My Cloud Environment is Always Changing – How Do I Track That Change and Why Should I Care About It?

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Many organizations move to the cloud to take advantage of economies of scale and cloud elasticity, modernize their processes using agile methodologies, and move from monolithic applications to a microservice-based architecture.

Enterprises have been dealing with operating systems and applications in data centers for many years. Applications and the underlying infrastructure in the on-premises environments generally have consistent change patterns and recurring update schedules — making it easy to plan for a change. Systems are patched monthly, application updates are executed quarterly, and there are typically firmware updates sprinking throughout a year. Typically, someone will open a change request, discuss the change in the Change Review Board, implement and test the change, and then finally close the change request once it is confirmed as successful.

IT organizations have been doing this for years and the process mostly works. So why the process can't just be repeated in your cloud environment?

Highlights

The Cloud Challenge
The elastic nature of a Cloud environment inevitably means that things are constantly and rapidly changing – making change related IT processes ineffective.

Flying blind without visibility into the actual changes will eventually lead to severe performance, security and compliance incidents.

Sirius & Evolven
Sirius and Evolven joined forces to help address the challenge of managing change in clients' dynamic environments.

The Result
With Evolven, Sirius can easily correlate a changed item to the incident the change was causing, and to significantly reduce the recovery time for our client issues.

Changes Occur All the Time in the Cloud.

Differing significantly from an on-premises data center, the elastic nature of a cloud environment inevitably means that things **are constantly and rapidly changing**.

In on-premises environments, all the key application and infrastructure resources are tracked in a CMDB (typically updated manually). With cloud there is autoscaling that can add and remove resources based on usage. **Servers, in many cases, become ephemeral**.

A **DevOps** approach and Agile methodologies enable small changes to be implemented easier and much faster. Companies no longer have to wait for major application updates; the updates process is part of how the application is delivered in the cloud.

Many cloud services don't fit the legacy way of managing changes, either. For example, **serverless applications** don't even have regular resources to track changes against. **Containers** spin up and down frequently, sometimes updating multiple times a day.

Your cloud environment is continually changing, and as a consumer of cloud resources and services, you must have visibility into those changes to ensure business continuity and efficient performance.

Flying blind without visibility into the actual changes will eventually lead to severe performance, security and compliance incidents. Traditional CMDB can become outdated almost immediately and ITIL-based change management is too slow to support agile processes.

How Does Sirius Computer Solutions Track Change for Clients as Part of Our Managed Services?

The Cloud and Managed Services team at **Sirius** architects, designs, implements, and manages multiple Amazon Web Services (AWS) accounts for many clients. Sirius realizes that monitoring the performance and availability of applications and services is not enough. As clients continuously adapt and increase their cloud presence, staying on top of the frequent change in their environments can become a challenge. **Because change is a major cause of most stability issues, we need to know what actually changed to recover faster from these issues and prevent issues resulting from changes**. Sirius also needed a better way to track and report frequent and rapid changes in our clients' cloud environments. Having the capability to track the changes helps us keep clients' environments auditable — what changed, when did it change, and who changed it — which is important for compliance and security purposes.

Sirius and Evolven joined forces to help address the challenge of managing change in clients' dynamic environments. Integrating with Sirius' ITSM platform, Evolven alerts Sirius when unexpected or unauthorized changes occur. Evolven Change Analytics, based on AI and machine learning, detects the potential risk of changes early, enabling our support team to prevent performance and availability issues. When an incident was reported previously, engineers had to review logs to determine a root cause. **With Evolven, Sirius can easily correlate a changed item to the incident the change was causing**. Evolven makes it easy to identify the historical configuration value before a change, when the change occurred, and who made the change. This information used when troubleshooting incidents, **helps to significantly reduce the recovery time for our client issues**.

By leveraging our combined strengths with Evolven, Sirius Managed Services powered by AWS can better respond and operate in our clients' ever-changing cloud environments.