

# Best Practices for Getting Ready to Go “All-in” on the Cloud

To ensure an application migration to the cloud goes well or that a company should even migrate a specific application to the cloud requires a thorough understanding of each application. This understanding should encompass what resources the application currently uses as well as how it behaves over time. Here is a list of best practices that a company can put in place for its on-premises applications before it moves any of them to the cloud.



1. ***Identify all applications running on-premises.*** A company may assume it knows what applications it has running in its data center environment. However, it is better to be safe than sorry. Take inventory and actively monitor its on-premises environment to establish a baseline. During this time, identify any new virtual or physical machines that come online.
2. ***Quantify the resources used by these applications and***

**when and how they use them.** This step ensures that a company has a firm handle on the resources each application will need in the cloud, how much of these resources each one will need, and what types of resources it will need. For instance, simply knowing one needs to move a virtual machine (VM) to the cloud is insufficient. A company needs to know how much CPU, memory, and storage each VM needs; when the application runs; its run-time behavior; and, its periods of peak performance to choose the most appropriate VM instance type in the cloud to host it.

3. **Identify which applications will move and which will stay.** Test and development applications will generally top the list of applications that a company will move to the cloud first. This approach gives a company the opportunity to become familiar with the cloud, its operations, and billing. Then a company should prioritize production applications starting with the ones that have the lowest level of impact to the business. Business and mission critical applications should be some of the last ones that a company moves. Applications that will stay on-premises are often legacy applications or those that cloud providers do not support.
4. **Map each application to the appropriate VM instance in the cloud.** To make the best choice requires that a company knows both their application requirements and the offerings available from the cloud provider. This can take some time to quantify as Amazon Web Services (AWS) offers over 90 different VM instance types on which a company may choose to host an application while Microsoft Azure offers over 150 VM instance types. Further, each of these provider's VMs may be deployed as an on-demand, reserved, or spot instance that each has access to multiple types of storage. A company may even look to move to serverless compute. To select the most appropriate VM instance type for each application

requires that a company know at the outset the capacity and performance requirements of each VM as well as its data protection requirements. This information will ensure a company can select the best VM to host it as well as appropriately configure the VM's CPU, data protection, memory, and storage settings.

**5. *Determine which general-purpose cloud provider to use.***

Due to the multiple VM instance types each cloud provider offers and the varying costs of each VM instance type, it behooves a company to explore which cloud provider can best deliver the hosting services it needs. This decision may come down to price. Once it maps each of its applications to a cloud provider's VM instance type, a company should be able to get an estimate of what its monthly cost will be to host its applications in each provider's cloud.

Companies have good reasons for wanting to go "all-in" on the cloud as part of their overall business and IT strategies. But integral to both these strategies, a company must also have a means to ensure the stability of this new hybrid cloud environment as well as provide assurances that its cloud costs will be managed and controlled over time. By going "all-in" on software such as Quest Software's [Foglight](#), a company can have confidence that its decision to go "all-in" on the cloud will succeed initially and then continue to pay-off over time.

*A recent white paper by DCIG provides more considerations for going all-in on the cloud to succeed both initially and over time. This paper is available to download by following this [link](#) to [Quest Software's website](#).*