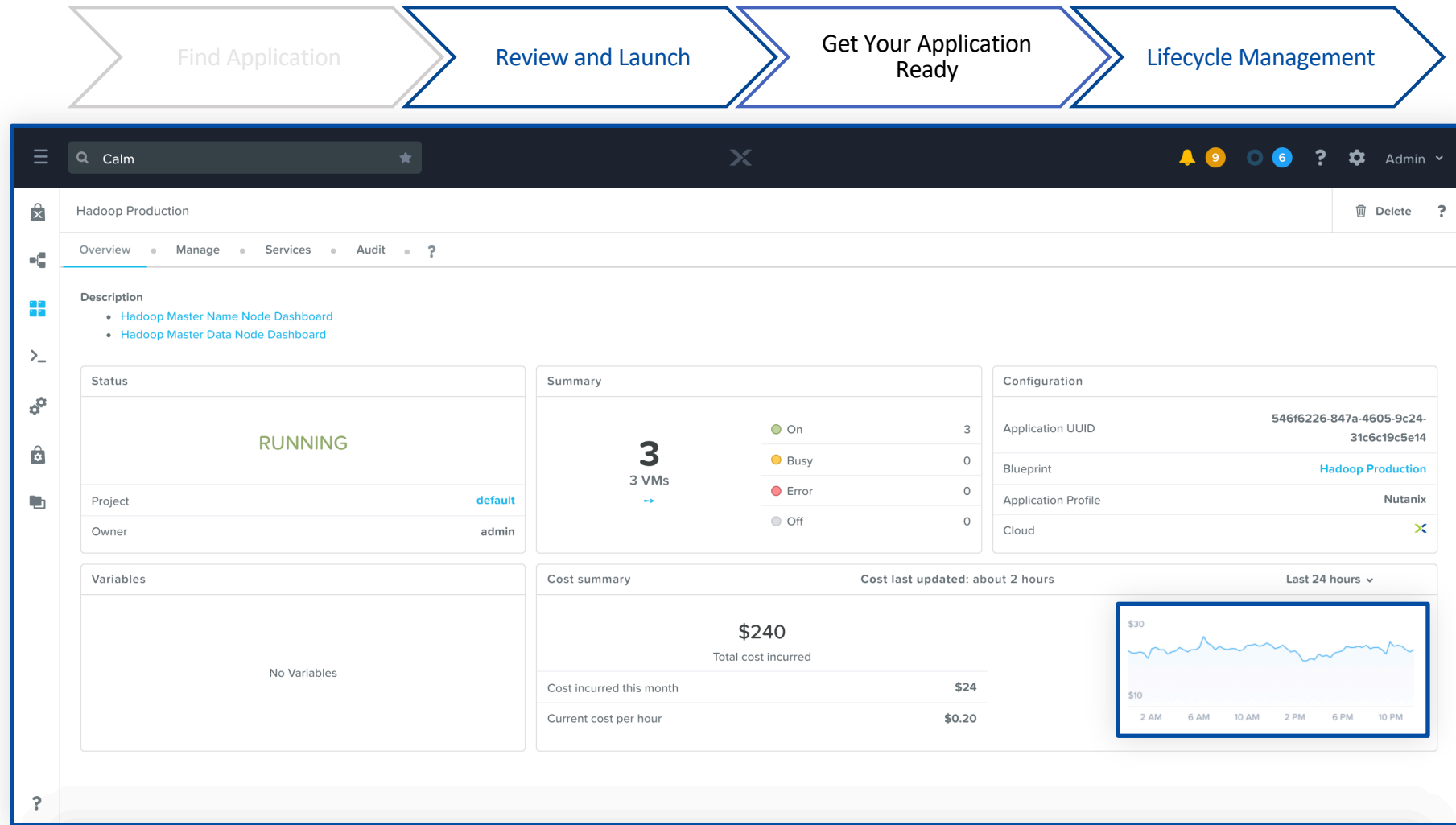
- Hadoop-2.6.0
- CDH-5.7.0
- Java oracle JDK-8
- Zookeeper

Operating System:

