

# User Experience Validation

Desktop virtualization is a real option for more and more companies who want to lower operating costs, simplify management, and enhance productivity, security and desktop mobility. However, the reality is that – on average – roughly a quarter of all virtual desktop projects stall due to unacceptable end-user experience and/or cost overruns. How do you keep your projects on track and your budgets in check? The answer is “validation,” a process using Liquidware Labs™ Stratusphere UX solution.

## What is Validation and Why Do You Need it?

Validation provides hard objective data to verify that you are making the right decisions at each phase of your project. Validation saves you time and money, and, more importantly, ensures users satisfaction and productivity on their virtual desktops.

### *Validation Cuts Through the Complexity and Uncertainty in Managing Virtual Desktop Environments*

You can verify that you are on track to success by setting up progressive Validation Checkpoints for the following stages:

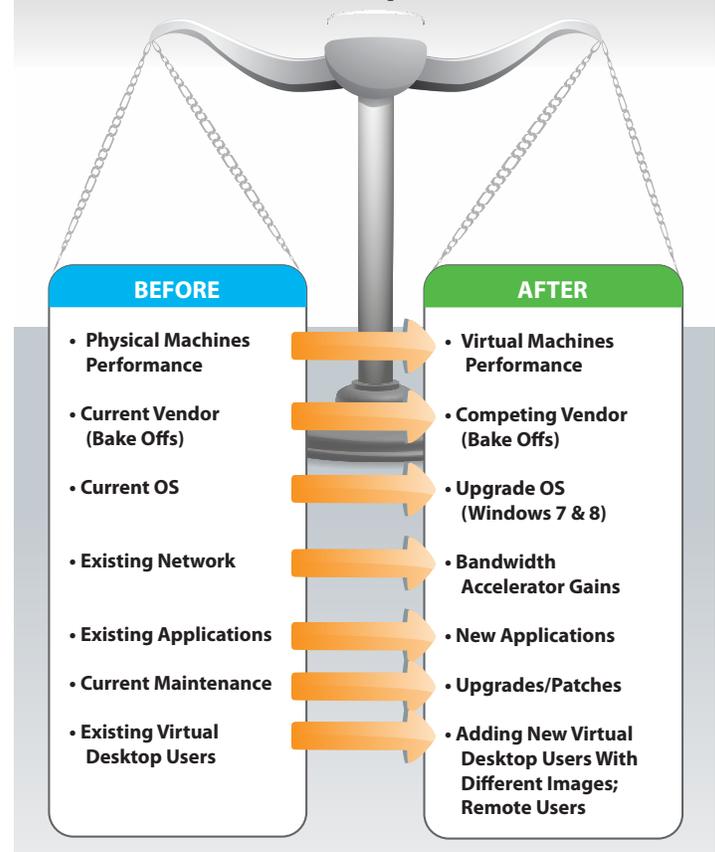
- During a proof-of-concept (POC) in order to ensure that vendors’ offerings meet your requirements
- In “bake-offs” when evaluating competing products
- During pilots to ensure the user experience on virtual desktops meets or exceeds that of physical desktops
- During production, when scaling or changing the environment, to ensure that performance standards are maintained and adequate resources provided.

## Do You Need a Validation Solution?

The short answer is Yes! If you have performed an assessment with Stratusphere FIT, you already have the data and insight you need with a solid picture of your physical desktop environment. You can continue to ensure that performance of your virtual desktops is maintained by leveraging Validation Checkpoints with Stratusphere UX. You can even compare your virtual desktop performance to existing concurrently running physical desktops to see which provides the better user experience.

Consult the brief questionnaire in the next column to determine whether or not you have the clear, detailed information you need to validate that your environment is performing to SLA requirements, and is meeting user expectations and TCO / budget goals.

## Easily Compare & Validate Changes with Stratusphere UX



## USER EXPERIENCE VALIDATION CHECKLIST:

- Can you proactively monitor physical and virtual desktops from a single pane of glass in order to validate they are performing on par with SLAs and to get alerts if issues develop with systems or users?
- Do you have remote users with different needs than in-office workers? Do workers follow different schedules and work patterns or do you have spikes when all / most are hitting the system?
- Are you planning an OS upgrade? Do you have a method to check that your applications are running well on the new OS after migration?
- Do you know how many different desktop images are needed to meet the requirements of your diverse workforce?
- Do you know which vendors’ solutions offer the best performance vs. cost for your environment? Do you have a way of getting hard comparison data in a bake off?
- Can you measure the impact of changes (adding users or adding, patching or upgrading applications) to your environment over time? Can you verify that you are maintaining user experience and performance after the change?

### Validation-In-Action: Reports in Stratusphere UX

Once you perform an assessment with Stratusphere FIT you have a baseline for validating that your virtual desktop performance is on par with that of physical desktops. Stratusphere FIT and Stratusphere UX are purpose-built to provide this before-and-after comparison.

Stratusphere UX provides at-a-glance Validation Reports for a side-by-side comparison of physical and virtual machines. Stratusphere UX leverages a patented, intelligent framework that tracks hundreds of metrics in near real time. No other product on the market offers the range or depth of virtual desktop environment metrics across user experience, end points, applications, machine and host resources, user authentication and authorization, desktop virtualization platform, server, storage and network.

