

# 2013 IT OPERATIONS OQ REPORT

## IMPROVING YOUR IT OPERATIONS QUOTIENT (OQ)

# 84%

of IT professionals said that they want to *significantly improve their IT operations management*, surveyed at the recent events - Gartner Data Center Summit (Dec 5-9 '12) and ServiceNow Knowledge13 (May 12-16 '13)

As shown by recent surveys IT Operations is now overwhelmed; by the volume, velocity and variety of change and configuration data, lacking insight or actionable information, all making change and configuration problems a chronic pain.

At the recent **Gartner Data Center Summit** and **ServiceNow Knowledge13** conferences, we surveyed over 300 IT Operations professionals, asking many of the critical questions related to IT operations management to see how effectively they manage their environments today.

More than half of the IT executives surveyed say that one of their greatest challenges comes from managing changes in their environments. Nearly 80% said that they can't automatically validate the accuracy of their deployments.

The IT OQ Report on IT Operations offers a good indication to IT executives as to whether IT ops investments have yielded desired results, using the **IT Operations Quotient (OQ)**, a metric for evaluating operational ability to support existing business services and incoming business requirements.

Today IT Ops is more likely to be at the table in executive meetings, and not just down in the bowels of the datacenter, with spreadsheets of metrics showing the success of their efforts – and, essentially justifying their own existence. This IT OQ Report offers a measure in the context of the changes that occur, and how operations responds to change.

### SURVEY RESULTS

Our questions address IT Operations performance in the context of changes that occur which are clearly lacking:

**7%** When an incident occurs, can you quickly know "what changed"?

**8%** Can you automatically validate that your release deployed accurately?

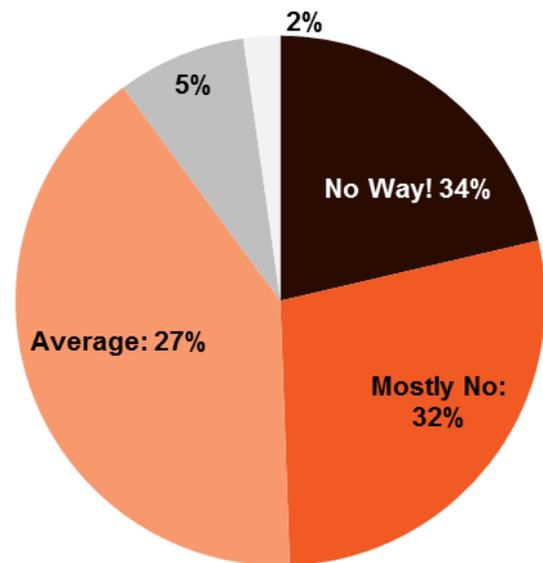
**5%** Can you quickly identify what is an incident's root-cause?

**5%** Can you automatically analyze the consistency of your environments?

“Three factors have conspired to rapidly accelerate the growth in the volumes of performance and event data that IT Operations teams are expected to take into account. First, **IT systems have become increasingly modular and distributed**. Second, with the adoption of agile style development methodologies, the rate at which systems change has also increased dramatically. Third, monitoring technologies capture much larger volumes of data per time period.” *(IT Operations Analytics Technology Requires Planning and Training – Gartner: Dec 2012)*

configuration data and frequent changes, this question has become quite formidable.

“In the past, only a small sample of performance and events was required in order to obtain an accurate picture of system behavior. However, since system elements have both increased in number and function largely independently of one another, the size of sufficiently revelatory samples has had to increase.” *(IT Operations Analytics Technology Requires Planning and Training – Gartner: Dec 2012)*



**When an incident occurs, can you quickly know "what changed"?**

**only 7%**

**of IT professionals surveyed can quickly identify "what changed".**

**Only 7% of the professionals surveys indicated that using their current IT management tools could they quickly identify what changed in order to respond to problems and incidents.**

The first question IT operations asks themselves when an incident occurs is "what changed?" Due to the complexity and dynamics taking place in the modern data center, with overwhelming

For IT Operations, managing the configuration of multiple environments still feels like a nuisance. Between applications, environments, and individual instances, mistakes and unauthorized changes happen, demanding that IT ops spend significant amounts of time managing configuration values.

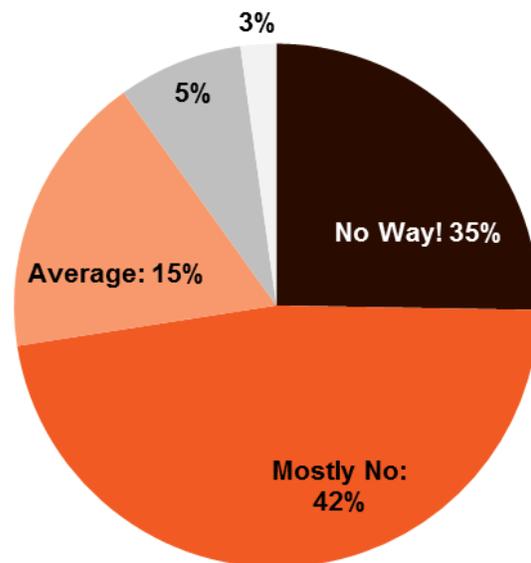
For IT Operations, change takes place at every level of the application and infrastructure stack, pushing IT to stay on top of an ever-growing collection of information and environment content. Without systems to manage and organize this growth, IT will drown in its own data.

