

Introduction to Sumerian's Capacity Planning as a Service

Optimize your IT infrastructure, use your data to predict problems, target investment and reduce costs with Capacity Planning as a Service (CPaaS).

In today's complex virtualized IT environments, it is increasingly difficult to maintain an accurate picture of your infrastructure capacity, keep it aligned and optimized to changing business needs and avoid capacity related downtime or outages.

Sumerian's Capacity Planning as a Service (CPaaS) brings a fresh approach to capacity planning and management, Delivered as a self-service SaaS model, CPaaS is an intuitive agent-less SaaS application that analyses the infrastructure data that already exists in traditional, cloud and hybrid IT environments. It will highlight areas of infrastructure that need attention right now. It will detect complex growth trends and predict potential capacity related outages, weeks in advance. And it provides best-in-class 'what-if' Forward Thinking® scenario modelling capabilities to understand the impact of change on your infrastructure.

Sumerian CPaaS has been ranked No. 1 in the market for strategy, innovation, customer satisfaction and value vs price (Research in Action, 2016).

Regain Control of your infrastructure, your services, using your data with our CPaaS service

Whether you are planning a technology refresh or cloud migration, concerned about upcoming business demand or optimizing infrastructure resources to save costs, Sumerian CPaaS provides the evidence to allow you to implement change with confidence.

PREDICT PROBLEMS

Large global bank

More than 300 service outages avoided on critical systems within a year



REDUCE COSTS

Global financial services firm

30% incremental reduction in annual operating costs from datacenter rationalization



Life Science company

24% reduction in implementation costs for datacenter transformation



Global hosted service provider

50% reduction in resources required for P2V technology refresh



OPTIMIZE INFRASTRUCTURE

TARGET INVESTMENT

With no agents to deploy, no hardware or database licenses to acquire you can be modelling your change scenarios, avoiding critical outages and determining optimisation and cost saving strategies within days or hours, not months.

Subscribe to CPaaS monthly using the service options that best suit your requirements. If you need some extra data science help, our award winning analysts are always available to lend a hand.

Our SaaS approach means that all the heavy lifting of data management, storage and modelling is dealt with by us. Leaving you to focus on the task at hand and addressing growth challenges of your organization.

By combining our advanced software with a highly flexible range of value add, expert services, CPaaS helps customers to implement a robust and integrated capacity planning framework, and build up their capacity planning capability at a level and pace that suits.

Our ISO 270001 accreditation gives you the peace of mind to be sure that your data is safe and secure.

Connecting Business with IT operations by informing ITSM

Sumerian CPaaS also integrates with ITSM platforms such as ServiceNow, providing an understanding of capacity and outage risk from a service perspective through the ServiceNow UI. Allowing Service Managers to prioritize their attention and reduce the risk of outages on business critical services.



Deep-dive analytical services determine the correlation between service demand and infrastructure allowing you, via the SaaS Sumerian Capacity Planner tool, to predict the impact of business demand on infrastructure resources and, by integrating with the change management process, provide the evidence need to ensure the changes required are addressed.

Measurable outcomes

Our customers reduce their IT infrastructure CAPEX and OPEX spend by avoiding outages in business critical applications. Furthermore, projected costs of change programmes are significantly reduced by optimizing infrastructure configuration and rightsizing.



- Cloud Migration
- On-boarding
- Business change
- Replatforming

- Outage prediction
- Forecasting
- Service reporting
- Disaster assessments

- Rightsize spend
- Rightsize cloud
- Rightsize infrastructure
- Rightsize Services

In 3 simple steps Sumerian’s advanced predictive modeling and powerful visualizations lets you quickly and accurately:

- Baseline your current estate and assess what you have today
- Scenario model all the options and evaluate the impact of change
- Decide your optimal plan for action and export as a report

Using RESTful APIs, embed these Capacity Planning outcomes into your business workflows, informing requests for capacity, long term projections and change management.

