

Ten Priorities for Hybrid Cloud, Containers, and DevOps in 2017

EMA Research Report and Decision Guide for Enterprise



ENTERPRISE MANAGEMENT ASSOCIATES® (EMA™)
VENDOR RECOMMENDATION REPORT
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IT & DATA MANAGEMENT RESEARCH • INDUSTRY ANALYSIS • CONSULTING

INTRODUCTION

This Enterprise Management Associates® (EMA™) decision guide focuses on how enterprises should manage hybrid cloud, containers, and DevOps to provide their business with an optimal IT environment where innovation can be delivered in the most efficient and effective manner.

WHY YOU SHOULD READ THIS RESEARCH REPORT

IT and software development decision makers and influencers will learn the following:

TEN PRIORITIES FOR EFFICIENTLY MANAGING HYBRID CLOUD, CONTAINERS, AND DEVOPS.

CONCRETE EMA RECOMMENDATIONS FOR EFFECTIVELY IMPLEMENTING THESE PRIORITIES.

EMA TOP THREE PRODUCTS TO OPTIMALLY IMPLEMENT EACH RECOMMENDATION.

RESEARCH METHODOLOGY

All research results in this report are based on EMA's survey of 260 randomly-selected North American enterprises with 500 or more employees across all industries. Clustering these survey results by theme led to our ten priorities. EMA analysts examined each of these priorities within the context of today's key challenges of leveraging containers, hybrid cloud, and machine learning to reach the optimal compromise between rapid software releases and reliability of IT operations.

260 enterprises surveyed

87% using private or public cloud

10 key trends identified

IN A NUTSHELL: 2017 TOP PRIORITIES

- Control your hybrid cloud cost.
- Enforce security and compliance.
- Private cloud is coming back.
- Plan for container management.
- Demand single pane of glass monitoring.
- Evaluate hyperconverged systems for your scale-out cloud.
- Focus on integration between cloud and data centers.
- Push your developers toward serverless functions.
- Bring automation and full visibility to your DevOps process.
- Evaluate machine learning for operations management.

INTRODUCTION

WHAT ARE THE EMA TOP THREE?

EMA's Top Three products were selected because they enable customers to address the ten key IT operations priorities in 2017 in a convincing and often innovative manner. Please regard this report as a guide to help IT influencers and decision makers in their project planning and vendor selection processes.

It is not a feature-by-feature comparison of all included vendors. In certain cases, EMA included products that are still in a late beta or preview stage simply to recognize a vendor's excellent alignment with research results. On the other hand, you may miss more traditional products that did not make it into the report, simply because newcomers took their spot.



EMA TOP THREE VENDORS ADDRESS HYBRID CLOUD, CONTAINER, AND DEVOPS CHALLENGES IN AN INNOVATIVE AND CONVINCING MANNER.

MARKET METRICS

Based on EMA research, the total market for hybrid cloud and container management tools is currently growing at a fast pace. In 2017, enterprises are becoming serious about moving traditional bread-and-butter applications to private and public clouds. Over the following 12 months, customers will move another 19 percent of their current data center workloads to a public cloud and 12 percent to a private one. Please dive into this report for a wealth of market metrics.

KEY DISRUPTORS IN 2017: CONTAINERS AND MACHINE LEARNING

Container management and machine learning are the two fastest-growing hybrid cloud topics in 2017. 68 percent of enterprises are exploring container strategies today. The rapid growth in containers also intensifies the pressure to leverage machine learning-driven IT operations to cope with the added operational complexity, which is caused by applications consisting of short-lived microservices hosted on portable containers and shared between multiple apps. 2017 is the year when machine learning will need to come out of its shell and do much more than just anomaly detection.

FROM THE SOFTWARE-DEFINED DATA CENTER TO THE BUSINESS-DEFINED HYBRID CLOUD

Enterprise customers are ready to take the step from a software-defined data center to a state where applications are provisioned and managed in an automated and policy-based manner. Development teams should no longer have to manually specify the exact types of servers and storage infrastructure they require, but the business-defined hybrid cloud needs to “understand” each application’s security, compliance, performance, and cost requirements. They must also make the most efficient placement decision and enable proactive operations management driven by constantly-changing business priorities.