Traditional IT management tools were not designed to deal with the complexity and dynamics of the modern data center. None of these tools have been automated to collect data down to granular details, analyzing all changes and consolidating information to extract meaningful information from the sea of raw change and configuration data.

**Can you automatically validate that your release deployed accurately?**

**only 8%**

**of IT professionals surveyed can validate the accurate deployment of a release automatically.**



**Only 8% of the participants surveyed agreed that they could currently automatically validate the accuracy of their deployments. Available release management tools are unprepared for one-off changes or changes that do not follow policy.**

IT organizations regularly transition changes to production environments, checking changes throughout a set of pre-production environments.

Now IT is under even more pressure. To meet business requirements, application deployments have accelerated and software deployment schedules have driven up high-paced change activity. The increasingly agile nature of application and infrastructure change requests, leaves IT operations at a loss as they are inundated by change requests that run the gamut from the critical and high priority to the minor and unimportant.

With a typical environment having thousands of different system configuration parameters, any little change can impact performance. So it's not surprising to see many companies going through painful stabilization periods after a release, as well as production outages.

Even when using automated tools for deployment, the lack of detailed visibility into the release means IT ops can't ensure accurate, error-free deployments.

While automated deployment scripts account for differences between test and production environments, a mistake in parameterization can result in an incorrectly-set configuration parameter, impacting system performance. Operations teams still need to spend long hours tracing issues to particular changes in automated deployment scripts, trying to understand why (and where) performance was affected.

IT Operations managers expect (or hope) to see that changes are consistently and accurately transitioned between environments. However, as incidents still regularly occur in production following such changes, and many incidents are related to the configuration not being synched with the live environment, environments must be validated following changes, to narrow in on configuration consistency issues.

How can systems' configurations be validated, and automatically take updates into consideration or correct any ad-hoc changes? IT Operations needs to improve the integrity of releases by validating releases over the application lifecycle.

**Can you quickly identify what is the incident's root-cause?**

**only 5%**

**of IT professionals surveyed can quickly identify an incident's root cause.**

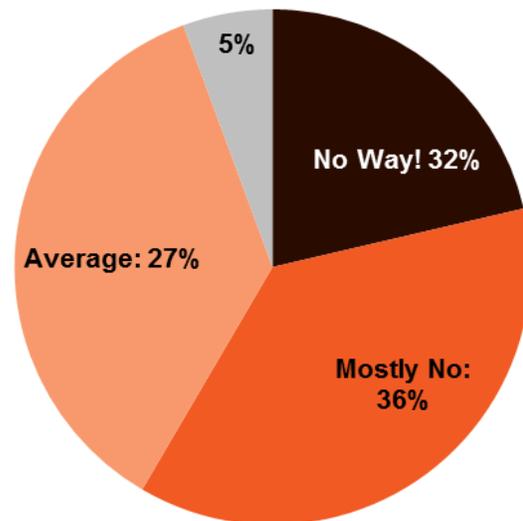
**As shown in this survey, the vast majority of the IT professionals surveyed concurred that they lack the capabilities to quickly identify an incident's root-cause. IT organizations find themselves challenged when assessing system failure and tracking down the root cause, such as if a patch wasn't deployed or a server failed.**

Recurring outages and major incidents can prove to be a nightmare for IT organizations. Any minute mis-configuration or omission of a single configuration parameter can quickly lead to an incident with high impact. With an infinite number of these configuration parameters in play when an environment incident hits, finding the root-cause consumes both precious time and manpower, making MTTR woefully high in most organizations.

The root-cause of downtime and incidents often start at the most granular level of configuration changes where today's configuration management and change management tools don't provide visibility.

After a major incident, root cause analysis should be conducted, focusing on root-cause analysis of the failure in order to not only resolve the incident but to head off a recurrence.

Even when IT teams manage to suppress a failure, and operations can return to 'normal', the true root cause may still remain unresolved, leaving the organization exposed to further chaos.



Yet the different groups in the organizations, like IT Development, Support, and Operations, tend to point the finger of blame for issues, and fail to diagnose or deal with the root cause of the problem.

Troubleshooting an incident early on is critical to really understand what went wrong, and why, in order to take actions toward rectifying this in the future.

