AgileStacks



DevOps Automation

Why Agile Stacks?

- Automate deployments and upgrades from a catalog of supported stack templates
- Use extensible stack templates to standardize your AWS environments
- Implement change control for custom stacks built with Terraform, CloudFormation, and Helm charts
- Deploy and manage containerized applications at scale
- Implement GitOps / Git based configuration management
- Leverage auto-tagging capability to analyze and optimize your cloud spend
- Reduce costs automatically by leveraging autoscaling groups and spot instances



Overview

Agile Stacks accelerate DevOps and Machine Learning workflows by managing complete stacks using infrastructure-as-code approach. Stack templates can be configured based on your needs, saved in a Git repository, and automatically deployed to your AWS cloud accounts or Kubernetes clusters. DevOps engineers can deploy a stack template as is, or extend it using Terraform or CloudFormation.

Product features

Automate and Manage Infrastructure as Code

Accelerate your DevOps implementation by using proven, reliable infrastructure code templates and best practices:

- Minimize manual tasks, enable secure and consistent deployments, reduce the time needed to provision cloud resources by using automated infrastructure-as-code deployments. Our UI offers low-code visual tools that accelerate the time to customer value, without limiting code customization flexibility for future enhancements.
- Configure, extend and version your infrastructure code in Git
- Define Terraform and CloudFormation once, no matter how many AWS accounts you manage

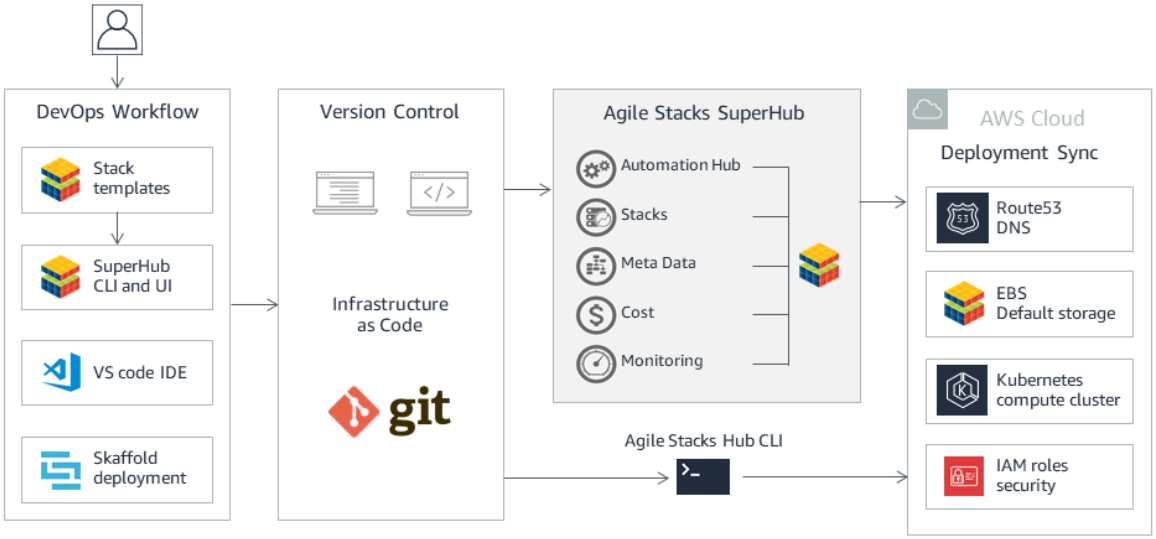
Certified Stack Templates

Deploy composable, flexible, automated cloud stacks that work from the instant they are deployed:

- Off the shelf pre-integrated stacks: Kubernetes, Kubeflow, Elasticsearch, GitLab, Harbor
- Stack templates can be extended using most popular automation tools: Terraform, CloudFormation, Helm
- Define infrastructure templates once, no matter how many AWS accounts you have
- Software developers can use code to provision and deploy cloud services and applications, rather than rely on system administrators in a DevOps environment.
- By standardizing the templates, security teams can efficiently audit and approve the deployed applications.

How it works

The Agile Stacks SuperHub deploys stack templates from a catalog of composable open source and commercial software. A stack template is configured for the AWS account and versioned in Git. The code repository is used as the central-source-of-truth for all of the infrastructure required to run applications. Automation hub implements state management, environment configuration, and automatic infrastructure provisioning across multiple AWS accounts for development, testing, and production environments.



Differentiators

- Full Stack automation allows to launch and maintain production-grade infrastructure in days, not months
- Automated deployments of Kubernetes extended with monitoring, logging, ingress, service mesh, and more
- Built-in best practices for secure, scalable, resilient, cost-optimized deployments
- Self-service deployment for developers while giving operations all tools for security, monitoring, upgrades
- Stack components are configured to automatically deploy, upgrade, rollback, backup, and restore
- State management and GitOps workflows for Terraform, CloudFormation, Helm, and Ansible

Certified Stack Templates

Stack Name	Stack Description	Available Tool Choices
Kubernetes Stack	Contains everything needed to secure and run a container-based set of services in a sound architectural way.	Prometheus, Elasticsearch, Traefik, Istio, Letsencrypt, ACM, dex, Okta, autoscaler, cert-manager
Machine Learning Stack	Machine learning toolset that supports the full lifecycle of an ML application.	Kubeflow, Jupyter Notebook, TensorBoard, Seldon, Minio, Spark, Amazon SageMaker, Istio, Letsencrypt, ACM, dex, Okta, autoscaler, cert-manager
Application Stack	A set of tools for continuous integration, testing, and delivery of applications.	Harbor, Minio, Postgres, Traefik, Istio, Letsencrypt, ACM, dex, Okta, autoscaler, cert-manager

Solution available in [AWS Marketplace]