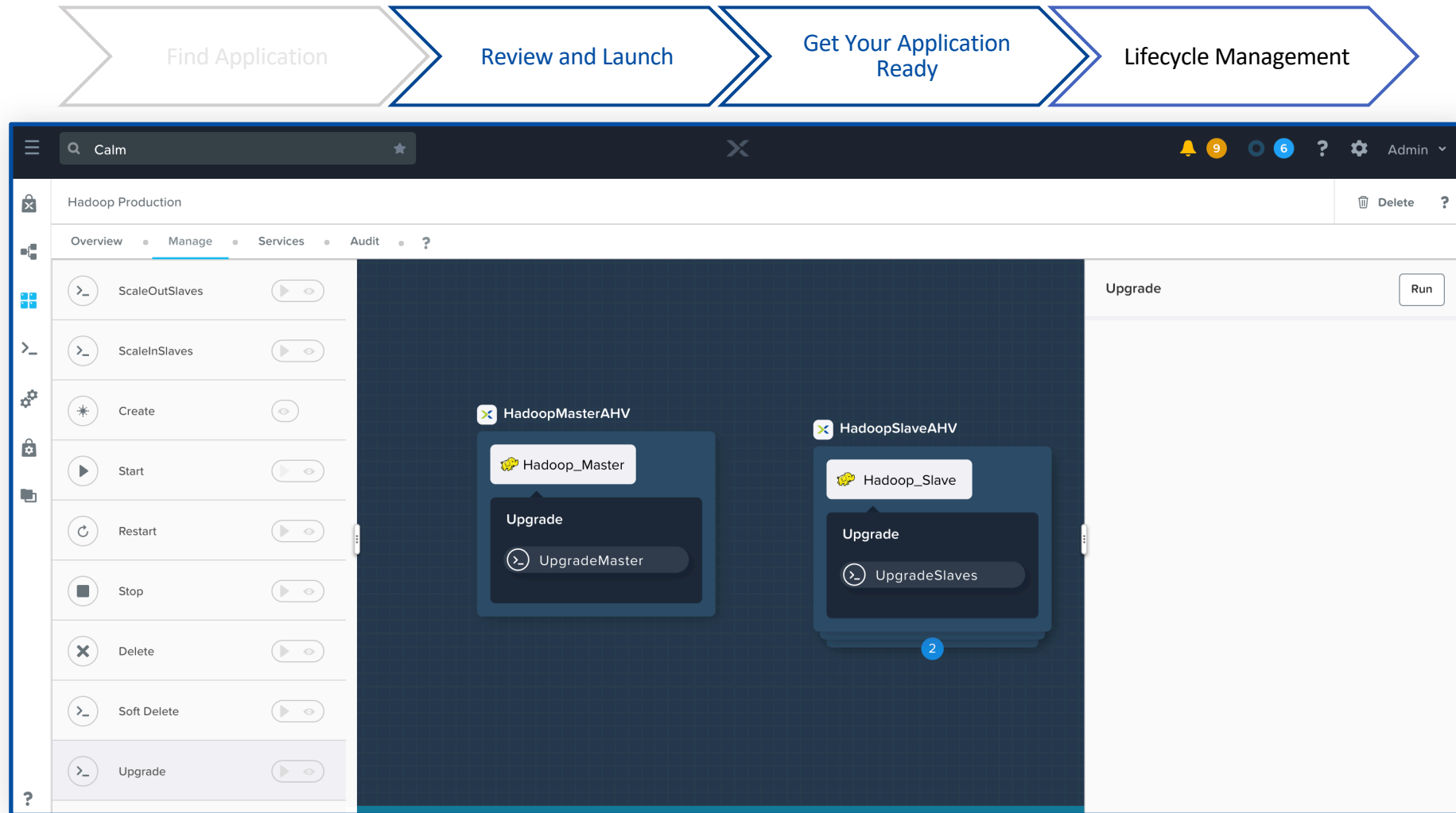
- CentOS Linux release 7.4-1801-01
- Select the [AMI](#) according to the region on AWS.
- Select the [Image](#) according to the zone on GCP.
- Select the [Image](#) according to the location on Azure.



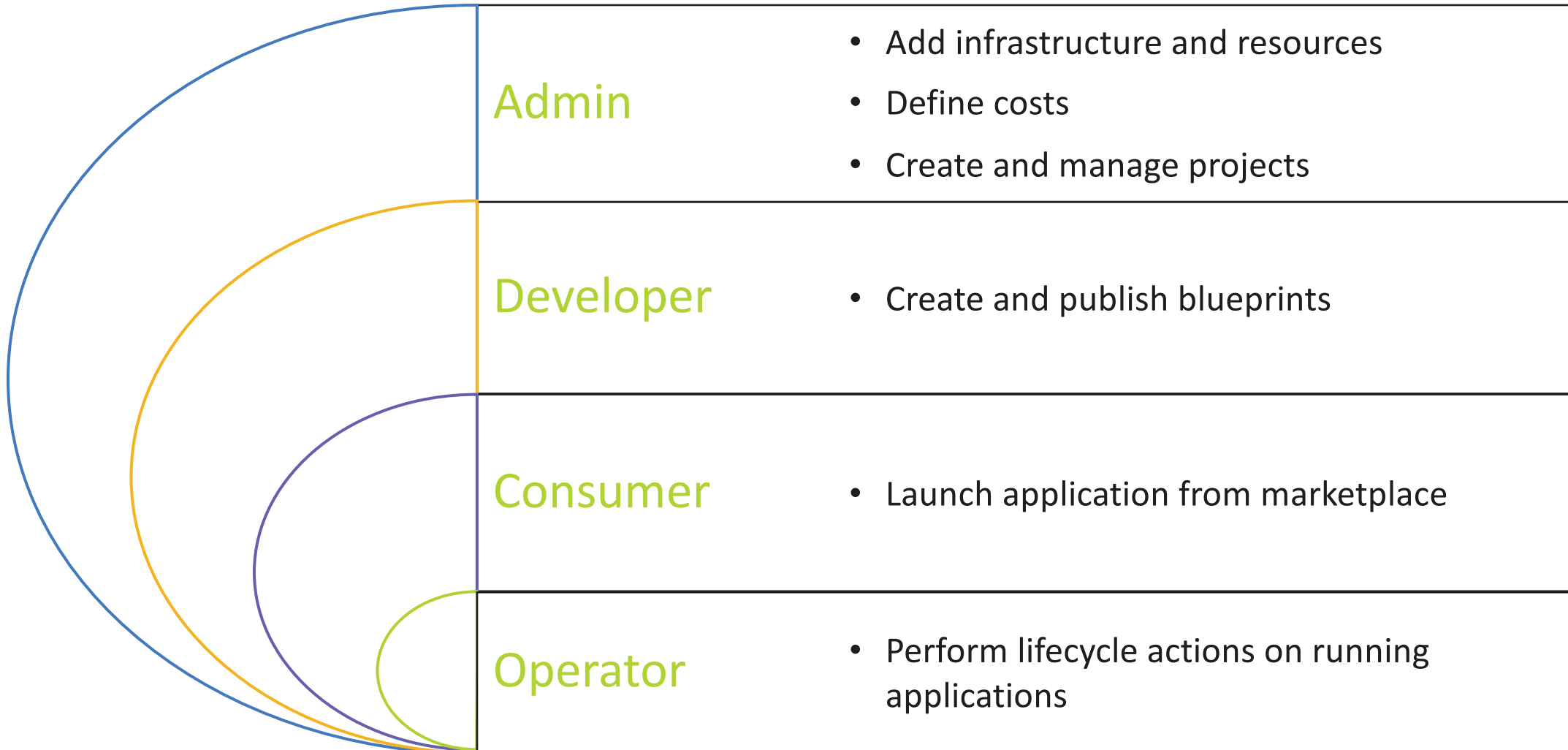
Use Case : Self Service App Provisioning