By focusing on the most granular level of configuration parameters, probing into the deepest levels, valuable information can be uncovered for identifying the real causes of the incident.

This is why IT struggles to discover hard-to-determine root causes of performance problems or faults.

Can you automatically verify the consistency of your environments?

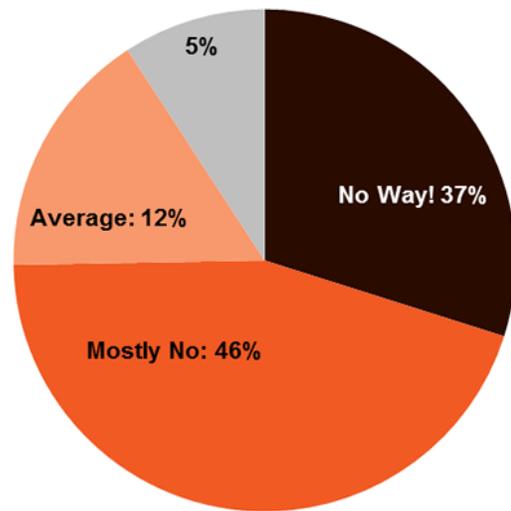
only **5%**

of IT professionals surveyed can automatically verify environment consistency.

From our survey, only 5% of the respondents felt that currently they can automatically verify the consistency of their environments, where they need to go into the fine, granular details and identify the make-up of even minor changes, having to process the enormous amounts of configuration data, for verifying the consistency between servers and environments.

For IT Operations, keeping servers and environments consistent is a constant challenge. When IT rolls out system updates or deploys upgrade patches, now happening weekly or daily, the configuration parameters must be validated for consistency in real-time.

As IT organizations regularly transition changes to production environments, IT teams need to check changes throughout a set of pre-production environments that can include system test,



performance test, UAT, staging, etc (changes are also mirrored in a Disaster Recovery environment). The high volumes of changes means that not all changes consistently make their way to all environments (pre-prod, prod, DR).

IT has sought to diversify their workloads, spreading deployments over multiple IT environments to mitigate risk, yet also doubling complexity.

How then do you track and maintain consistency of changes across the highly disparate Development, Testing, Staging, Production and Disaster Recovery environments?

## Evolgen Helps

With performance at risk from any disruptions to stability, you need to know exactly what has changed in an environment.

Managing IT environments with intelligent automated analytics will drive more sophisticated proactive processes like comparing environment states, validating releases, and verifying consistency of changes, helping to prevent or identify critical issues. So rather than continue to feed bloated system tools, IT Operations should strive to simplify and implement configuration management based on IT Operations Analytics, and turn the situation around from what can't be managed to being what can be done about performance and availability.

- Dynamically capturing all change configuration information automatically across IT environments, Evolgen IT Operations Analytics analyzes and displays change information in a single point of view on **what changed** across end-to-end environments, prioritizing and helping to pinpoint risky changes.
- Ensuring that changes and releases are accurately deployed, Evolgen's **release validation** capabilities allows IT Operations to verify accurate transition of key release configurations, validating that individual changes, patches and releases are applied accurately and consistently to avoid performance and availability issues and unnecessary stabilization time.
- Evolgen advances **environment incident investigation**, quickly identifying configuration changes and differences that are the incident's root-cause. Incident management teams can execute comparisons of the problematic environment to identify granular changes or discrepancies that might have triggered an incident.
- Evolgen automatically **verifies the consistency of environments**, comparing pre-prod, production and disaster recovery environments using Consistency Analysis to detect inconsistencies.

## About the 2013 IT OQ Report

While engaging more than 300 IT professionals at both the **Gartner Data Center** conference in Las Vegas (December 5-9 2012) and the **ServiceNow Knowledge13** conference in Las Vegas (May 12-16 2013), Evolgen gathered insights and valuable real-life IT experiences for this study. Titles of those surveyed included Manager IT Operations, IT Director, Senior Manager IT Infrastructure, Data Center Manager, and Senior VP of Information Technology.

## About Evolgen

Evolgen's IT Operations Analytics provides intelligent answers to key IT operations challenges: how to accelerate incident resolution, how to avoid harmful and risky changes, and how to assess and optimize IT operations performance.

Evolgen's new analytics approach to the chronic change & configuration challenges dramatically minimizes the risk of downtime and slashes incident investigation time.

Leading industry analyst, Gartner selected Evolgen as a 2013 Cool Vendor in IT Operations Management recognizing Evolgen as "the only vendor to marry IT Operations Analytics to configuration and change management". Adding to this recognition, other industry analysts have recognized Evolgen for "transforming change and configuration management" and as the "Industry's most adaptive change management analytics."

## SCHEDULE A DEMO

See our IT Operations Analytics software in action!

[sales@evolgen.com](mailto:sales@evolgen.com)

1-888-841-5578

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