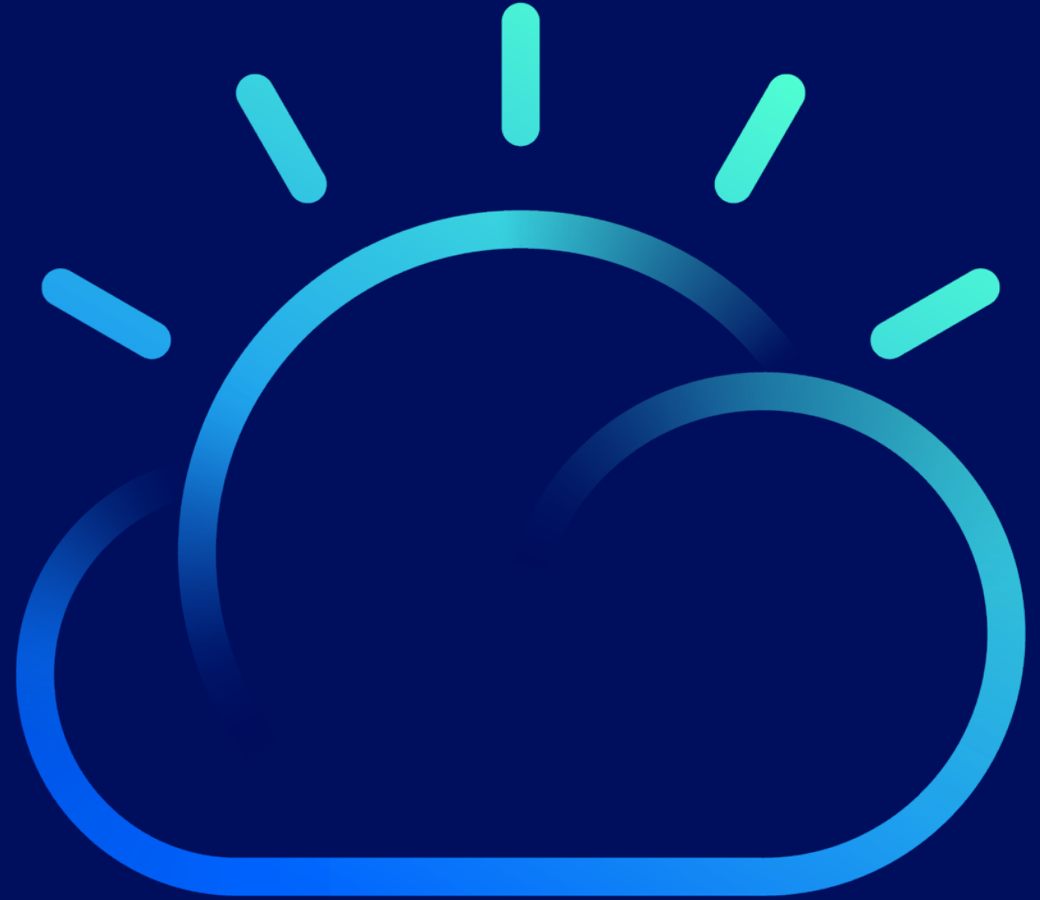


CAM Service Composer and Template Designer




IBM **Cloud** Automation Manager
Service Composer & Template Designer

Example: A WAS ND Service built with *CAM Service Composer* delivered in the Service Catalog

IBM Cloud Private


Create resourceDocsSupport



ibm-transadv-dev

IBM Cloud Product Insights Transformation Advisor


ibm-charts



ibm-transadv-dev

IBM Cloud Product Insights Transformation Advisor


ibm-charts-internal



ibm-voice-gateway-dev

IBM Voice Gateway Helm chart (Developer Trial)


ibm-charts



ibm-websphere-liberty

WebSphere Liberty for Linux on amd64, ppc64le and s390x


ibm-charts



ibm-websphere-liberty

WebSphere Liberty for Linux on amd64, ppc64le and s390x


ibm-charts-internal



ibm-webterminal-dev

A browser-based full xterm terminal.