Use Case : Self Service App Provisioning



Role-Based Access Controls



End-to-End Audits

1

Every action and the response is logged

2

Identify who did what and why across environments

3

Export logs to your choice of logging system for archival

The screenshot displays the Calm console interface for a 'Hadoop Production' environment. The top navigation bar includes a search bar with 'Calm' and a star icon. The left sidebar contains various icons for navigation. The main content area shows an audit trail for a 'Hadoop_Master - Package Install' task. The task is marked as 'Finished - last Tuesday at 11:11 AM' and 'SUCCESS'. Below the task name, there are sections for 'Started' (last Tuesday at 11:07 AM), 'Status' (SUCCESS), and 'Output'. The output section shows a terminal log of a yum update command and its results, including loaded plugins and determined fastest mirrors. A 'View Script' link is visible at the bottom of the output section.

```
1 + sudo yum update -y
2 Loaded plugins: fastestmirror
3 Determining fastest mirrors
4
5 epel/x86_64/metalink
6 * base: mirrors.xmission.com
7 * epel: mirrors.developer.com
8 * extras: mirrors.oit.uci.edu
9 * updates: repos.lax.quadranet.com
10
11 base
12
13 epel
14
15 extras
```

[View Script](#)



On-Prem Resource Cost

1

Define vCPU/Memory/Storage cost for On-Premise cloud

2

Analyze cost

- Per VM
- Per App
- Per Project

The screenshot displays the On-Prem Resource Cost interface. At the top, a modal titled "4 Active Services" shows four services: Nutanix [0], Nutanix [1], Nutanix, and Nutanix. Below each service name are icons for APACHE_P..., APACHE_P..., MYSQL, and HAPROXY. The cost for each service is listed below the icons: \$11.52/mo, \$11.52/mo, \$11.52/mo, and \$10.08/mo. Below the modal, a "Cost summary" box shows the total cost incurred as \$240. Other cost metrics include "Cost incurred this month" at \$24 and "Current cost per hour" at \$0.20. The background shows a table with 25 total projects, including "default", "New Esxi P", and "Giri-Test".

4 Active Services

- Nutanix [0] \$11.52/mo
- Nutanix [1] \$11.52/mo
- Nutanix \$11.52/mo
- Nutanix \$10.08/mo

Cost summary

Cost last updated: about

\$240

Total cost incurred

Cost incurred this month **\$24**

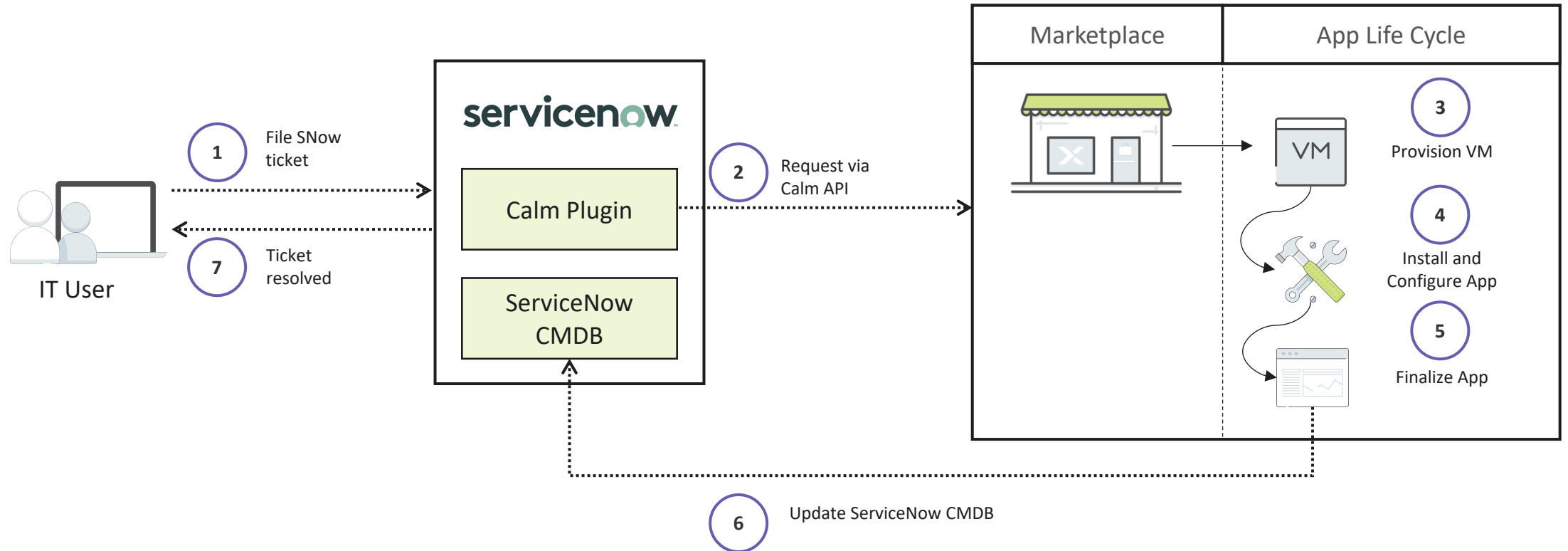
Current cost per hour **\$0.20**

25 Total Projects

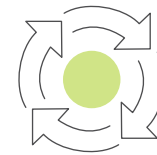
NAME	VCPU USAGE (AHV)	MEMORY USAGE (AHV)	STORAGE USAGE (AHV)	USER COUNT	USER GROUP COUNT	VM COUNT	COST ⓘ
default	-	-	-	25	0	-	\$84
New Esxi P	0 of 2	0 GiB of 2 GiB	0 GiB of 2 GiB	2	0	0	-
Giri-Test	0 of 2	0 GiB of 4 GiB	0 GiB of 20 GiB	4	0	0	\$8



