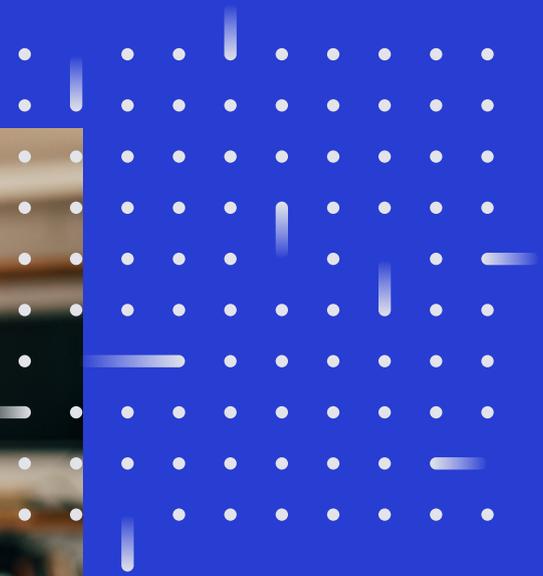


White Paper

Don't Compromise on the End-User Experience

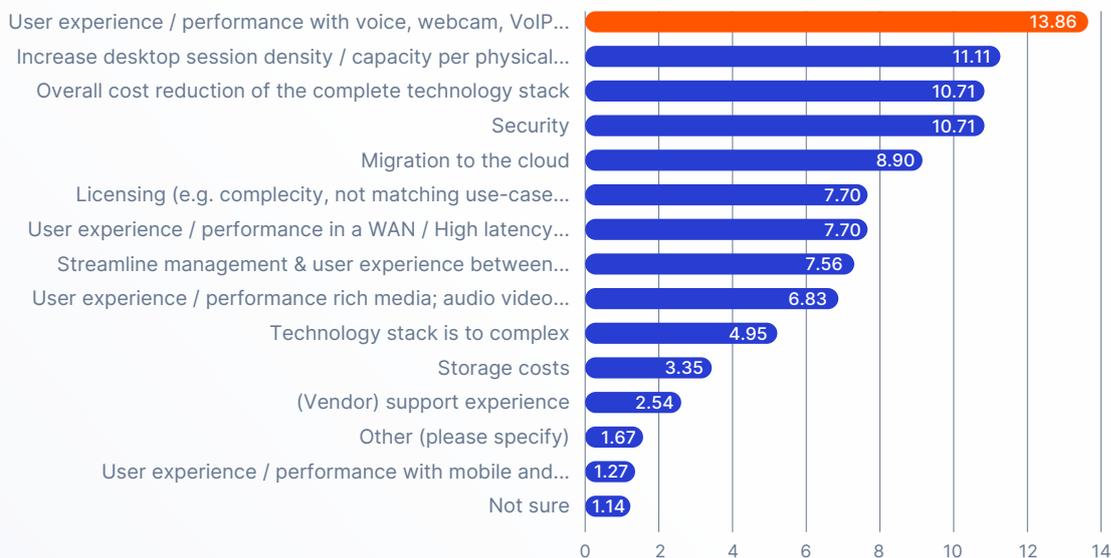
Apply Gartner's Recommendation for Successful Virtual Desktop Infrastructure (VDI) Deployments



How important is user experience (UX)?

Every year, VDI Like A Pro, a community-driven group of End-User Computing (EUC) professionals, releases the results of their EUC State of the Union survey. This survey provides information from 1500+ respondents regarding end-user computing, cloud, digital workspace experiences, and usage. In 2021, most respondents stated that user experience is today's biggest challenge with on-prem virtual desktop environments.

What are today's biggest challenges with your on-premises virtual applications and desktops environment



In Gartner's note, "Define and Prioritise the User Experience to Succeed with VDI and Desktop as a Service (DaaS)", Gartner states that more than 80% of organisations that don't prioritise the user experience in the planning phase will fail to meet their virtual desktop infrastructure/desktop as a service deployment goals. A VDI deployment designed only to benefit IT is unlikely to delight users as well—resulting in a solution they don't want to use. The Gartner note provides invaluable insights on user experience from hundreds of customer VDI related inquiries, including:

- Delivering a user experience that's as good as or better than an employee's current PC experience is the most important critical success factor when adopting VDI or DaaS.
- Address users' non-session-based usage requirements to ensure that they're aligned with business and IT goals—don't reduce the quality of the UX to save costs.
- As mentioned previously, more than 80% of organisations that don't prioritise the UX in the planning phase will fail to meet their VDI/DaaS deployment goals.

VDI UX: Get it right the first time

It's a common mantra repeated by anyone who has been involved in one or more VDI deployments—if it's not as good as their PC, users won't want to use their new VDI. The article warns further that if not done right the first time, "it may be difficult to revive a troubled DaaS deployment, once it has a bad reputation"—and that's the challenge. How can you deploy a high-quality user experience and validate that experience without risking the reputation of your VDI?

Login VSI addressed this several years ago, and its flagship product, Login Enterprise, is the industry standard for benchmarking VDI user experience. Instead of exposing real users to VDI, Login Enterprise uses synthetic users.

Synthetic users to the rescue

Synthetic users have many benefits. They don't collect a salary, don't go on vacation, and attempt to do the same tasks repeatedly when assigned, and they never complain. They also measure exactly how long it takes them to perform those tasks to analyse UX performance fully.