#1

COST OPTIMIZATION IS THE NUMBER ONE PRIORITY IN HYBRID CLOUD OPERATIONS IN 2017

68%

ENTERPRISES EVALUATING CONTAINERS IN 2017

CHAPTER 1: HYBRID CLOUD COST CONTROL

IMPORTANCE OF
HYBRID CLOUD COST CONTROL

#1

ENTERPRISES USING
4 OR MORE PUBLIC CLOUDS

35%

ENTERPRISES
EVALUATING CONTAINERS

68%

“THE ‘CONTAINER
REVOLUTION’ MAKES COST
CONTROL EVEN MORE
IMPORTANT, AS IT OFFERS
EXPONENTIALLY MORE
DEPLOYMENT OPTIONS FOR
YOUR APPLICATIONS.”

– CTO, MAJOR MORTGAGE
BROKER

EMA TOP THREE: HYBRID CLOUD COST CONTROL



MULTI-CLOUD MANAGERS



CISCO CloudCenter

IBM Cloud Automation Manager

RightScale Cloud Management Platform



EMA Market Metrics Size: >\$800 Million

Saturation: Low

Growth Rate: Fast

Maturity: Moderate

Key Trends: Containers, Multi-Cloud Adoption

Risk of Disruption: Low

PRIVATE CLOUD PLATFORMS

Emotix vCommander

OnApp Cloud Platform

VMware vRealize Automation



EMA Market Metrics Size: >\$10 Billion

Saturation: Low

Growth Rate: Moderate

Maturity: Low

Key Trends: Multi-Cloud Adoption, Hyperconverged

Risk of Disruption: Medium

CLOUD OPTIMIZATION

Cloudability

Densify

VMware vRealize Business for Cloud



EMA Market Metrics Size: >\$1 Billion

Saturation: Low

Growth Rate: Fast

Maturity: Early

Key Trends: Containers, Machine Learning

Risk of Disruption: Medium

RAPID ROI UTILITIES

CloudRanger

GorillaStack

ParkMyCloud



EMA Market Metrics Size: \$300 Million

Saturation: Low

Growth Rate: Moderate

Maturity: Moderate

Key Trends: Multi-Cloud, Public Cloud, Containers

Risk of Disruption: Moderate

TOTAL MARKET: HYBRID CLOUD COST CONTROL

Size: >\$12.1 Billion

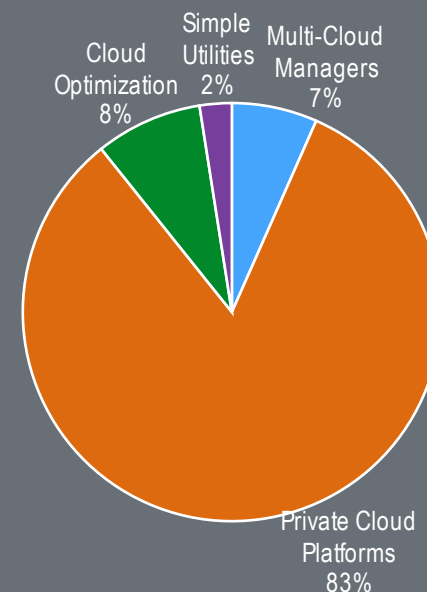
Saturation: Medium

Growth Rate: Fast

Maturity: Moderate

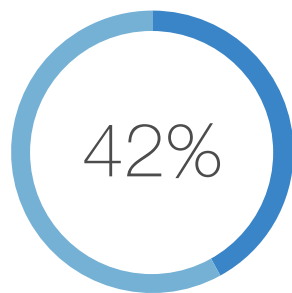
Key Trends: Containers, Multi-Cloud, Machine Learning

Risk of Disruption: Low

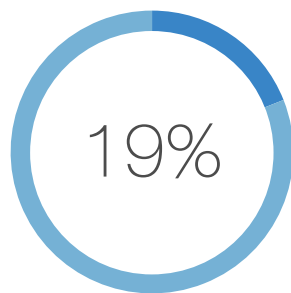


HYBRID CLOUD COST CONTROL IS THE #1 IT OPERATIONS INITIATIVE IN 2017

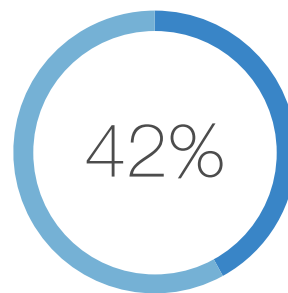
ENTERPRISES NAMING “COST CONTROL” AS THEIR NUMBER ONE IT OPERATIONS PRIORITY.