Use Case : Self Service via IT Service Desk



Automate
Empower
Relax

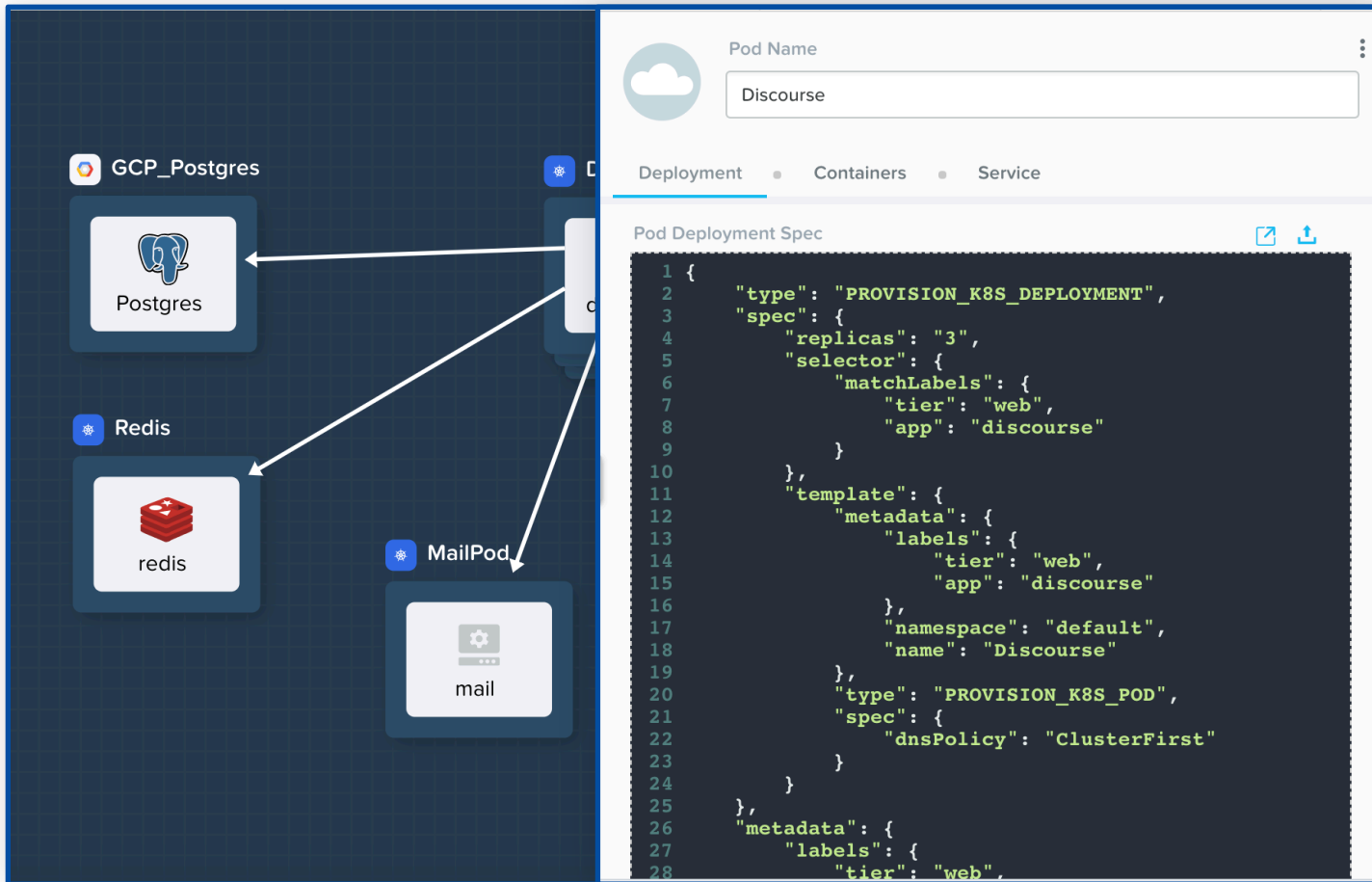


DevOps

End-to-end automation of application
provisioning, scaling and management



Kubernetes with Calm



1

Supports Vanilla K8s API, Karbon, Public K8s Services

2

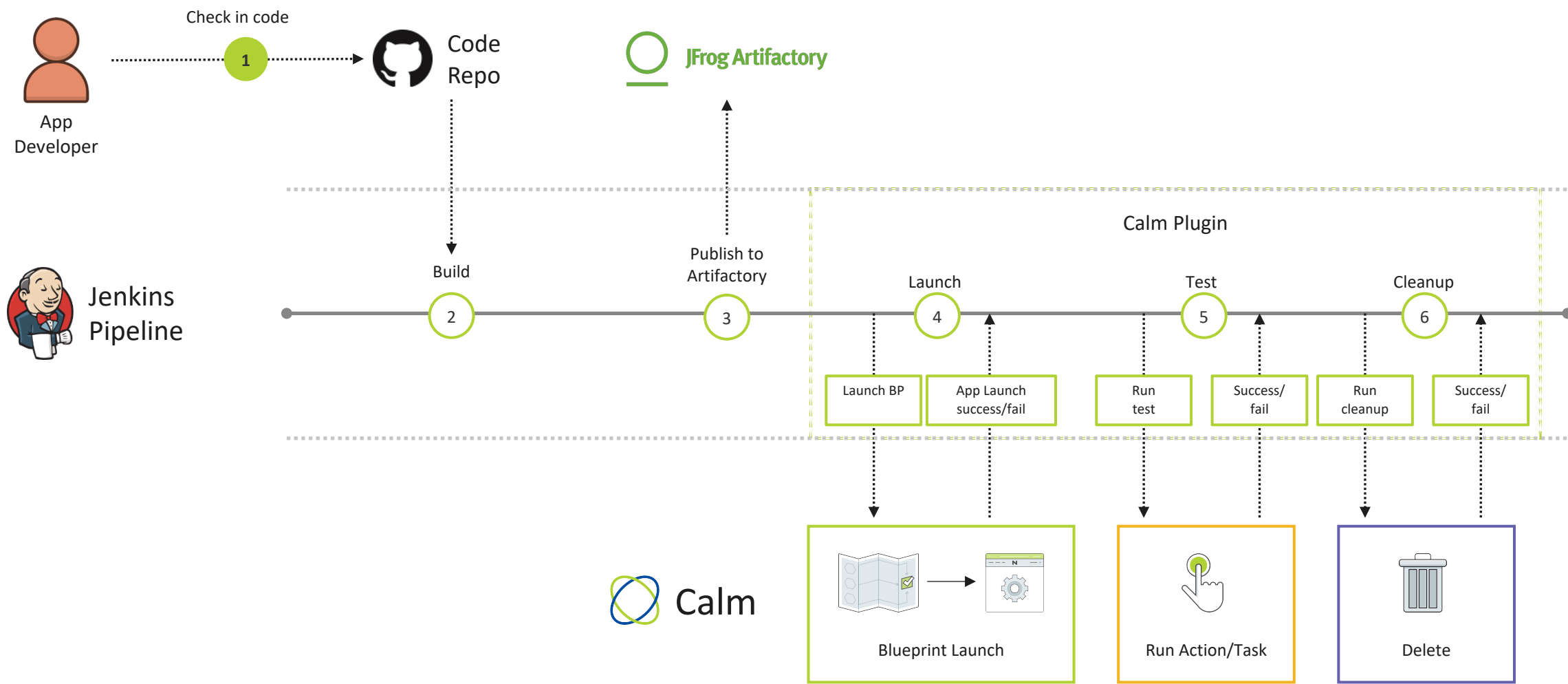
Combined Life Cycle Management of VMs and Kubernetes Pods in a single blueprint

