The Challenge
The cancer center was running Allscripts on older releases of Citrix and needed to migrate to Citrix 7.15. They wanted to maintain consistent logon and application transaction speeds under peak load.

The Solution
The cancer center selected Login Enterprise to determine if the design would meet production standards. Login Enterprise logged virtual users in pre-production environments and determined user density, logon performance, and if application transaction times were satisfactory before production. This created a baseline set of data through which optimization or change can be quantified.

About Company
The cancer center is a research and treatment institution dedicated to medical facilities for cancer treatment and research in the United States. The cancer center, conducts clinical research on cancer as well as developing new drugs, provides advanced treatment for all forms of adult and pediatric cancer.
Login VSI has validated the center’s design specifications through pre-production testing. The healthcare institution allocated 6 dedicated HPE Synergy blades for testing. This represented half of their production hardware. A customized workload was created to perform interactions with Allscripts, which is published through Citrix. 600 users were logged into 6 blade HPE Citrix deployment successfully.

- Logon times were between 11 and 14 seconds a maximum load
- Deviation from baseline with Allscripts application transactions was 9% at maximum load

The Result

With the help of Login Enterprise, the cancer center was able to determine that the design met the production standards and maintain consistent logon and application transaction speeds under peak load.

Other Key Findings:
- Individual VMs were reaching between 90 - 100% CPU utilization
- Individual blades exhibited between 20 - 40% utilization
- Baseline (general) experience deviated from start to peak load of approximately 11%
- All scripts transaction times between start and peak load deviated by approximately 9%
- Logon duration at peak load was under 14 seconds
- Power management settings were unevenly set between physical hardware. This was found in pre-production and addressed before affecting real users
- During off-hours, user experience was influenced by the backup. The impact of backup during production was quantified. The center was still able to maintain acceptable responsiveness
- Baseline performance is better on Gen10 servers. Hardware differences were evaluated and accepted

Conclusion

The cancer center was able to successfully migrate to Citrix 7.15 while maintaining consistent logon and application transaction speeds under peak load. This ensured ideal end-user experience while optimizing cost and eliminating unnecessary overhead.

Additionally, as systems had already been put under the expected realistic load, they were able to dramatically decrease the risk associated with moving such a large user base onto the newest software releases.

Finally, the company will be able to continue to monitor the impact of changes in pre-production as well as compare current production performance to standards developed during pre-production testing.