Synthetic users in production

There's also a strong use case for running synthetic users side-by-side with real users in production. With VDI in production, it is arguably even more important that performance matches the results from testing, and Login Enterprise covers that as well. Login Enterprise deploys synthetic users performing tasks and measuring them. Still, instead of having hundreds or thousands of users trying to stress test the environment, Login Enterprise uses one (or a few) synthetic users that log in to the environment, side-by-side with real users, throughout the day. Login Enterprise's synthetic users watch out for

performance anomalies—is login time longer than yesterday or last week? Are applications launching as expected? If anything is out of the ordinary, Login Enterprise sends out alerts to notify IT that something's not right.

Using Login Enterprise is a great way to validate user complaints—is your VDI running slow, or is performance on par with expectations? Customers indicate that the amount of time spent resolving "slowness" complaints related to VDI drops when the helpdesk can easily determine if the desktop is slow or if the user has unrealistic performance expectations.

Login Enterprise also provides notification of outages, so remediation activities can start before the helpdesk phones even begin ringing. There are other solutions out there that work by installing an agent in every desktop or server, then collecting performance data about the environment. However, Login Enterprise has several advantages over agent-based monitoring solutions:

- The overheads associated with deploying and updating agent-based solutions
- Agent-based solutions work by having the agent installed and running on all images/servers in the environment. There are additional management costs in deploying and maintaining those agents. And because it's another service running on the Virtual Machine (VM), there's increased CPU/memory utilisation, impacting both performance and density.

- Reviews of agent-based solutions often comment about the tremendous amount of data collected and the challenges of analysing it all. If there's a performance outage for an application, agent-based logging tools will log that performance notification for every user—potentially creating hundreds of alerts or notifications. With Login Enterprise, using a synthetic user as a proxy for hundreds of real users makes that data analysis and collection much easier to manage.
- Real user workloads aren't consistent. If a user is working in 5MB documents one day and 50MB documents the next, the performance metrics will be different because the data being used by the application is so different. It's a challenge to normalise that data and identify what "good" performance looks like for that application. For example, if Microsoft Word is launching for a user in two seconds one day, but six seconds the next, the VDI is running slow, or is it just because today the user is working with larger documents? Login Enterprise's synthetic users work with the same size documents and access them, in the same way every time, so it's very easy to establish performance baselines and identify when those baselines have been exceeded.

Synthetic users for performance, capacity, and compatibility testing

Deploying synthetic users started as a way to validate the scale and capacity of VDI systems. Because synthetic users don't need a place to sit, it's much easier to scale up testing or stress the system with a large user load to determine the maximum capacity.

That's what Login Enterprise does—a test scenario is identified like "initiate a performance test with 200 users doing typical office worker tasks"—and Login Enterprise will log in 200 virtual users into the environment. Those users will automatically start sending emails, browsing the web, creating documents, and other typical office worker tasks. And while they are running these tasks, the synthetic users are logging how long the tasks take, how long it took to copy a file and how long it took to launch MS Word.

As more and more users start logging on and the resource load on the VDI increases, the time to complete those tasks increases. Login Enterprise identifies the sweet spot—the maximum number of users running and still reporting acceptable performance. We call that number VSI_{max}.

Login Enterprise can run just about any test scenario, like "simulate a logon storm with 500 users all logging on at once at 9 am on Monday" or "how does the storage perform with 1,000 users running continuously for 168 hours straight?"

Many customers use Login Enterprise as part of the validation process to change their server or golden image. Applying patches, upgrading Office versions, and changing anti-virus providers are just a few examples of image changes, which can drastically impact VDI performance. Based on Login Enterprise tests, upgrading from Office 2010 to Office 2013 decreases the number of

users you can host on an environment because Office 2013 uses more resources, particularly graphics and GPU-based rendering. Office 2016 increases user density compared to Office 2013, with improvements specifically geared at remote desktop environments.

Any changes planned for the production environment should be validated first. Login Enterprise can help identify incompatibilities in new software or configurations (workloads will fail to complete if the update contains breaking changes). Login Enterprise will also determine if the change increases or reduces user density, so IT can predict the impact of rolling out a change.

“Don't compromise UX for budgetary reasons because the UX cannot be traded against to reduce costs.”

- GARTNER

Don't compromise on the user experience (UX)

The Gartner article closes with: "Don't compromise UX for budgetary reasons, because the UX cannot be traded against reducing costs. Instead, review whether your decision to deploy VDI or DaaS (or to continue using VDI or DaaS and address existing UX failings) will result in optimal UX. For many organisations, this will not be a question of either/or. Instead, it will be a matter of where to target these solutions across the business, when investing in a UX-optimised solution can be justified against all UX perspectives."

Synthetic users provide companies with an

understanding of their VDI UX without risking any loss of productivity from their real users. Login Enterprise enables IT departments to understand how their environment performs to guarantee the best user experience possible.

“Delivering a user experience that's as good as an employee's current PC experience is critical success factor when adopting VDI or DaaS.”

- GARTNER

About Forfusion and Login VSI

Forfusion specialise in digital transformations empowering companies to prevent risk, plan for the future and optimise business performance by partnering with Login VSI we can help you procure and implement the only solution in the market guaranteed to maximise the end-user experience in your digital workspaces.

Don't compromise your
end-user experience.
Speak to one of our experts.

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about Login Enterprise?

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