3

Manage Kubernetes deployments and services using spec editor



Use Case : CI/CD Using Calm and Jenkins



Automate
Empower
Relax



Multi-Cloud Optimization

Deployment of apps and centralized visibility
across private and public clouds



Mix and Match Clouds

Freedom to
Choose

Public
Clouds



Private
Clouds



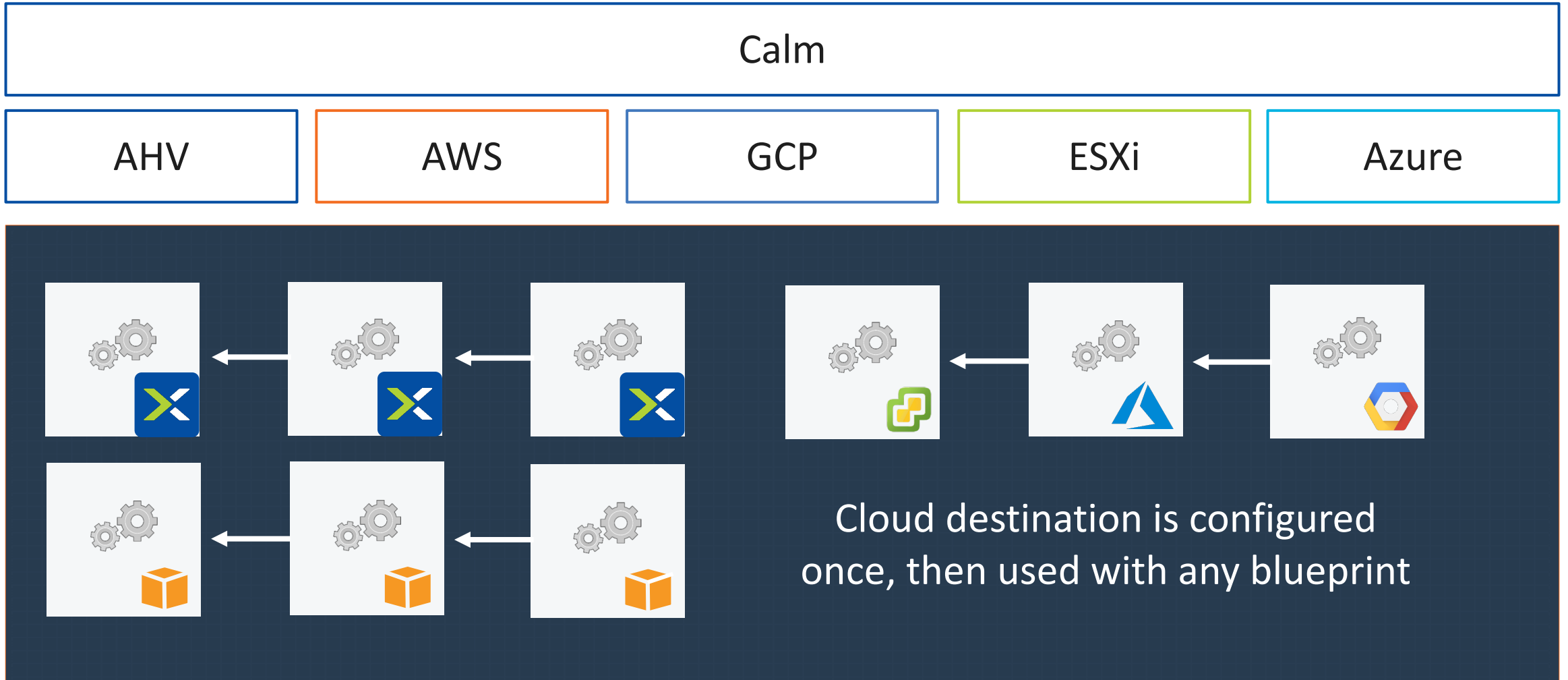
Nutanix AHV



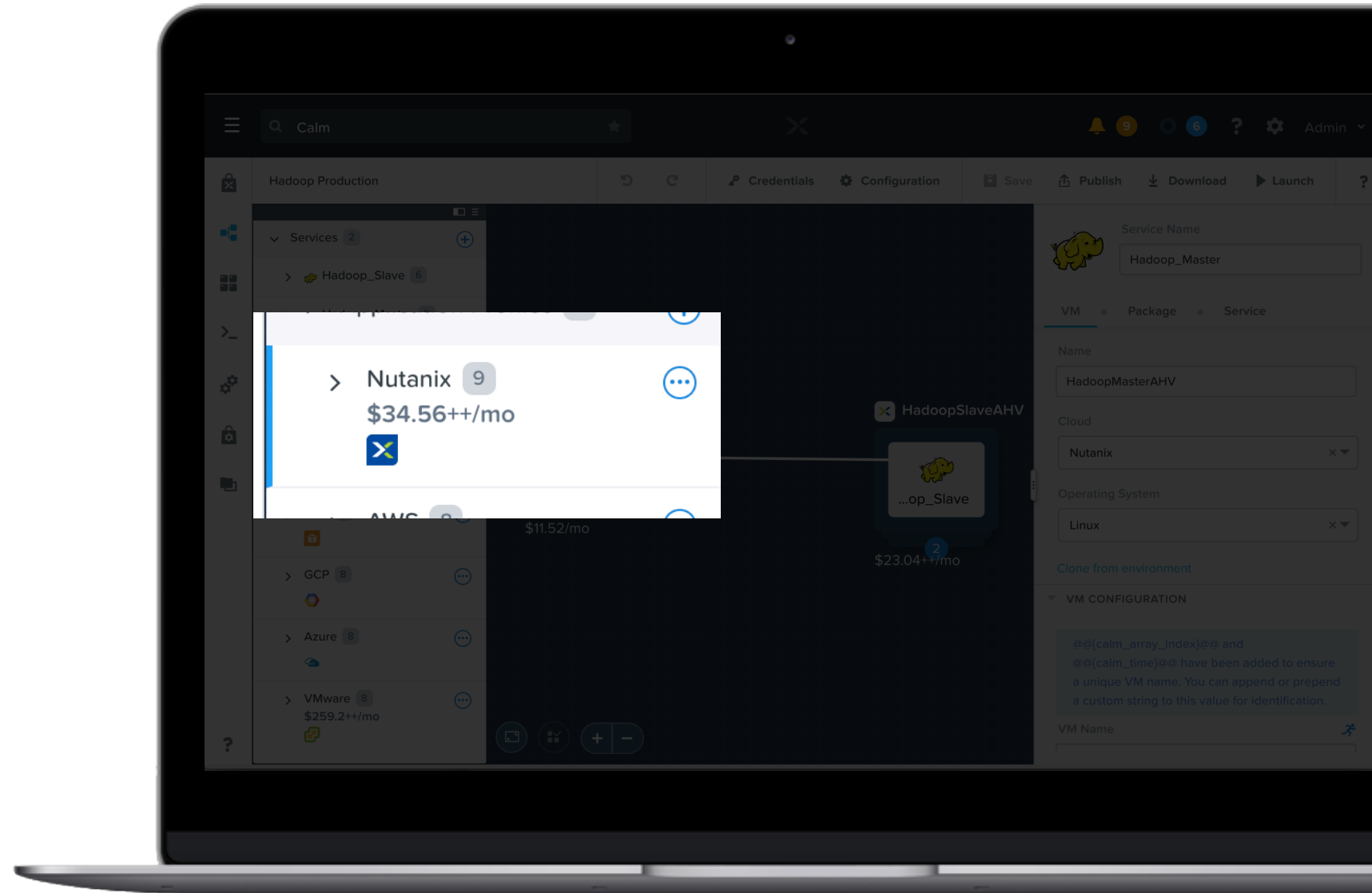