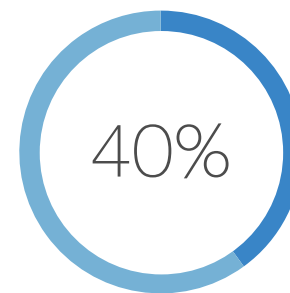
DATA CENTER APPLICATIONS MOVING TO PUBLIC CLOUD IN 2017



SHARE OF AMAZON CUSTOMERS COMPLAINING ABOUT COST INEFFICIENCIES



SHARE OF ENTERPRISES UNABLE TO IDENTIFY THE MOST COST-EFFICIENT CLOUD



“Cost Control in the Hybrid Cloud” tops the list of operational challenges that enterprises aim to address in the following 12 months. 42 percent indicated that cost control is their greatest IT operations challenge. The cost control topic boiled over in 2017, as enterprises are adopting different clouds and rapidly shifting more data center applications to these cloud platforms. EMA research found that 35 percent are using four or more public clouds and are planning to move 19 percent of their currently data center-hosted applications to the public cloud, and 11 percent to on-premise clouds.

Customers are blaming a lack of internal enterprise governance and difficult-to-understand cloud pricing models for today’s cost overruns. Hence, 40 percent of enterprises indicated that they are unable to identify the most cost-efficient cloud solution for their applications.

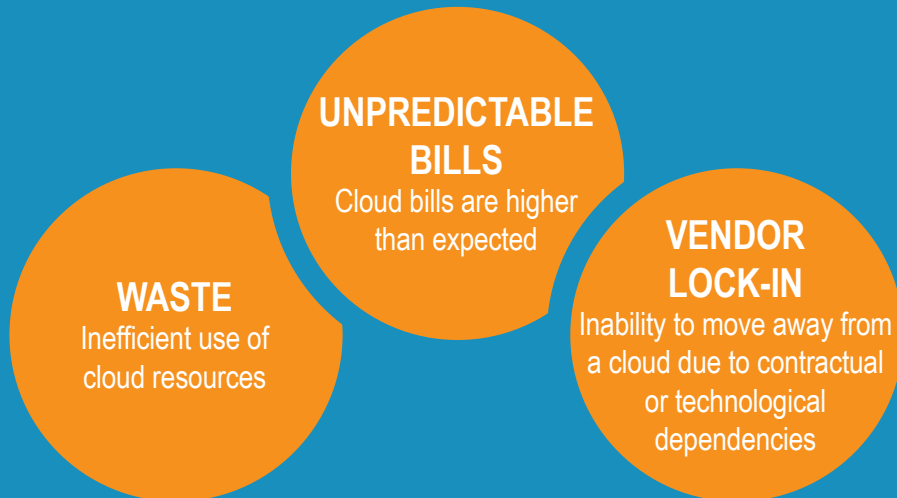
PRODUCT SPOTLIGHT: CISCO CLOUDCENTER

Cisco CloudCenter™ is an application-centric hybrid cloud management platform that securely provisions infrastructure resources and deploys applications to data center, private cloud, and public cloud environments. The Cisco CloudCenter approach to hybrid cloud management abstracts the application from the cloud infrastructure, which lowers the total cost of managing multiple environments. The resulting scalability makes Cisco CloudCenter interesting for enterprise and cloud service providers.