ibm-charts



ibmcloudcloudantservice

ibmcloudcloudantservice


service



icsservice

icsservice


service



wasapplicationservice

wasapplicationservice

service



wasndservice

wasndservice

service

Ordering the WAS ND Service

IBM Cloud Private

Create resource Docs Support

← View all

wasndservice

wasndservice

VERSION2458111

PUBLISHEDMar 7th 2018

TYPEService

WASNDService

Details

Helps user deploy WAS ND in multiple formats and connected to different systems

Useful Links

Documentation:

Support link:

Plans

PLAN	FEATURES	PRICING
development	To deploy a Standard plan	Free
staging	Staging	Free
production	Production	Free

Configure the service

Configuration options curated by **Service Composer**

Select the plan

Plans created with Service Composer

Configure

Build the WAS ND Service with CAM Service Composer

Three steps: Assemble, Curate, Publish

IBM Cloud Automation Manager

Docs Support

WASNDService

OverviewCompositionParametersPlans & FormSource Code

Filter

Search

Flow Components

Decision

Notification

Email Notification

Integration

Rest Hook

Templates

Helm

Development Plan

Test Plan

Production Plan

IBM WebSphere Network Deployment V9 on a single ...

Basic InformationParameters

Search Parameters

INPUT PARAMETERS	VALUE
WASNode01_dns_servers	1 Items
WASNode01_dns_suffixes	1 Items
WASNode01_domain	\${templates.infobloxc35ad464.output.associated_domain}
WASNode01-image	Content/ContentRH_Template_2018_1Q
WASNode01-os_admin_user	root
WASNode01-os_password	Op3nPatterns
user_public_ssh_key	None
WASNode01_root_disk_size	100
WASNode01-name	\${templates.infobloxc35ad464.output.associated_

(3) Publish the service into the Service Catalog

SavePublish

(1) Assemble the service by dragging activities from the palette and connecting on the canvas. Note: 3 plans are designed

(2) Curate the service by locking down configuration variables

CAM Service Composer

Decision activity

Notification

REST Hook activity

Terraform & Helm Charts

Register with CMDB

Notify that Environment Provisioned

Get IP Address

Select VM size

Configure variables

Publish into service catalog

IBM Cloud Automation Manager

Single VMWare VM Stoddard

OverviewParametersCompositionSource Code

Filter

Flow Components

Decision

Notification

Email Notification

Integration

Rest Hook

Templates

Amazon EC2 (31)

Amazon EC2 Virtual Server wit...

Apache HTTP Server basic de...

Apache HTTP Server full deplo...

Apache Tomcat on a single virt...

AWS instance with tags

Bills AWS LAMP STACK

IBM DB2 Enterprise Server Edit...

Search

Get IP Address

decision

Small

Small VM

Medium

Medium VM

Large

Large VM

CMDB Update

e-mail Notificati...

