Automation, DevOps, and the Demands of a Multicloud World

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Methodology

In September, 2017 IDC conducted a global study to assess how enterprise IT management and automation strategies are evolving due to the impact of cloud computing, DevOps and digital transformation initiatives.

Respondents were IT operations decision makers with influence over their organization’s IT infrastructure architecture, management and modernization strategies including experience with or interest in DevOps and Linux.

This InfoBrief Summarizes the key findings from this study.

Q. In which country are the majority of your organization’s employees located?

Q. Which best describes your role?
What is DevOps?

DevOps represents the integration of application development and IT operations at many levels including culture, process workflows, and infrastructure management, as well as application creation, deployment, and delivery.

DevOps represents a faster, more agile approach to conceptualizing business innovation and driving those ideas or processes into customer- and user accessible code — whether delivered as packaged software, mobile and web apps, or online business services.

An organization adhering to DevOps embraces a collaborative, business-centric approach to development that values tight links between business decision makers, application development staff, IT operations and infrastructure managers.
100% of enterprises worldwide are investing in or evaluating DevOps to achieve faster business innovation and agility

#1 DevOps Driver today: Faster Business Innovation

Current Enterprise Application Architectures

- **53%** Traditional: optimized for client-server computing and/or mainframes, running on physical or virtual platforms
- **47%** Cloud native: optimized for VMs or containers running on public and/or private cloud infrastructure.

35% of enterprise applications development projects expected to use DevOps by 2020
DevOps Means Faster, More Frequent Change

DevOps Impact on Individual Applications

48% Percentage of organizations updating individual applications every 6 months or less frequently prior to using DevOps

65% Percentage of organizations updating individual applications every 3 months or more frequently after using DevOps

Top DevOps Impacts on IT Operations

- Faster & more frequent code changes
- More dynamic infrastructure usage
- Traditional management strategies won’t scale
- Automation required
Automation Required to Keep Up with DevOps Driven Change

85% of IT Operations Decision Makers believe automation is mission critical or very important for DevOps strategy.

Most important attributes of automation for cloud & DevOps:
- Ability to keep up with constant DevOps code changes
- Ability to continuously scale and grow environment
- Ability to take advantage of open source innovation

Source: IDC Next Generation IT Infrastructure & Management Survey

Frequency of change:

Predictability of change:

N=981 IT Operations Decision Makers that believe automation is mission critical or important for DevOps
Source: IDC Next Generation IT Infrastructure & Management Survey

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DevOps Workloads Will Run in Multicloud Environments

**86%**

Automation is either mission critical or very important to their future cloud strategy

**77%**

See public cloud IaaS as a primary platform for new applications

The average number of clouds (public and private) that enterprises expect to use by 2020: 5
Infrastructure Agility Is Critical To DevOps Success

79% of IT organizations will need to deploy new management and automation software between now and 2020.

91% say infrastructure scalability & agility is mission critical or very important to the success of DevOps and cloud native application strategies.

88%
Open Source Provides Critical Innovation

VENDOR SUPPORTED OPEN SOURCE IS RANKED AS #1 SOURCING PREFERENCE FOR NEW IT INFRASTRUCTURE

38% OF TODAY'S APPLICATIONS RUN ON LINUX

84% believe open source is mission critical or very important for supporting IT strategies over next 3 years

Source: IDC Next Generation IT Infrastructure & Management Survey
Automation Enables Successful DevOps, Improves Operational Agility, and Enables IT Innovation

Reason Enterprises Cite for Deploying Net New Management & Automation:
“DevOps Requires Modern Automation”

#1 CRITERIA for Evaluating New IT Infrastructure, Including Cloud
“Ability to Improve Operational Agility”

Expected impact in improving business and IT:
“Allow IT to develop, deploy and innovate faster”
Integrated, Automated Management For Traditional IT, Cloud & DevOps: A Winning Combination

Modern Automation

Multi-cloud & VM Management

Infrastructure Lifecycle and Configuration Compliance

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