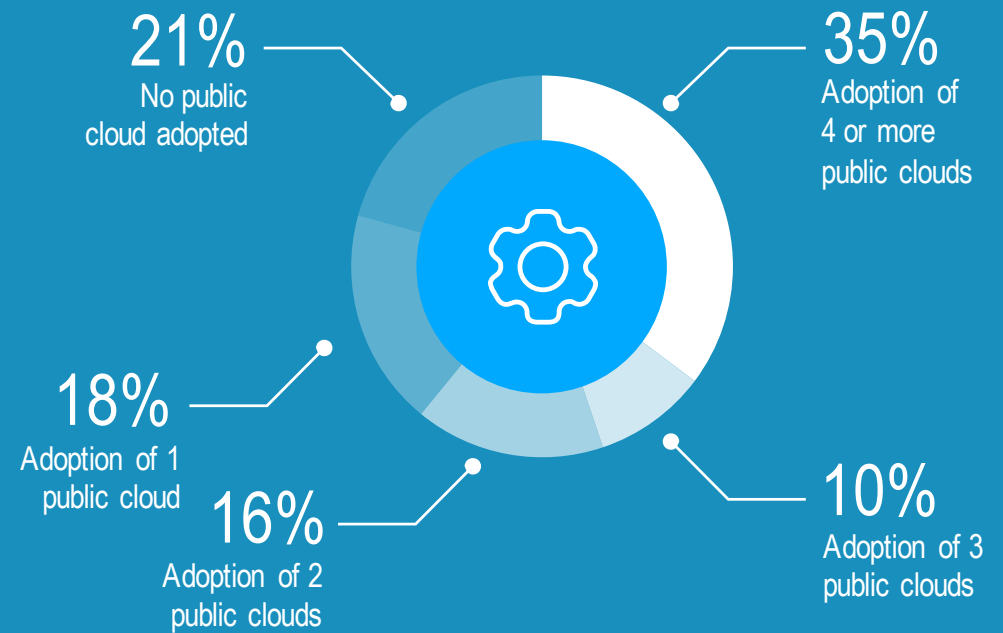


HYBRID CLOUD COST CONTROL – IN A NUTSHELL

To address the cost challenge, EMA recommends enterprises consider four product categories (multi-cloud management, private cloud platforms, cloud optimization software, and rapid ROI tools) that follow different approaches and can, in some instances, be combined. The EMA Top Three listings are a good starting point for this evaluation, especially the category of “rapid ROI tools,” which can easily be tried out and the results evaluated in a brief period of time.



PUBLIC CLOUD ADOPTION



EMA RECOMMENDATIONS: COST CONTROL FOR MULTI-CLOUD MANAGERS AND CONTAINERS

MULTI-CLOUD MANAGERS

RECOMMENDATIONS

Evaluate multi-cloud managers: Multi-cloud management tools can provide the governance and automation layer needed to make application placement decisions under full information.

EMA TOP THREE



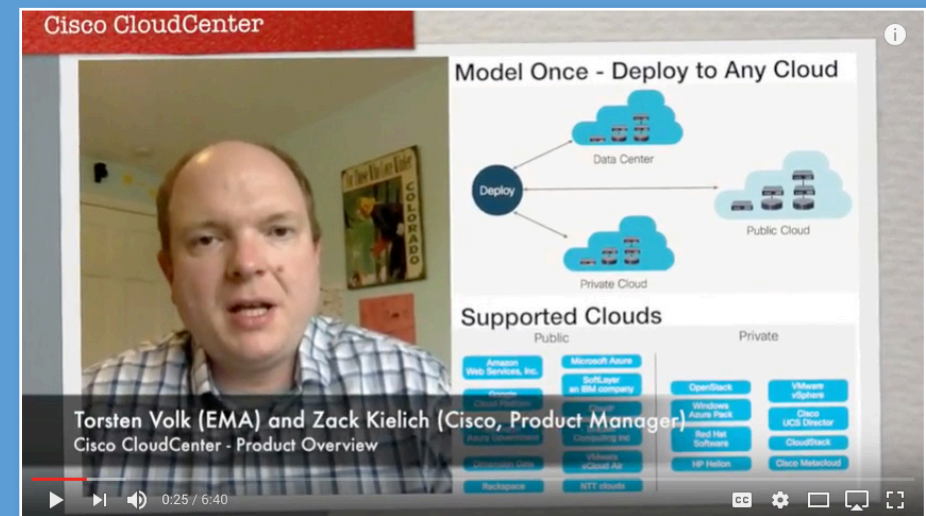
IBM Cloud Automation Manager

RightScale Cloud Management Platform

FREE
GUIDED
ONLINE TRIAL



EMA PRODUCT OVERVIEW



EMA RECOMMENDATIONS: COST CONTROL FOR MULTI-CLOUD MANAGERS AND CONTAINERS

| | RECOMMENDATIONS | EMA TOP THREE |
|-------------------------|--|---|
| PRIVATE CLOUD PLATFORMS | Also include traditional private cloud management platforms into the evaluation: Most traditional cloud management platforms no longer exclusively focus on on-premise clouds, but in many cases turned into versatile multi-cloud deployment and operations tools. | Embotics vCommander OnApp Cloud Platform VMware vRealize Automation |
| CLOUD OPTIMIZATION | Evaluate cloud optimization tools: Hybrid cloud and container optimization tools aim to minimize operations cost while considering compliance, security, performance, and availability. They can therefore be valuable tools for cloud transformation and optimization. | Densify RightScale Optima VMware vRealize Automation |
| RAPID ROI UTILITIES | Consider simple tools with large impact: Evaluate tools that are quick to implement and help harvest “low-hanging fruit.” | CloudRanger GorillaStack ParkMyCloud |

About Enterprise Management Associates, Inc.

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that provides deep insight across the full spectrum of IT and data management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help EMA's clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise line of business users, IT professionals, and IT vendors at www.enterprisemanagement.com or blogs.enterprisemanagement.com. You can also follow EMA on [Twitter](#), [Facebook](#), or [LinkedIn](#).

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