Save

Publish

Settings

Support

Small VM

Basic InformationParameters

Search Parameters

INPUT PARAMETERS

USER PERMISSION

name

Read-Write

folder

Read-Write

datacenter

Read-Write

vcpu

Read-Write

memory

Read-Write

cluster

Read-Write

network_label

Read-Write

ipv4_address

Read-Write

ipv4_gateway

Read-Write

ipv4_prefix_length

Read-Write

storage

Read-Write

vm_template

Read-Write

create_vm_folder

Read-Write

CAM Template Designer - Graphical Terraform Editing

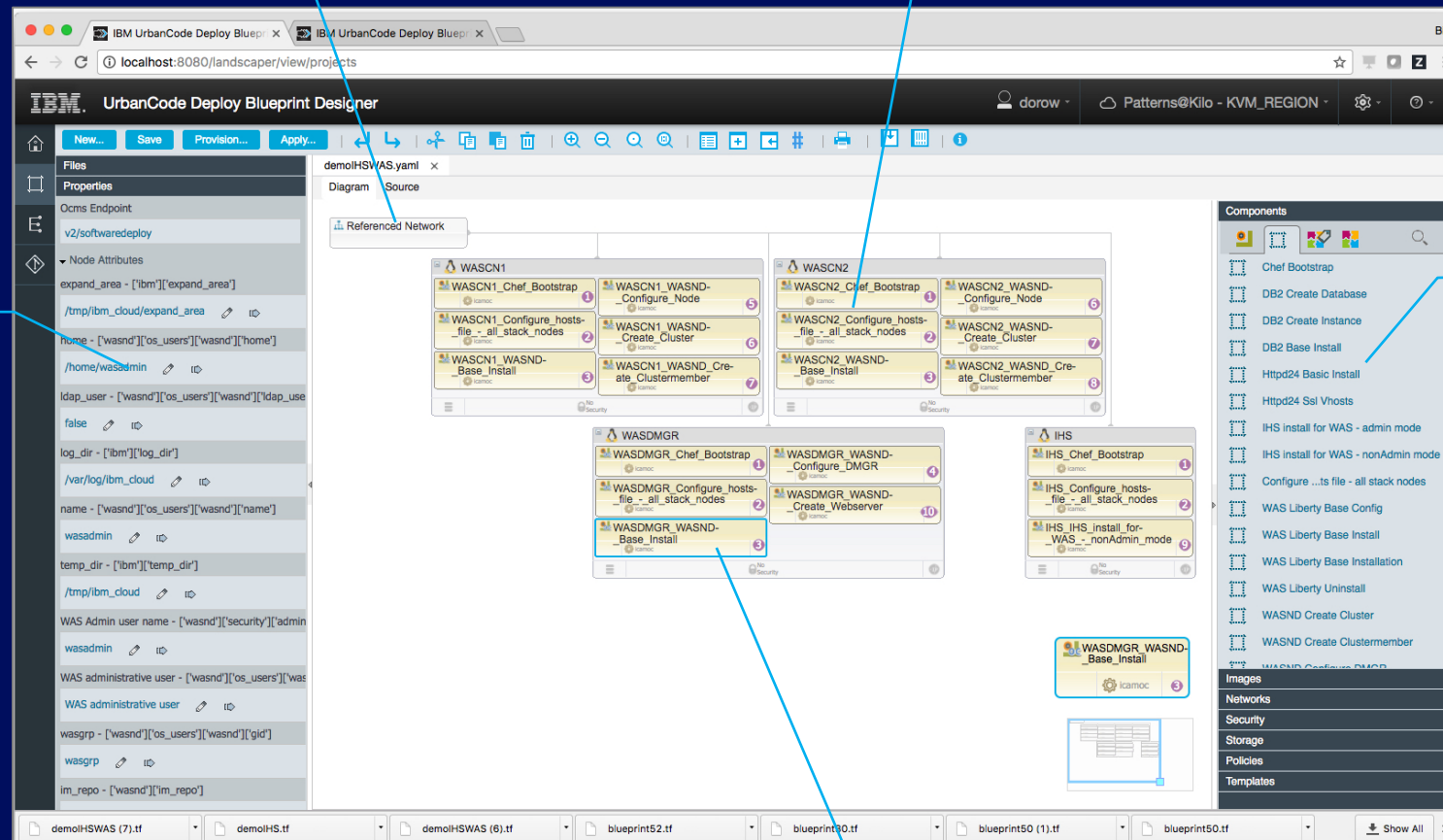
Develop automation for any cloud FAST

Pre-built advanced topologies with expertise built in. **Save time and effort**

Drag and drop graphical editor. No programming required to configure or customize automations!

