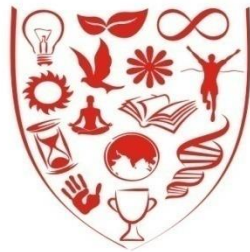# CLOUD COMPUTING

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- Cloud Governance

- Need of Cloud Governance

- How Cloud Governance work?

- Database Creation

Cloud Governance

- When you run a business in the cloud, there are a few rules you have to comply with.

- Generally, these rules relate to personal privacy and data security, and they can vary according to the industry you operate in.

- Typically the rules are no different from those you have to comply with when you run a business on an on-premises IT infrastructure. It's only the landscape that is different.

WHY LANDSCAPE IS DIFFERENT

- This is because, when you run a business on an on-premises IT infrastructure, you know what your capital costs are and have a fairly good idea about your month-to-month operational costs.

- You also know departments will be running the software, applications, and programs that have been approved for them.

- In the cloud, different departments can develop their own systems and deploy assets with the click of a mouse.

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WHY LANDSCAPE IS DIFFERENT

- You may no longer have to worry about capital costs, but your operational costs can get quickly out of hand without controls in place.

- The software, applications, and programs deployed by one department may not be able to communicate with those deployed by another department.

- A lack of controls not only creates issues with costs and efficiency, but can also raise security concerns.

NEED OF CLOUD GOVERNANCE

- With an on-premises IT infrastructure—your business network was protected from many security concerns by a firewall.

- There are no firewalls in the cloud. This is why you need cloud governance.

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WHAT IS CLOUD GOVERNANCE

o It is a set of rules.

o These rules of cloud governance should consist of budgets for how much departments can spend.

o Guidelines about what software, applications and programs departments can use.

o policies for cloud security

COMPLIANCE

○ Then compliance with the rules needs to be monitored. This can be achieved via many different types of cloud management software

○ If you operate in a multi-cloud or hybrid cloud environment (or plan to), it is better to use a third party cloud management solution—rather than software supplied by cloud service providers—in order to give you total visibility of all your business's cloud activity.

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COMPLIANCE

- As you monitor compliance with the rules, you may notice areas that could be tweaked to improve cost-efficiency or performance.

- It may also be the case that, as you expand your cloud-based operations, you need to make changes to the rules you have created in order to accommodate new products and services.

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WHAT YOU NEED TO KNOW BEFORE?

- Before you start creating rules of governance, you need to know what assets are already deployed in the cloud, how they work together, and what security risks exist.

- The best way of doing this is to use a cloud management solution that gives you total visibility over your cloud account(s).

- You should then optimize your assets for costs and performance to get a starting point for future capacity planning and budgeting.

CLOUD GOVERNANCE AUTOMATION SOFTWARE

- Cloud governance automation software is a useful element of some third party cloud management solutions that executes predetermined actions when a governance rule is violated.

- Cloud governance automation software can be configured to notify you of a violation, request approval for an event beyond the parameters of your governance rules, or automatically terminate an asset.

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EXAMPLES OF HOW IT WORKS?

- Let's say you have allocated a monthly budget to a department. You can create a policy to notify you (and/or the budget owner) when monthly costs to date are projected to exceed the budget so the overspend can be investigated.

- Or, you have stipulated the development team cannot launch non-production Virtual Machines with more than 4 cores without approval. As soon as an 8 core VM is launched, it is suspended until you approve the deployment.

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EXAMPLES

- Or, if during the monitoring process of an AWS account, the software identifies an account with root account API access, the software can be configured to execute function to revoke user access and notify you of the violation.

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Conclusion

- Effectively, cloud governance automation software removes much of the work involved in cloud governance, helps you create a more cost-effective and efficient environment, and alerts you to potential security issues before they develop into serious concerns.

DATABASE SERVICE IN AWS

- Use RDS for creating database
- Download SQL Client in VM
- Connect database with SQL Editor
- Execute SQL Queries

THANK YOU!!!