



# Creating your private cloud ▶▶

Using Sumerian Capacity Planner

## The challenge

Private clouds offer many benefits to both computing end-users and providers. However a recent Gartner Report, titled "Six Reasons Private Clouds Fail, and How to Succeed", published on 25 October 2014, highlighted some key recommendations to ensure organizations reap the benefits of a private cloud.

According to Gartner, "some deployments are successful, but many (and perhaps most private cloud deployments) are too expensive, do not meet enterprise requirements, are too complex and so forth."

"Cloud computing provides benefits to both the provider and the end user. For the provider, standardization of technologies and offerings and automation of menial and common tasks will drive down operating expenditure (opex) costs. Efficient resource utilization through virtualization, automated reallocation and resource sharing drives down capital expenditure (capex) costs."

Gartner recommends that organizations "design and deploy private cloud services in an evolutionary way, incubating staff and processes appropriately and expanding the services incrementally based on changing demands".

The Gartner research recommends that organizations "identify the right use cases, and optimize the design of a private cloud service for those requirements that are standard and common and that require the most agility (bursty or short-lived)."

Therefore, it is important for an organization considering private cloud, to ensure that they are able to meaningfully compare cloud providers and understand and plan the migration of workloads (i.e. VMs) to their selected cloud platform. It is also important to be able to use the same capacity planning tools for both their 'traditional' IT infrastructure and their private cloud on an on-going basis, to ensure sufficient capacity exists to meet dynamic business demands.

## Sumerian solution

Cloud providers use a mixture of terminology to describe their 'flavors' (e.g. small, medium or large) of compute and storage offerings. Much like clothes shopping, a 'large' from one vendor might be a 'medium' from another. This means it is often tricky and time-consuming to meaningfully compare one to the other.

Sumerian Capacity Planner allows organizations to easily model these different flavors to rapidly understand how they compare to each other, and how many they will need to support particular workloads. And also letting them quickly understand the ongoing OpEx implications of the various options.

Building an accurate plan for migrating workloads as part of a managed process (and being able to clearly communicate these to all stakeholders) is key to making a success of migrating to a private cloud. Sumerian Capacity Planner allows organizations to easily create application or service specific views to clearly understand the demand generated by the components within the application/service. Using that accurate data, various migration scenarios can then be quickly created and tested to find the optimal migration plan. This detailed plan, which forms the foundation of the project plan and task list, can then be socialized with all stakeholders as a Word document.

Migrating workloads to a private cloud is only the beginning—as it's important to remember that, despite the hype, cloud resources are finite. Therefore, it's vital to give the same attention to private cloud infrastructure as is provided to 'traditional' IT, so that organizations are aware of capacity events and constraints before they impact on service. Using advanced machine learning algorithms and pattern matching techniques, Sumerian Capacity Planner warns of upcoming capacity events (such as compute constraints on memory/CPU or storage constraints such as IO and disk space). Despite the fact that, in cloud computing, VM lifespan is sometimes measured in hours or minutes compared to years in 'traditional' IT, Sumerian Capacity Planner factors this short-lived demand into the cloud's long term capacity forecasts. This allows organizations to take preventative action and offers a step-change in capability from 'fire-fighting' to 'fire-prevention'.

## Client results and value

Sumerian Capacity Planner allows organizations to have a unified view of infrastructure across both private cloud and 'traditional' IT. This allows organizations to manage capacity holistically and consistently with the minimum of fuss using log data that already exists.

This hardware and hypervisor independent capability, conveniently offered as a Software-as-a-Service, provides a key strategic tool for comparing private cloud options, planning migrations and managing capacity.

In turn, this allows the IT function of an organization to quickly respond to dynamic business needs for new services and additional demand.

We believe that by following Gartner's sage advice on private cloud adoption and by using Sumerian Capacity Planner, you can take significant steps towards making your private cloud a success.

▶▶ **More information**

To find out more about Sumerian Capacity Planner, just give us a call on 0131 226 9300, drop an email to [sarah@sumerian.com](mailto:sarah@sumerian.com) or visit our website at [www.sumerian.com](http://www.sumerian.com)