Configurable automation. Use right out-of-the box with recommended default values, or change them to get desired behavior and performance

Subscribed **automation content** and self developed content all in one place. **Just select what you need and bring it into your canvas.**



Tool is **integrated with DevOps toolchains.** Manage your automation creation processes **for higher efficiency**

Orchestrate with ease: define order by operations by numbering

CAM Template Designer - *Graphical Terraform Editing*

The screenshot displays the IBM Cloud Automation Manager Template Designer interface. The top bar shows the IBM logo, the title 'Cloud Automation Manager Template Designer', and user information 'ucdpadmin'. Below the top bar is a toolbar with icons for 'New...', 'Save', and various editing functions. The left sidebar shows a file tree with folders like 'default', 'aws-terraform', 'two-tier', and 'Internal-Team'. The main workspace shows a 'lamp' template with a diagram view. The diagram shows a 'default' component connected to 'web' and 'web-alternative' components. Below the diagram are categorized components: NETWORKING (web), COMPONENTS (install_php), STORAGE (db), SECURITY (web), and OTHER (default). The right sidebar shows a list of networks and storage, security, modules, and other components.

IBM Cloud Automation Manager Template Designer

ucdpadmin

New... Save

Files

- default
- aws-terraform
- two-tier
- README.md
- Internal-Team
- Internal-Team50 added 58cb1a049ea
- starterlibrary
- AWS
- Azure
 - terraform
 - hcl
 - lamp
 - lamp.tf
 - camvariables.json
 - catalog.json
 - BlueMix
 - Google
 - images

Properties

lamp x

diagram lamp camvariables.json

default

web web-alternative

NETWORKING

- web
- web
- web

COMPONENTS

- install_php

STORAGE

- db
- db
- db

SECURITY

- web

OTHER

- default

Components

Instances

Networks

- AWS Reference Network
- Azure Reference Network
- IBM Cloud Reference Network
- OpenStack Reference Network
- VMware Reference Network
- AWS Virtual Cloud
- Azure Virtual Network
- OpenStack Network

Storage

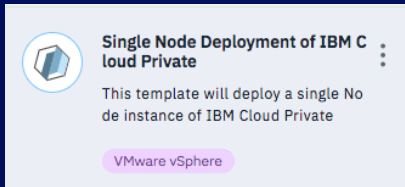
Security

Modules

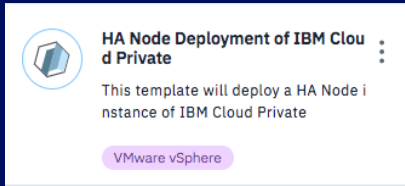
Other

- Laptop or Server install
- Integrated Git Repo
- Integrated with CAM
- Helper functions for managing variables

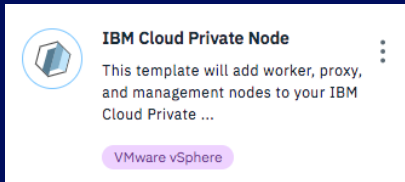
Terraform configurations to deploy, scale, and upgrade IBM Cloud Private