With rapid time to value, measurable outcomes and significantly improved business processes, Sumerian CPaaS allows you to focus your attention on those parts of the infrastructure and business critical services requiring attention. Allowing you to provide the availability the business expects, when it is required and within budget.

Get in touch

If you’d like to know more about how Sumerian CPaaS can help you and your organization, book time for a dedicated demo or arrange for a free proof of concept for your infrastructure using your data, please contact sarah@sumerian.com

Why Sumerian Capacity Planner?

Customers tell us that our SaaS Sumerian Capacity Planner has transformed the way they plan, run and optimize their IT infrastructure. Here are some of the reasons why they love it:

A step change in visibility of potential capacity issues

Most tools tell you what happened yesterday or what is happening now, a few even forecast imminent issues. Sumerian Capacity Planner lets you see much further ahead.

Using sophisticated machine learning and pattern matching techniques, Sumerian Capacity Planner extrapolates utilization data from across your infrastructure and forecasts when server and storage capacity issues will occur. Time series charts give you a detailed view onto both the relevant historic data and the forecast utilization profile, and provide a confidence level in that forecast.

This means you have days, sometimes weeks, of advance warning of potential problems—letting you take mitigating actions rather than rely on urgent, and often disruptive, incident response.

An extended planning horizon into your IT future

Sumerian Capacity Planner is the only product on the market that lets you accurately assess your future IT options and select the right way forward with confidence. Its powerful Forward Thinking scenario modeling lets you create as many 'what if' models as you like.

This means you can model strategic programs such as moving to the cloud, physical to virtual transformations, changing hypervisors or different platform options. You can play out commissioning new datacenters or decommissioning hardware. The list is endless.

And because the modeling is based on real data from your environment, our proven statistical techniques provide accurate, quantified evidence you need to support any investment business case.

Disaster recovery planning

Every now and again you will have an audit. Inevitably this means you need to demonstrate to the Business Continuity guys what your DR plan is and prove whether it will work—not an easy thing to do. With Sumerian Capacity Planner's advanced modeling, you can conduct an Infrastructure walk through of a DR event. You can simulate a datacenter failure or a hardware failure, and demonstrate the impact. Determine what can and cannot be recovered, then export all information to a report—ideal for a Business Continuity audit.

Four weeks work now done in an hour!

The accuracy of our predictive analytics and modeling

We have been working with customers applying analytics to help them with IT infrastructure planning and transformation programs for years—so we really know how this stuff works and the best techniques to apply. All that know-how and real world experience is distilled into Sumerian Capacity Planner.

Sumerian Capacity Planner's predictions and forecasts are all grounded in the granular data captured from your existing hardware estate. You can click right through to all the underlying data at any time. It knows how to deal with the complexities of volatile capacity metrics such as Memory and CPU, and apply hardware and hypervisor recommendations in terms of capacity constraints. It applies statistics to deal with different workloads peaking at different times. It applies industry benchmarks to model different CPU architectures.

This means statistically accurate insight that you can rely on to inform your plans and decisions about your future IT.

Full coverage and vendor independence

We are not trying to sell hardware nor do we have any restrictions on the technology we work with. It doesn't matter whether you use VMware, HyperV or RedHat, physical servers or the cloud—we can cover it all. This means you get a new level of comprehensive insight across your entire environment.

New insight in hours

Because we use data that already exists, from your server logs and tooling, and because Sumerian Capacity Planner is available as a SaaS, we can have you up and running in a matter of hours. No big upfront investment or lengthy rollout required.



To find out more about Sumerian Forward Thinking® predictive capacity planning and using Sumerian Capacity Planner, just give us a call on +44 (0)131 226 9300, drop an email to sarah@sumerian.com or visit our website at www.sumerian.com

Baseline your estate and manage its capacity

Server performance scaling

Using Industry benchmarks, Sumerian's Baseline takes into account the relative performance of your different server architectures – letting you visualize the advantages of modern hardware.

Application and business level perspective

View your Baseline from a business perspective. For example by application, service or function.