Container
Platforms



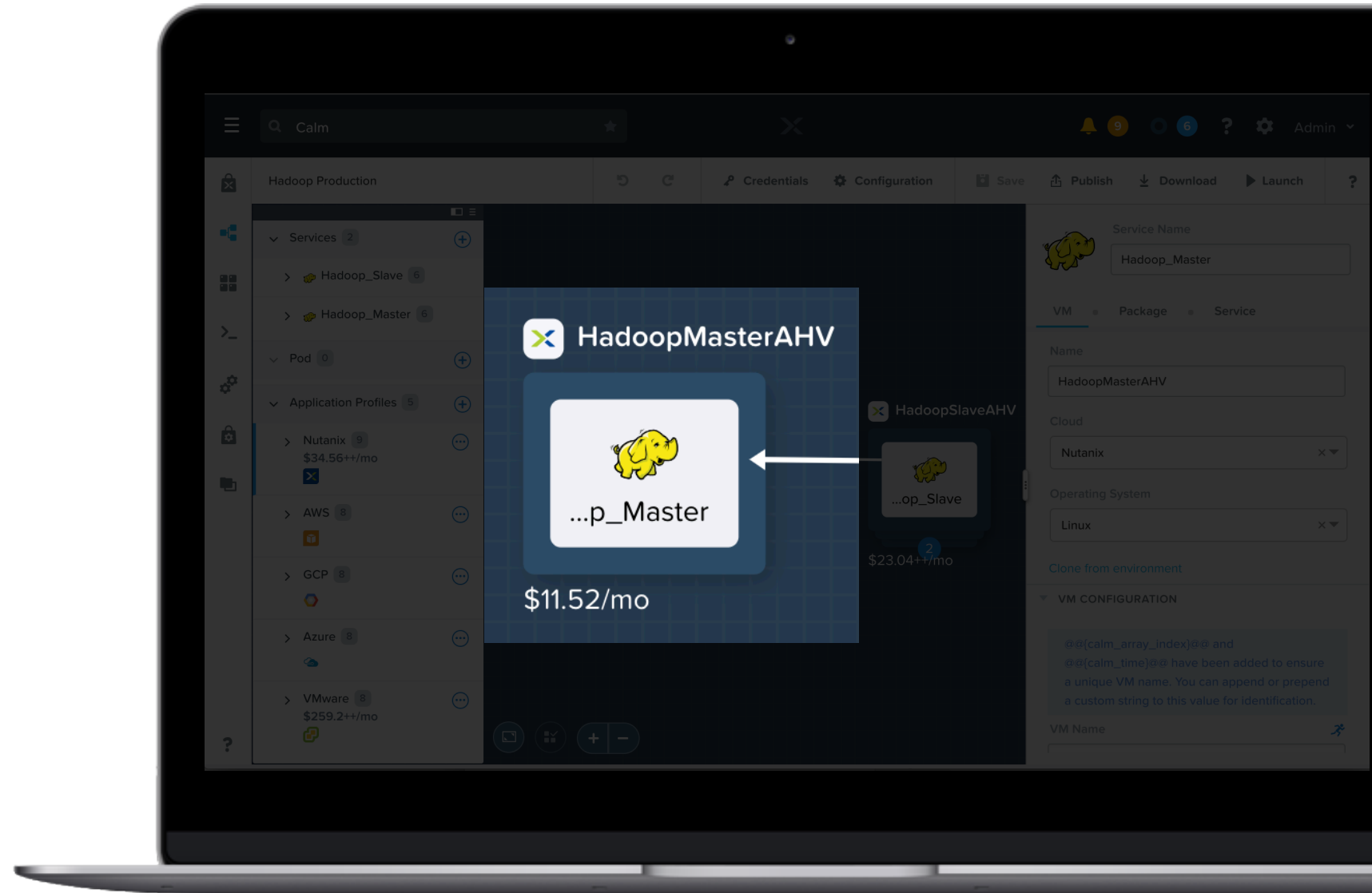
Define Apps Once, Use Everywhere with Profiles



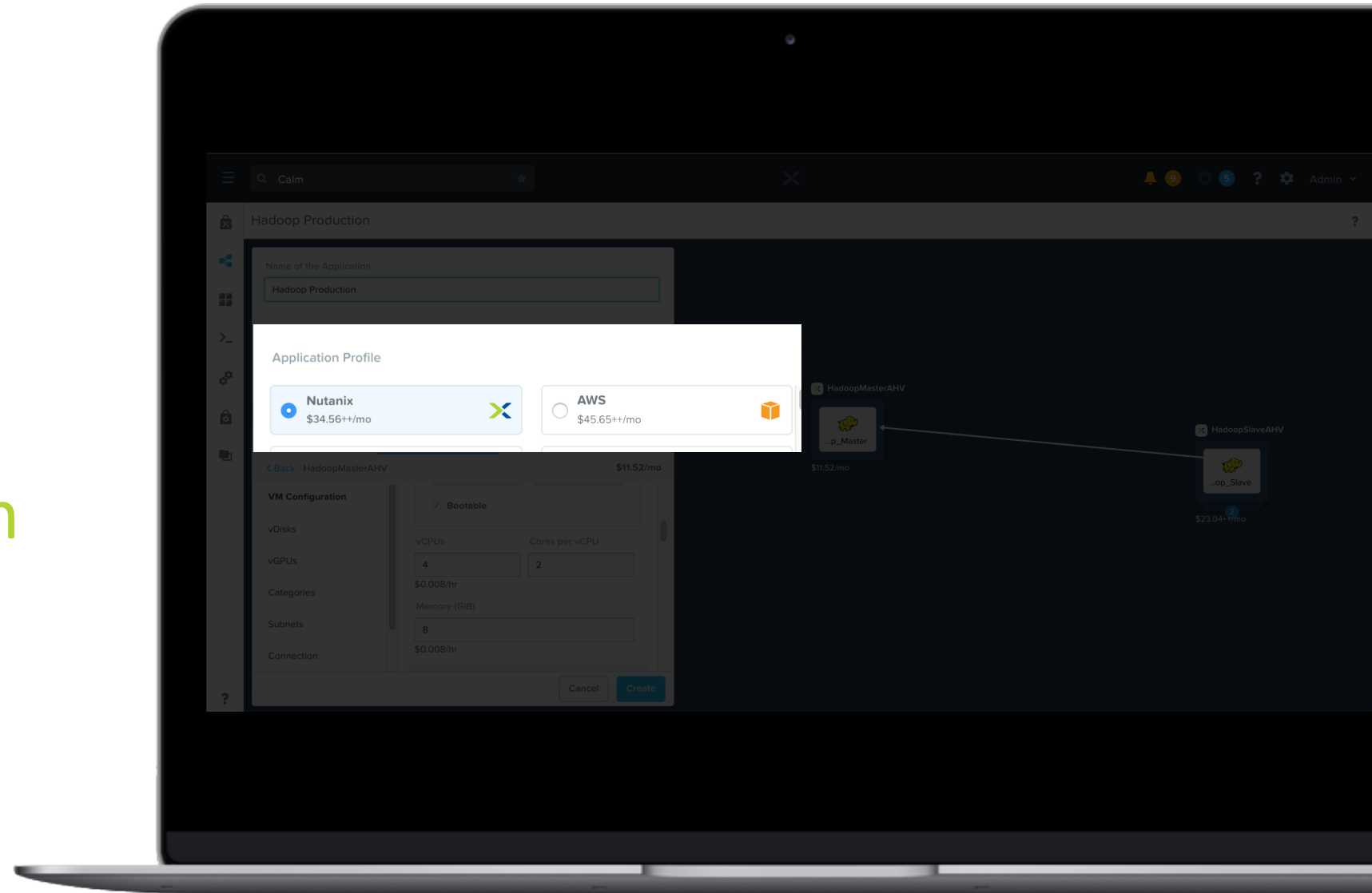
Define
multi-cloud app
configuration in
blueprint