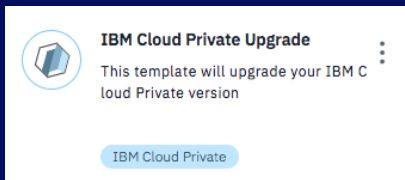
Single Node ICP Deployment



HA Node ICP Deployment



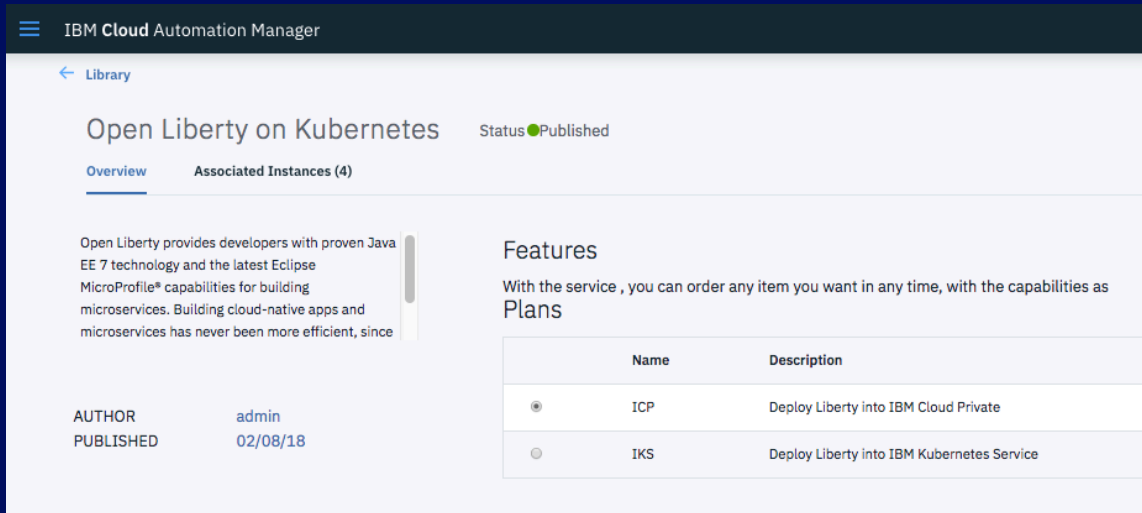
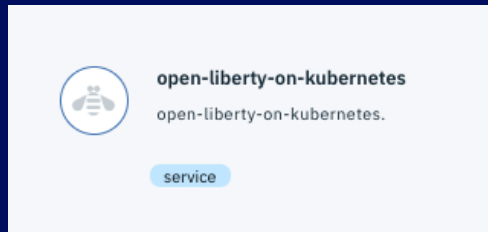
Scale worker nodes



Upgrade ICP Version

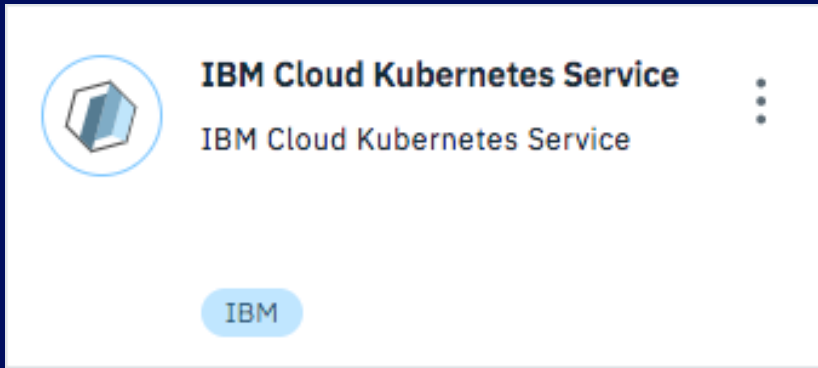
- For OpenStack and VMware
- **Deploy** single node and multi-node HA ICPs
- **Scale** ICP clusters - add & remove worker nodes
- **Upgrade** ICP version
- Compose the **deploy**, **scale**, and **upgrade** Terraform configurations into **services** that can be delivered to teams through the ICP service catalog

Deploy Helm charts into any ICP or IKS cluster



- Configure cloud connections to IKS or ICP Kubernetes endpoints, anywhere
- Compose services that can deploy Helm charts out of the local ICP catalog into remote or local ICP or IKS kube clusters

Use CAM to provision, and scale IBM Cloud Kubernetes Service (IKS) clusters



- Provision IKS in IBM Cloud with Terraform
- Install Helm Tiller
- Deploy Helm Charts from the ICP Catalog into the provisioned IKS instance
- Scale IKS nodes with Terraform plan/apply
- Update Helm Tiller version with Terraform plan/apply
- Compose IKS Terraform into a service that can be published in the IBM Cloud Private Service Catalog

Shared Parameters

Manage | Cloud Connections | Content Runtimes | Email Configuration | Shared Parameters

Shared Parameters

Shared parameters allow you to create reusable Data Objects. This helps save time when deploying new instances and creating services. You can learn more [here](#)

