EVOLUTE PLATFORM



Information Sheet

Realizing the promise of cloud-based applications

Organizations today are seeking to realize the promise of the cloud, but are often stymied in migrating applications to this new environment. They realize the potential inherent in container deployment, but expensive downtime, complexity and unwieldy overhead all slow efforts to the point where migration alone can take 12 to 18 months per application. Evolute automates not only the initial container migration process, but also streamlines and optimizes subsequent application infrastructure maintenance, optimization and management for an effective end to end application lifecycle experience. Solution paths are listed below.

Container Migration

Accelerate adoption and ease process by automatically migrating applications to containers

Container Infrastructure

Enable greater scalability, security, and relliability for the container technology In private and public clouds

Enterprise Cloud Management

Ease management by providing sowtfare developers and system engineers management tools for containers



Migration to and Deployment of Containers

Description

The Evolute platform analyzes, migrates and produces the necessary processes to move entire systems from previous environments (i.e. virtual machines, bare metal or in a cloud environment) to Linux Containers automatically. Evolute analyzes the virtual hardware and data layers of your virtual machine and its destined container environment with the ability to allow them to speak the same language. Whether it's a java-based database, a *nix utility communicating directly to libc++, or another environment the migration process is native and consistent.

Process

The process of porting applications to containers consists of 5 steps: identification of assets, classification, configuration, containerization and commitment. These are all done in an automated fashion with a few key strokes by the user.

1	Step	Description
	Identification	Evolute understands the initial environment, bare metal or VM OS/ Data and application environment, e.g. Cassandra (3.10 kernel, java8 and native mappings to libraries) to Oracle DB (on i686 accessing libc++ leveraging a 32-bit EL7), SAP, Desault et al.
	Classification	Evolute classifies what type of container will be needed by each application or component for the new environment.
	Configuration	For each application identified, Evolute calculates Binary, Configuration and Data outcomes for the future containers
	Containerization	Evolute then creates the container structure for each application e.g. one for Oracle, apache http and its application instance (e.g. Desault) to move to the destination container environment
	Commit	Evolute will seal the new container by performing an `lxc-commit` to ensure the data is kept with the newly created image (enabling Docker or Windows compatible containers)





Description

The Evolute platform allows repeated deployment of software in less than a minute. With very high success rate in VM conversions, applications are ready to run in very little time. Publishing in any environment is supported.

Component

Description

Agnostic Application Streamlining

No matter what environment you are currently running in - Amazon EC2, VCenter or something else Evolute can optimize the resulting application infrastructure.



Application Environment Management and Optimization

Description

Respond to operational demands and issues in the environment allowing software and services to grow and react based on the needs of the customer. The Evolute platform provides enterprise software developers and system engineers management tools for containers so that the organization can get the highest value from them once deployed. It also allows the system to be very responsive as business conditions and the system environment changes; supporting microservice environments effectively.

1	Component	Description
	Manage Applications	Enable existing applications to reach the next level of scale as they move to microservices
	Operational change on the fly	Operational changes can be made without disrupting daily workflow

Evolute -- Use Case Advantages

Whether its development, testing or production, Evolute delivers value to key stakeholders: it provides operational advantages spanning turn up, management and ongoing maintenance. It's a complete, secure solution that is self-managed, substantially lowering investment footprint and lifecycle costs. The platform supports automatic configuration of container workloads, converged hardware monitoring and visibility in a package ready to go, and supports application optimization and ongoing management effectively.

Summary-top 5 advantages- the Evolute platform-end to end application lifecycle optimization

Migrating from legacy virtualization environments to the world of containers and optimization of the application lifecycle post migration affords key advantages to today's enterprise:

- 1. Saving valuable resources that used to be dedicated to virtual machines. (OS, Libraries, etc)
- 2. Faster development and deployment cycles which means it is easy and inexpensive to set up containers to isolate apps on the same machine
- 3. Easier and cheaper to scale up and down than available infrastructure alternatives.
- 4. Better maintenance and no need for re- architecting applications with changing business conditions
- 5. More effective responsiveness to business needs as they change-enabling existing applications to reach the next level of scale and move towards responsive infrastructure and software in a microservices driven environment.

Only Evolute provides the automated capability to realize the promise of the container world in a fraction of the time of current solutions and with little complexity and manages the container-based application world effectively.