Create your own profiles

You can configure your own capacity constraints to apply to the Baseline – both logical and physical – changing physical memory and CPU limits, vCPU to Host CPU ratios and more.

Powerful single view

Your entire estate (datacenters, platforms, clusters, hosts and virtual machines) are presented in a clear hierarchy giving you instant visibility into how your current infrastructure – both physical and virtual – is distributed, how heavily it is loaded and where you are over and under provisioned.

Save multiple views

Once you have configured the specific Baseline views that give you the insight you're looking for, you can save them to use again for regular review and reporting.

Create high impact reports

Generate high impact capacity reports covering your estate and publish them as PDF for easy sharing across your organization.

Accurately visualize headroom

View headroom across a service, application or platform and identify the servers and datastores that will constrain your ability to grow.

Pre-empt capacity issues

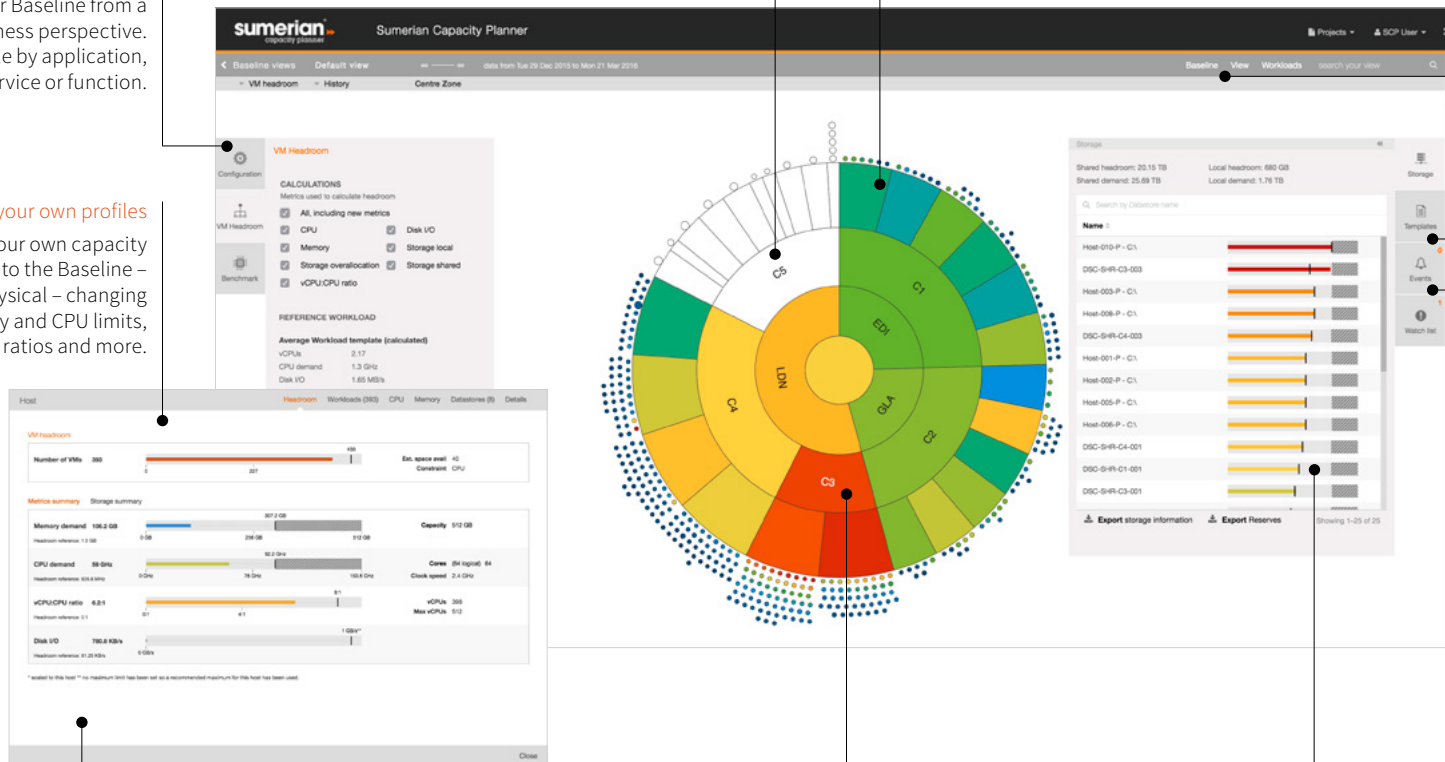
See accurate predictions of when utilization will begin to constrain capacity for growth. Based on Capacity Planner's sophisticated machine learning and pattern matching technology.