Data Types(4) Create Data Type +

5 Data Types per page | 1-4 of 4 Data Types 1 of 1 pages < 1 >

NAME	DATA TYPE	ACTIONS
Bastion Host Configuration	bastionhost	⋮
HTTP Proxy Configuration	httpproxy	⋮
ibm_cloud_app_management_agent	ibm_cloud_app_management_agent	⋮
Infoblox IPAM Server	ipam.infoblox	⋮

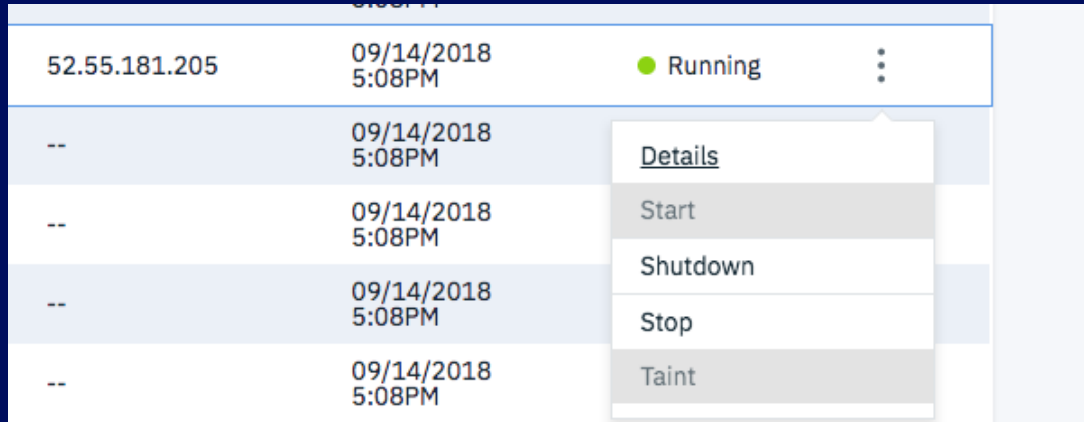
Pre-built shared parameters

- Infoblox
- IBM Cloud App Management

Store shared parameters in Git

- Share
- Reuse

New VM operation commands available in the CAM Deployed Instances console **for all clouds**



The screenshot shows a table of VM instances in the CAM Deployed Instances console. The first row shows an instance with IP 52.55.181.205, timestamp 09/14/2018 5:08PM, and status Running. A context menu is open for the first row, showing options: Details, Start, Shutdown, Stop, and Taint. The subsequent rows show placeholder IP addresses (--) and the same timestamp.

IP Address	Timestamp	Status	Actions
52.55.181.205	09/14/2018 5:08PM	Running	⋮
--	09/14/2018 5:08PM		Details
--	09/14/2018 5:08PM		Start
--	09/14/2018 5:08PM		Shutdown
--	09/14/2018 5:08PM		Stop
--	09/14/2018 5:08PM		Taint

- **Shutdown** - *shutdown* the OS on a VM
- **Stop** - *power off* a VM
- **Start** - *re-start* a powered off VM, *start* a shutdown OS
- **Taint** - mark a resource for cleanup on the next Terraform plan/apply

Limitations:

- OS shutdown path for some clouds will result in forced VM termination. This is a limitation of the cloud, not of CAM. Details [here](#)
- Start/stop VM/OS not supported for Nutanix (this is roadmap)

Deploy Terraform based workloads through an HTTP proxy

← Shared Parameters

Edit Data Type


NAME

DATA TYPE

DESCRIPTION

HTTP Proxy Configuration

httpproxy

Proxy configuration to be used for both http and https outbound communication by the virtual machines deployed inside the proxy. 

Attributes(4)

Add Attributes +

View Attributes +

5 ▾ Attributes per page | 1-4 of 4 Attributes

1 of 1 pages < 1 >

NAME ▾	TYPE	REQUIRED	IMMUTABLE	ACTIONS
host	string	false	false	⋮
password	password	false	false	⋮
port	string	false	false	⋮
user	string	false	false	⋮

