

# AUTONOMIC PLATFORM FOR PAAS MANAGEMENT

## Assure the Performance of Applications Built on Cloud Foundry

### Increase the Speed of Application Delivery

Delivering better applications, faster is a key mandate for IT. Today's business stakeholders and application teams see the speed at which an idea goes from a conversation to production as a fundamental competitive advantage. Operations and DevOps teams play a crucial role in making this possible.

Cloud Foundry enables development teams with a self-service portal to speed up the dev, test and deploy cycle. Turbonomic complements the Cloud Foundry platform with a real-time understanding of the application resource demand and available infrastructure supply. It self-manages application demand to the compute, storage and network resources assuring performance as developers push more apps into production.

In order for IT to play a partnering role in the success of the business, what's designed and built must run—IT must assure application performance. Cloud Foundry PaaS allows developers to focus on what they do best: code. Turbonomic allows Operations teams to do what they do best: design, build and seamlessly run the cloud environments that support those applications.

### Turbonomic Solution

Your PaaS is only as good as the reliability of the applications it helps you build and deploy. While Cloud Foundry and other PaaS or self-service portals make developers' lives easier, at scale they create highly dynamic workload demand that challenges even the very best operations teams. The question for Operations remains: what workloads, where and when? This problem must be solved in software.

**Turbonomic discovers, analyzes and manages Cloud Foundry** Applications, Application Instances, Droplets and Droplet Execution Agents ("DEA"s). When Cloud Foundry is deployed on Virtual Machines that Turbonomic also discovers (as a separate IaaS or Cloud target, e.g., vCenter or OpenStack), Turbonomic recognizes the relationship between the Cloud Foundry DEAs and the underlying IaaS or Cloud VMs on which they are deployed. In this way, Turbonomic provides a full stack autonomic software platform for Cloud Foundry environments, from the physical and virtual infrastructure to the applications and virtual applications. It provides real-time, self-management:

**Where to deploy new applications:** Turbonomic ensures new applications are on an appropriate VM or cloud instance based on the dynamic usage of existing resources across the data center. The software places Cloud Foundry Droplets on the right Droplet Execution Agents as the first step in assuring performance of workloads in Cloud Foundry for their entire lifecycle.

**How to manage and scale those applications:** Turbonomic continuously assures the performance of applications built and deployed with Cloud Foundry. As transaction volumes increase and hit Droplets, Turbonomic scales out applications, spinning up more containers to help meet the demand. Likewise, as demand for more CPU and memory resources increases and hits the DEAs, Turbonomic horizontally scales the underlying VM or Cloud instance infrastructure to meet that demand.

Cloud Foundry promises faster time to market. At scale, it assures cloud infrastructure complexity. The promise of PaaS can only be realized with an autonomic software platform that provides the workload decisions that ensure performance at every layer of the stack.

### KEY BENEFITS

- Control Cloud Foundry environments, assuring application performance without over-provisioning resources.
- Real-time placement decisions of newly deployed applications.
- Real-time application scaling to meet dynamic workload demand.

### TIME TO VALUE

**91% of Turbonomic customers see a return on their investment within 90 days.**

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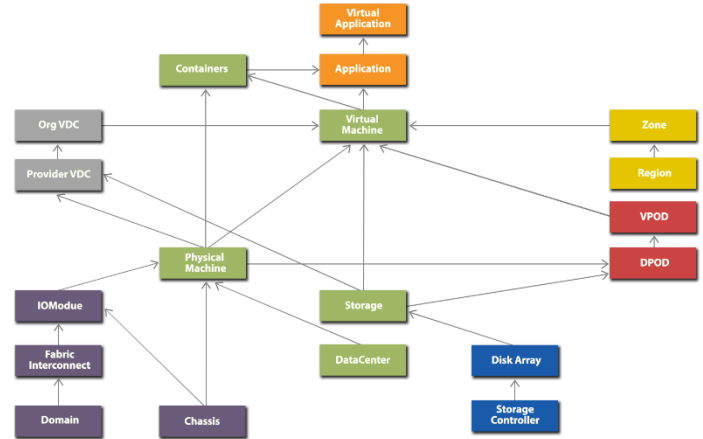
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## Autonomic Platform for Cloud Foundry PaaS

Turbonomic's Common Data Model relates every entity in the data center as a provider or consumer of resources enabling the automation of placement, sizing and provisioning decisions.

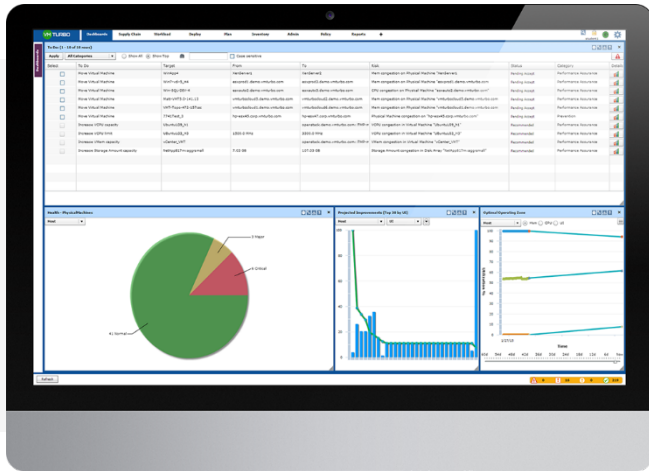
Cloud Foundry Entity	Turbonomic Service Entity
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Application	Virtual Application
Instance (or Application Instance)	Application
Droplet	Container
DEA (Droplet Execution Agent)	Virtual Machine



## Supported Implementations

Turbonomic supports the Cloud Foundry platform. When setting up targets, you can specify PaaS implementations that use the Cloud Foundry API v.2.



## Try Turbonomic

- Download a free trial of Turbonomic for 30 days, at [turbonomic.com/download](http://turbonomic.com/download)
- For more information, visit [turbonomic.com](http://turbonomic.com)