

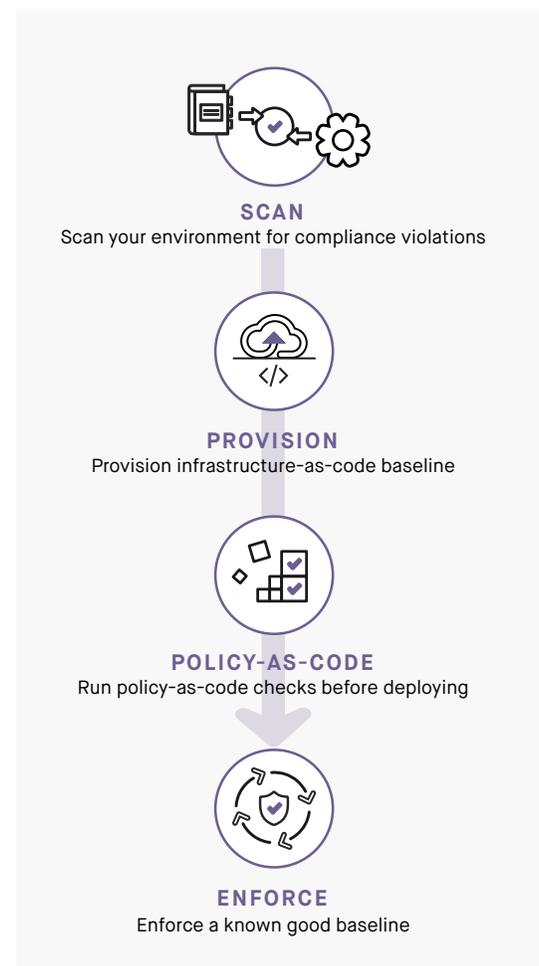
# Fugue Platform: Infrastructure Provisioning and Automated Baseline Enforcement

In cloud environments, enterprises face an increased likelihood of configuration and policy compliance violations—which may lead to security breaches, system downtime, and data loss. This happens because cloud deployments are becoming more complex to provision and manage.

With too many resources, too much change, too many interfaces and too many policies to adequately track and govern manually, the risk of cloud misconfiguration is on the rise. According to a survey, 79% say critical misconfiguration events are still being missed.

Fugue Platform helps to secure and ensure that your infrastructure is always in compliance by automatically reverting all policy and security violations back to a good known state.

## FUGUE PLATFORM WORKFLOW



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## Compositions

Infrastructure as code in files known as compositions takes the place of traditional configuration files. Written in a language called Ludwig, which can be thought of as “YAML with superpowers,” compositions are the source of configuration truth for running workloads. Using Ludwig shortens the development feedback loop—if a composition compiles without errors, its infrastructure will be successfully provisioned.

An enterprise can choose to create new compositions or it can migrate its existing cloud infrastructure into compositions with a few easy clicks. Fugue Platform’s Composer and Transcriber tools provide the ability to scan your cloud account to discover existing infrastructure and generate a composition representing your resources. The import feature matches resources between your composition and your existing account so Fugue Platform can manage these imported resources, with no duplication of services and no interruption to running workloads.

## Compliance Policies and RBAC

Security and compliance policies are applied to compositions. A policy is a set of validations, also written in Ludwig, that assess whether a composition is in compliance with internal requirements or external regulations. For example, a validation will verify that your cloud storage such as AWS S3 is configured to store only encrypted files or that port 22 is not opened anywhere on resources. Fugue Platform provides out-of-the-box validations to enforce compliance frameworks such as NIST 800-53, GDPR, HIPAA and CIS Benchmarks. Fugue Platform generates an error if a validation’s conditions are not met and the offending composition will not compile. Fugue Platform policies also define role-based access control (RBAC) and the principle of least privilege by defining which users and groups can create, modify, and access infrastructure.

## Secure and Protect Your Cloud

Fugue Platform enforces policy and automatically remediates resources throughout the infrastructure life cycle. Our automated remediation feature reverts policy and security violations back to a known good state to ensure that your infrastructure is always in compliance.

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## About Fugue

Fugue, a leader in cloud infrastructure automation and security, provides solutions to ensure that enterprise and public agencies cloud resources are always provisioned according to a single source of truth—and stay that way throughout the resources’ lifetime. Fugue is privately held and headquartered in Maryland. Fugue was named a Cool Vendor in Cloud Computing 2017 by Gartner.



## Conductor

Compositions and policies are processed by the Conductor. The Conductor is the heart of the Fugue Platform system and its orchestration engine. It interacts with Cloud Provider APIs to provision and instantiate the resources defined by compositions. Once these resources are provisioned by a Cloud Provider, the Conductor continually checks whether any changes are made to resource configurations and automatically corrects these violations in near real time. The composition is a known good state so the Conductor has a baseline to reference. Rather than defining event driven Serverless functions to handle all of the various scenarios in which configuration or policy violations can occur, the Conductor provides a simpler and more powerful solution for the seamless management of state.

## Processes

A process is an instance of a composition that has been provisioned by the Cloud Provider. A process is a powerful concept because it can be suspended, resumed, or killed; Fugue Platform’s process management is similar to that of an operating system. Fugue Platform provides visibility into all processes providing a clear picture of all infrastructure managed by Fugue.

## Console

Console is a web interface for managing Fugue Platform. Fugue Console enables users to view, create and manage infrastructure with an informative visual interface. Users can easily and manage infrastructure processes with a few clicks.