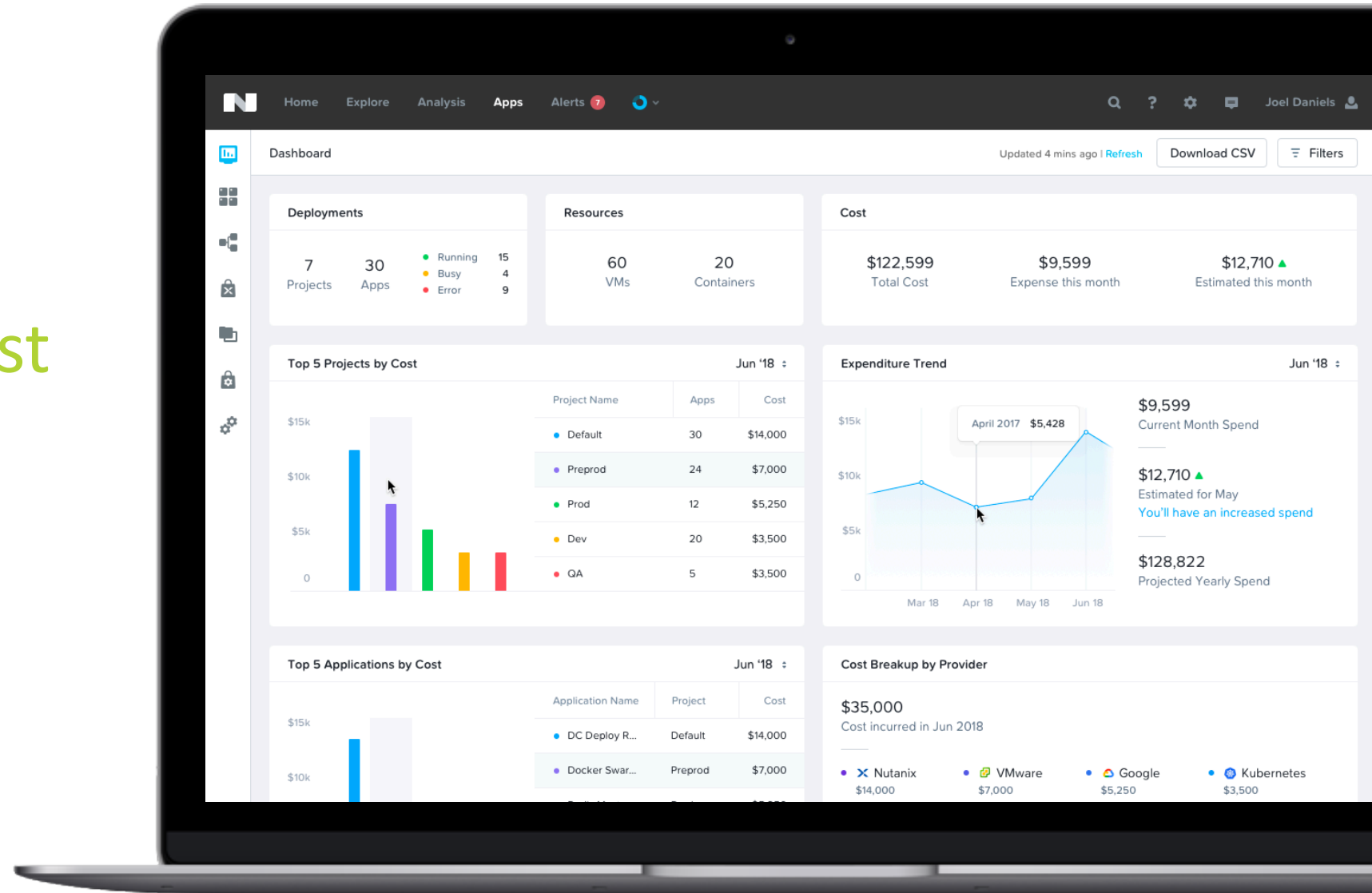
Define
multi-cloud app
configuration in
blueprint



Compare cloud
costs before
application launch



Understand the cost of resource using Showback



The Nutanix logo is centered on a background with a blue-to-green gradient. It features the word "NUTANIX" in a bold, white, sans-serif font, followed by a small "TM" trademark symbol. The background is decorated with several large, semi-transparent, light blue chevron shapes pointing in various directions, creating a dynamic, geometric pattern.

NUTANIX™