

Costs – Cloud computing vs. On-Premise model, A comparison

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Introduction:

Identifying the costs involved to migrate an existing IT enterprise infrastructure or setting up a new enterprise infrastructure in cloud is often a daunting task. But, there are several methods to identify them. This write up deals with identifying the costs involved in maintaining a datacenter inhouse vs. in cloud, its commonalities, differences and details on the costing for software licensing for the cloud platform.

On-Premise datacenter costs:

In order to maintain an on-premise datacenter, it involves costs such as real estate, property taxes, telecommunications costs which includes Internet, fiber optics and network hardware, power supply and backup, cooling systems, security, hardware acquisition, Software licensing, Hardware and Software Maintenance, IT Staffing, Network Operations Centers and costs associated for risks which includes SLA payments, Disaster recovery and security breaches.

Cloud datacenter costs:

The cloud datacenter costs include Software licensing, Software Maintenance, IT staffing, Cloud hosting fees and costs for risks which includes SLA payments, Disaster recovery and security breaches.

Common costs:

Both Cloud and On-premise datacenter has some common costs associated. For instance, the software licensing fees paid, Software maintenance, staffing costs which includes Network engineers, Application database engineers, Security engineers and costs for risks such as SLA violations, Disaster recovery and security breaches.

These costs may vary for cloud platform; however, these are some of the common costs which incur for both inhouse and cloud platforms.

Out of the costs discussed above, risks payments may increase for cloud model since guaranteeing the SLA, server down time, disaster recovery and security are completely in control with the Cloud provider and not with the subscriber.

Costs which differ for both the models:

Even though there are commonality in costs for both the models, there are differences as well. For instance, the costs for real estate, power supply and backup, cooling, hardware maintenance, costs for staffing which includes maintenance engineers for datacenters, network operation centers, server and storage are applicable only for On-Premise model. Whereas, costs for Cloud subscription and professional costs for hosting applications and datacenters in cloud is an exclusive cost for cloud model.

Other variables to consider:

While considering the costs discussed so far most of the firms underestimate the following costs while moving to cloud from the on-premise enterprise model.

There will be costs to maintain the on-premise datacenter, costs associated to develop and deploy applications and maintenance costs during the migration phase to cloud. This is a considerable amount of money which needs to be accounted.

Also, the costs involved to train the existing associates and reengineering the legacy enterprise applications may play a major role in costing.

Software licensing for Cloud:

Software licensing for cloud model is way different from the traditional inhouse version. The enterprise may pay the costs for Software licensing in full to the vendors and as per the agreement they can use that for application development, the down side is the firm may end up paying full price even though the software is less used for the development. This is termed as “Perpetual software licensing”.

The organizations may want to use the software month on month or year on year depends on their requirement and they may get the licensing based on that. This model is called a “Subscription model” and it is better compared to “Perpetual licenses”.

The most preferred model for cloud is “Pay-per-use” and as the name suggests the user will pay only for what they consume and it is a win-win for both the subscriber and provider in a longer term.

Conclusion:

An enterprise needs to research on the costs discussed in this paper before taking a decision on cloud migration. By carefully investigating the costs, the firm can effectively decide on the ROI and on hosting their application in a public/private or hybrid cloud model or to continue on-premise.

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