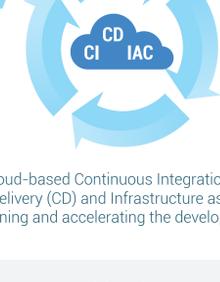


7 Benefits of Self-Healing Automation and Optimization for the Cloud



Cloud-based Continuous Integration (CI), Continuous Delivery (CD) and Infrastructure as Code (IAC) tools are streamlining and accelerating the development lifecycle.



Running your workloads on modern distributed infrastructure can come at a price.

You'll also need complete visibility into everything that's happening in your cloud environment, such as:



User access privilege changes



Unused and underutilized resources



Publicly accessible

Significant challenges in terms of managing cost, security, and compliance happen as you scale.

Using automated cloud optimization and self-healing tools can help enterprises stay on top of their IT infrastructure.

Key Benefits and Considerations

1

Less Management Overhead

Managing a fast-changing enterprise cloud environment demands continuous attention to tasks like:



Sizing and resizing instances



Allocating and reallocating workloads



Provisioning volume sizes of block storage



Purging old backups that are not needed



Enforcing security policies



Locking down resources

You'll also need to oversee a variety of other aspects of your infrastructure, such as:



Analytics



Database



Networking



Content delivery services



Cloud optimization and self-healing tools make this whole process significantly quicker and easier.



They monitor your infrastructure and identify configurations and settings that aren't in line with best practices.



They can then enforce policies by performing self-healing tasks, let you review actions before they're fixed, or even proactively act based on your predetermined specifications.

2

Highly Responsive

Automation can provide almost instant responses to undesirable or potentially harmful changes in your infrastructure



This can reduce costs and address vulnerabilities.

Automated procedures can:



Rebalance and resize instances and machines



Maintain cost-efficient database cluster sizes



Stop and start instances, in line with usage



Avoid unnecessary delays involved in protracted manual procedures.

3

Full Topographical Coverage

You cannot optimize or secure cloud resources that you don't know you have.



Cost and security management tools eliminate the problem of human error and always ensure you have complete visibility into environment.



Automation gives you full topographical coverage of all your cloud deployments. Reduce complexity of managing data from many disparate sources.



Keep tabs on cloud cost and security at all times.

4

More Consistent and Reliable

With automation, you can take a less active approach to managing your cloud.



Receive proactive reminders and alerts to optimize your cloud..



Ensure consistent, efficient task execution—every time.



Implement best practices such as enforcing strong passwords and tagging policies.

5

More Robust Infrastructure

Cloud automation also helps you to maintain a stable, fault-tolerant IT environment.

For example: They can create Amazon Machine Images (AMIs) from your EC2 instances, so you can launch duplicate versions of your servers, which you can use to:



Enhance your infrastructure resiliency



Add more capacity to handle an increase in workload



Terminate unhealthy instances and replace them

6

Deeper Insights



Intelligent automated cloud solutions can alert you to potential security threats, compliance issues, and wasteful infrastructure expenditure.



They can also make recommendations on configurations, such as instance sizes, so you don't have to manually calculate before you can make a decision.



Comprehensive cloud management tools will have the capability to consolidate all your cloud data, from different accounts and vendor platforms, into a single pane of glass.

7

Highly Scalable



As your infrastructure scales, so does the complexity and time overhead required to manage it.



Automated cloud management offers a more sustainable, long-term solution than manual management.

Automated cloud management tools offer you the freedom to grow, scaling with your cloud and requiring relatively little additional time and effort.

Conclusion

Cloud users may feel that automation represents a loss of control over their infrastructure. But, if anything, the opposite is true.



With any viable cloud optimization solution, you can tailor your level of automation.



You can also stay informed of all changes via email or your cloud management console.



WITH THE RIGHT CLOUD AUTOMATION SOLUTION, YOU CAN OPERATE IN THE CLOUD WITH CONFIDENCE.