LOGINVSI

CASE STUDY

Customer Roundup

Benchmarking capacity to achieve the highest level of cost savings and performance

Fortune 500 and private companies worldwide are among the organizations represented here. They operate extensive virtual desktop setups that cater to users across multiple locations, relying on numerous business-critical applications. As a result, the End-User Computing (EUC) teams are responsible for ensuring the utmost reliability and performance to ensure business operations run seamlessly and at optimal efficiency.

Optimizing Price-to-Performance

Desktop virtualization has moved from cutting edge to the mainstream, and today is regarded as a highly mature solution for delivering secure, reliable, centrally managed desktops with many advantages over traditional PCs and laptops.

Today there are infinitely more options and complexity when implementing virtual desktops – from on-premises to hybrid and pure cloud. If you underinvest in your services, the experience and user density may suffer. However, if you overinvest, you risk wasting valuable IT budget that could be invested elsewhere.

This case study highlights how several customers utilized Login Enterprise to make smarter decisions – whether during an upgrade to existing on-premises infrastructure or moving workloads to the cloud. Regardless of where you are in your virtual desktop journey, achieving the right balance between price and performance is straightforward with Login Enterprise.

At a Glance

- **Industry**
  Various
- **Location**
  Worldwide
- **Challenge**
  Reliably manage capacity while providing better performance.
- **Impact**
  - 40% monthly savings in cloud costs.
  - Saved an estimated $3M in excess spending.
  - Confidently added more users without impacting performance.
  - Accelerated a large-scale migration project.

Migrating to the Cloud

With a business mandate of cloud-first, this healthcare services organization needed to pilot and migrate a portion of its Citrix services to the cloud. They considered multiple cloud platform vendors from Amazon Web Services (AWS), Google Compute Platform, and Microsoft Azure but ultimately decided that AWS was their platform of choice. Their biggest concern was keeping costs low and preserving user experience as they move workloads to the cloud.

To help the healthcare services organization achieve its goal, its virtual cloud engineering team performed capacity planning using Login Enterprise. By comparing various AWS EC2 instance types, they had quantitative data to determine the best fit for their Citrix workloads. They analyzed the results of over 17 AWS EC2 instance types and found they could implement the M5 Double Extra Large (M5 2XL) instance type with an increase in user density of 75% over the M4 Double Extra Large (M4 2XL).

Based on the results, the increased density and slightly lower hourly run costs equated to over 40% monthly savings in AWS. Login Enterprise enabled the team to mimic their Citrix desktop workload and better identify the AWS EC2 instance type that best suited their performance and cost requirements.

> Using Login Enterprise to compare over 17 AWS EC2 instance types, we found an instance type with a 75% increase in user density over our current workload. Based on our environment, this increased density would equate to a theoretical savings of over 40% for one month in AWS.

Maximizing User Density During a Refresh

A healthcare provider initiated an Epic Systems upgrade, precipitating a multi-million dollar investment in new hardware, software, and implementation services. The goal was to ensure that the Epic upgrade could be rolled out "cold" on a given day, the environment was performant end-to-end, and the user experience was as good or better than the current environment.

Using Login Enterprise's synthetic user technology, the team simulated Epic user workloads in old and new environments. By scaling thousands of synthetic users, they could predict the maximum user density before the performance degraded. The comparisons fostered confidence in the architectural design and resulting end-user experience.

The data generated enabled vendor teams onsite to optimize various hardware and software platform settings. The first iteration supported 2,900 users. Post optimization, the teams increased the number of users to 4,200. The resulting configuration changes facilitated an incremental 1,300 users in the environment with no additional cost to the customer.

As the organization planned for additional growth, increasing user density helped them future-proof their environment. Without the improvement, future budget approvals and additional hardware would have been needed. Ultimately, they saved an estimated $3M in excess spending over three years.

> The capacity increase allowed us to support many users without adding hardware and increasing costs. We estimate that we will save $3M in excess spending over the next three years.

Ensuring a Seamless Migration to HCI

The world's largest privately held insurance brokerage firm ran Citrix virtual desktops in a production environment. However, over several years performance continually degraded, prompting them to move from a traditional three-tier data center architecture to hyper-converged infrastructure (HCI).

Given the large-scale change in architecture, the IT team wanted to assess various capacity and performance aspects well before the formal production migration. The firm chose Login Enterprise to baseline the performance of the existing and new production environments.

After a battery of tests, Login Enterprise definitively proved a significant increase in capacity and performance, including the detection of a noticeable improvement in CPU response time, IO performance, and IO utilization. Further, the IT team felt confident that they mitigated any risks and were able to accelerate the migration.

Right Sizing a New Environment

A leading global fleet management services company strategically mandated shared virtual desktop services across all business units. The strategy would ensure a consistent IT experience for the entire organization—employees and partners. This also meant a significant increase in the number of end-users the team needed to support.

While the organization understood its capacity in the older infrastructure, it needed a way to estimate requirements for a more extensive user base. They roughly calculated the amount of hardware sufficient for a new Citrix environment using readily available sizing guidelines and online recommendations. It soon became clear that the company had miscalculated.

As they moved to the new environment, they ran out of capacity runway. The IT team quickly deployed Login Enterprise to get the project back on track. Using Login Enterprise for capacity planning, the team could test and measure the entire system's behavior and response times at normal and anticipated peak loads. This gave it a much clearer idea of what was required to support its projected 6,000 users.

Login Enterprise enabled the company to rollout the environment to 4,500 users and acquire additional hardware for the remaining 1,500 users. Before purchasing new hardware, they evaluated options from several vendors—saving money and eliminating the complexity needed to achieve the best VDI operations.

> Login Enterprise has become an intrinsic part of our environment and enabled the organization to plan exactly the right capacity needed to support all the users in our growing virtual desktop environment.

Request a **live demo** of the Login Enterprise Platform or **get in touch** with the Login VSI team today.

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