



Modeling for growth ▶▶

Using Sumerian Capacity Planner

The challenge

With complex IT infrastructures supporting multiple application workloads, it's challenging to understand the consequential effects of changes in demand, and the infrastructure changes required to support them. As working environments grow increasingly complex, allocating capacity to absorb growth is likely to cause a ripple effect throughout your environment.

Capacity planners are faced with a dilemma; if they provision more than is really required, there will be surplus cost and wastage. Conversely, if demand exceeds expectation, outages and performance issues will likely occur.

It is essential to be able to quickly model the probable impact of a planned increase in demand. By accurately forecasting the required infrastructure resources, you can optimize the utilization of existing resources, along with any required additional investment, while ensuring service performance that meets user expectations.

Sumerian solution

Using the modeling for growth capabilities of Sumerian Capacity Planner, you can quickly understand how many additional instances of various workloads you can fit onto your current estate, and accurately model the impact of planned future growth.

By importing data from across your environment, a comprehensive Baseline is created which acts as the foundation for all of your Forward Thinking scenario modeling. The Sunburst visualization gives you a clear hierarchical overview of your datacenters, clusters, hosts and VMs—showing headroom for growth and telling you how many more average VM's you can accommodate before running into IO, memory, storage or CPU constraints.

Whether you are onboarding new customers, internal users, or adding specific types of server, each workload type will have a different demand profile. By creating a Workload Template based on a demand profile, you can accurately predict how many more VMs of that type you can fit on to your environment.

You can then go further and lay out expected growth over a timeline of weeks and months, planning out the addition of different types of workload at various points in time (for example, add 10 new "Heavy Profile VDI Users" every week, plus 2 new "Medium DB Servers" every month). Sumerian Capacity Planner will inform you of how much resource you're consuming at each point in your plan, while identifying any shortages.

If there is a shortfall, you can address any resource constraints by modeling the introduction of new servers, additional shared storage, or upgrade the configuration of existing components. This allows you to see the impact of adjustments, and precisely understand what you need to change, and when. You can then export your planned timeline, including details of proposed changes, with a before and after picture to share with relevant stakeholders.

Client results and value

With many risks involved in managing growth, not having the intelligence to minimize these risks causes significant issues. The companies we work with have turned to predictive analytics to help—using real data as the basis for statistically modeling each growth scenario. This gives them the confidence to make the right decisions, while having the agility to quickly modify plans as changes inevitably arise.

Armed with capacity forecasts that are precise, rather than being based on guesswork or averages, they are able to optimize the use of their existing estate and be confident to only invest in precisely the additional capacity they really require. The results have been transformational—letting them run leaner operations and significantly reduce costs.

▶▶ **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 or visit our website at www.sumerian.com