UX Comparison Summary between Physical & Virtual Machines by User Group							
This report lists user groups comparing their VDI UX Rating and Score between physical and virtual machines. For each user group, it lists the number of users observed by the CID Key on physical machines and on virtual machines, and compares the overall VDI UX Rating (Good/Fair/Poor) and the actual VDI UX Score for the entire group between physical and virtual machines. This report is filtered based on Start Date and End Date. It can also be filtered based on the User Group and Machine Group membership. The report is sorted based on the user membership count of the user groups in descending order.							
Report Filters							
Start Time: March 1, 2012 12:00:00 AM ET				End Time: April 8, 2012 11:59:00 PM ET			
User group: All Users				Machine group: All Machines			
User Group	User Count	Physical UX Rating	Physical UX Score	Virtual User Count	Virtual UX Rating	Virtual UX Score	Result
Domain Users	9	Fair	2.72	6	Good	2.81	🟢
All Employees	9	Fair	2.72	5	Good	2.85	🟢
Accounting Group	9	Fair	2.72	5	Good	2.85	🟢
Sales Group	9	Fair	2.72	5	Good	2.85	🟢
Marketing Group	9	Fair	2.72	5	Good	2.85	🟢
Developers	9	Fair	2.72	5	Poor	2.49	🔴
Support	9	Fair	2.72	5	Good	2.85	🟢
Operations	7	Fair	2.69	4	Good	2.86	🟢
Alpharetta HQ	6	Fair	2.69	3	Good	2.96	🟢
Chicago HQ	6	Fair	2.69	3	Good	2.96	🟢
Remote Office – Vich	6	Fair	2.69	4	Fair	2.69	🟡
Remote Office – UK	7	Fair	2.70	2	Fair	2.74	🟡
Remote – Sales Engineers	4	Fair	2.68	2	Good	2.98	🟢

#### Report 1: Stratusphere UX Comparison Summary between Physical and Virtual Machines by User Group

In Report 1, you see all of the user groups in a virtual environment. Highlighted is one group “Domain Users.” A member of this group is complaining that he is having problems with his virtual desktop. Although the group has an overall GOOD rating, we can drill down to the see all users in the group, and then to the individual user level to validate each user’s experience.

UX Comparison Summary between Physical & Virtual Machines by User Group & User						
This report lists users within a user groups comparing their VDI UX Rating and Score between physical and virtual machines. For each user in user group, it compares the overall VDI UX Rating (Good/Fair/Poor) and the actual VDI UX Score for the user between physical and virtual machines. This report is filtered based on Start Date and End Date. It can also be filtered based on the User Group and Machine Group membership. The report is sorted by User Group and User Name in ascending order.						
Report Filters						
Start Time: March 1, 2012 12:00:00 AM ET				End Time: April 8, 2012 11:59:00 PM ET		
User group: Domain Users				Machine group: All Machines		
User Group	User Name	Physical UX Rating	Physical UX Score	Virtual UX Rating	Virtual UX Score	Result
Domain Users	CMcallister	Fair	2.69	Fair	2.50	🟡
Domain Users	DBieneman	Good	2.78	Good	2.98	🟢
Domain Users	DBoone	Fair	2.59	Fair	2.69	🟡
Domain Users	DKhare	Fair	2.65	Good	2.92	🟢
Domain Users	GPorter	Fair	2.59	Good	2.81	🟢
Domain Users	Alrina	Fair	2.59	Fair	2.61	🟡
Domain Users	JFlatbush	Good	2.78	Poor	2.25	🔴
Domain Users	JMattox	Fair	2.62	Good	2.98	🟢
Domain Users	JOvyach	Good	2.92	Good	2.98	🟢
Domain Users	LWortman	Fair	2.74	Good	2.56	🟢
Domain Users	MVanFrayen	Fair	2.75	Fair	2.98	🟡
Domain Users	NJeans	Fair	2.72	Good	2.98	🟢
Domain Users	TRohrer	Fair	2.59	Good	2.97	🟢

#### Report 2: Stratusphere UX Comparison Summary between Physical and Virtual Machines by User Group & User

In Report 2, we can get a better picture of how each user within the group experiences his or her virtual desktop and how it compares with his or her physical desktop. In the report above, most of the users have a GOOD experience that is within the desired performance thresholds. A few users with FAIR indicators should be checked out. But the complaining user does have a problem with a POOR rating. We can now take a deeper dive into his particular desktop (See Report 3 below.) to verify what the issues are and to identify possible remedies.

User Group : Domain Users			
User Name : JFlatbush			
Metric	Physical	Virtual	Result
Average Login Delay (ms)	10,666.67	19,111.11	🔴
Average Application Launch Delay (ms)	124.66	49,028.98	🔴
Average CPU Queue	1.82	3.94	🔴
Average RAM Used (KB)	2,353,160.77	517,784.97	🟢
Average Page File Used (KB)	803,830.97	93,429.08	🟢
Average Page Faults	5,975.02	872.53	🟢
Applications Not Responding		0.59	🟡
Average Disk IOPs	25.85	2.85	🟢
Average Disk Queue	7.88	7.58	🟡
Average Network Latency (µs)	2,636.23	2,700.23	🟡
VDI UX Rating	Good	Poor	🔴
VDI UX Score	2.78	2.25	🔴

#### Report 3: Stratusphere UX Comparison Summary between Physical and Virtual Machines by Specific User Name