Instant visibility

Each segment's size and color lets you see the relative capacity and headroom of your different infrastructure components.

Sophisticated storage modeling

Easily see which datastores are used by each VM, and how each VM contributes to overall storage demand. Understand which datastores are close to capacity or over allocated.



Detailed drill through

The easy to interpret color scale and detailed metric drill through mean you can see all the underlying detail you want at any time, so you're confident you have the complete picture.

Forward Thinking scenario modeling

Try out as many scenarios as you like

Whether you're planning to outsource, perform a datacenter migration, P2V, hardware refresh or make a hardware vendor selection – model a whole range of different 'what if' change scenarios, and run them as many times as you like to try out all the different permutations. Then compare and save them for future reference.

Fully interactive and easy to use

Simply drag and drop to simulate migrations. The sunburst immediately changes to show you the new capacity and headroom for growth for each part of your estate.

Create plans and reports

Once you've finalized your plans you can generate a report capturing your plan and publish it as PDF for easy sharing across your organization. The report includes before and after visualizations of your estate and a detailed list of the change actions that you are planning to take.

Automated overcommit reporting

If a destination cluster doesn't have the capacity to support the new workloads you're trying to allocate, Sumerian Capacity Planner will indicate that cluster as 'Overcommit' and show you details of the amount of capacity that will need to be added across compute and storage in order for that cluster to support the new demand. You can then try modeling more changes to make space available – upgrading servers, adding storage capacity or introducing entirely new hardware.

Storage impact

Instantly see the storage impact of any proposed transformation, including P2V. Accurately determine your future storage requirements.

Model growth

Accurately model growth by adding reference VMs based on existing workload demand profiles, or upload your own standard workload configurations. Also, model the increase in application volumes using 'Demand Templates', correlating application volumes with infrastructure utilization. You can then determine when capacity constraints will prevent further growth.

Add new hardware

Make sure you invest in the right hardware to meet your growth requirements by comparing different hardware options with Host Templates, based on industry benchmark data.

Demand on source host					Demand on target host				
Workload	Host	Memory Demand	CPU Demand	Class	Check Status	Host	Storage (CPU) Demand	Class	Check Status
VM0-001	Host01	300 GB	1000 MHz	2	OK	Host01	1000 MHz	2	OK
VM0-002	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-003	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-004	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-005	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-006	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-007	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-008	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-009	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-010	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-011	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-012	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-013	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-014	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-015	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-016	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-017	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-018	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-019	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK
VM0-020	Host01	400 GB	1500 MHz	1	OK	Host01	1500 MHz	1	OK

Change tracking

Details of all your changes are automatically logged in Sumerian's Operations List. Sumerian will sort your changes into a logical running order for display in the Operations List ready for you to review, and if you decide there's a change that doesn't make sense you can simply delete it.

VM optimization

Sumerian can automatically rightsize your VMs to accommodate the workload from your old servers based on the relative performance of old and new hardware. VMs will automatically be configured based on the demand each places on its host, enabling you to maximize your consolidation ratios and cost savings.

Plan out a timeline for action

Once you've tried out your ideas for change, you might want to start planning them over a timeline. Sumerian's intuitive Timeline feature lets you plan out which changes you'll make when, and see the impact of changing the running order so you can refine your plans ready for action.