

# Monitoring with Stratusphere™ UX Adapter for VMware® vCenter Operations Manager

**The Challenge:** Many organizations are still seeking the best methods to quickly solve issues and avoid finger pointing among internal teams or vendors that occurs when there is no visibility to understand the underlying issues of VDI deployment.

**The Solution:** By leveraging Liquidware Labs Stratusphere UX and our Adapter technology, organizations can gain an entire view of their desktops as a service within a single pane of glass and most importantly enable VMware's vCenter Operations Manager powerful root-cause analysis engine.

Stratusphere UX provides properly related KPIs for over 40 critical desktop metrics for both physical and virtual machines. These metrics can be fed by the Stratusphere UX Adapter into vCenter Operations Manager's superior analytics engine to provide fast root-cause analysis by correlating user desktop events with other events across the virtualization layers and other supporting systems, including vSphere host and storage layers. Desktop performance can be monitored through customer dashboard in the vCenter Operations Manager console and desktop administrators receive rapid at-a-glance alerts through custom dashboards.

## View Desktop Performance through vCenter Operations Manager via Stratusphere UX Adapter

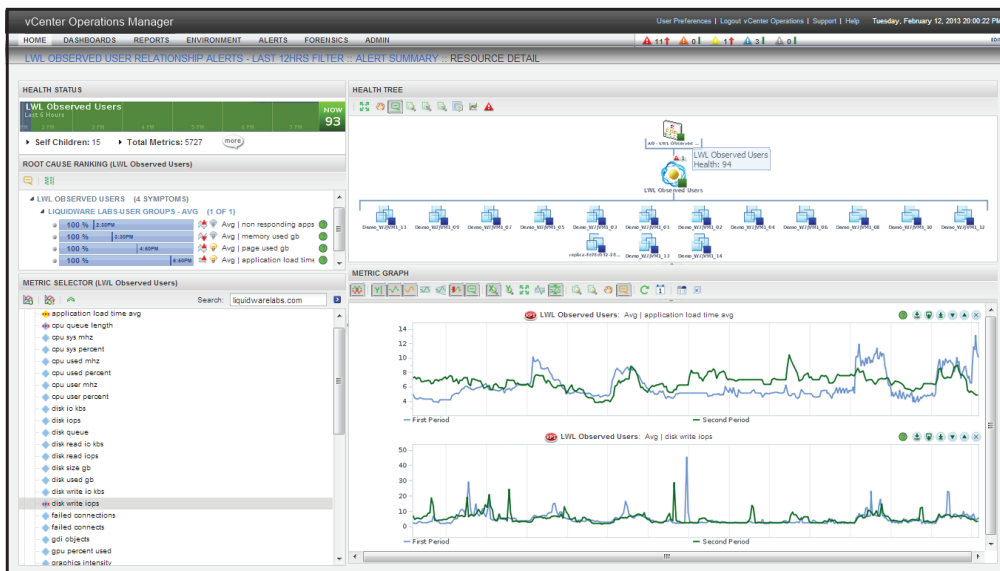
VMware vCenter Operations Manager provides customized dashboard views and forecasting of future events. More importantly, it can provide fast root-cause analysis by correlating anomalies and events from various resource feeds and uncovering related systems and services affected. In addition, system level events that are draining resources from user desktops can be spotted by vCenter Operations Manager powerful event correlation. By using Liquidware Labs Stratusphere UX and vCenter Operations Manager, organizations can gain an entire view of their desktops, as a service, within a single-pane-of-glass. Organizations can also leverage the powerful vCenter Operations Manager root cause analysis engine for ALL your desktop users – both virtual and physical.

Stratusphere Adapter provides an integration feed for Stratusphere UX metrics to flow and display directly into vCenter Operations Manager consoles. Administrators create custom dashboards in order to view these metrics for their environments. Key to this integration is naming KPIs in order to relate vSphere and other vCenter Operations Manager Resources up-stream and down-stream to user

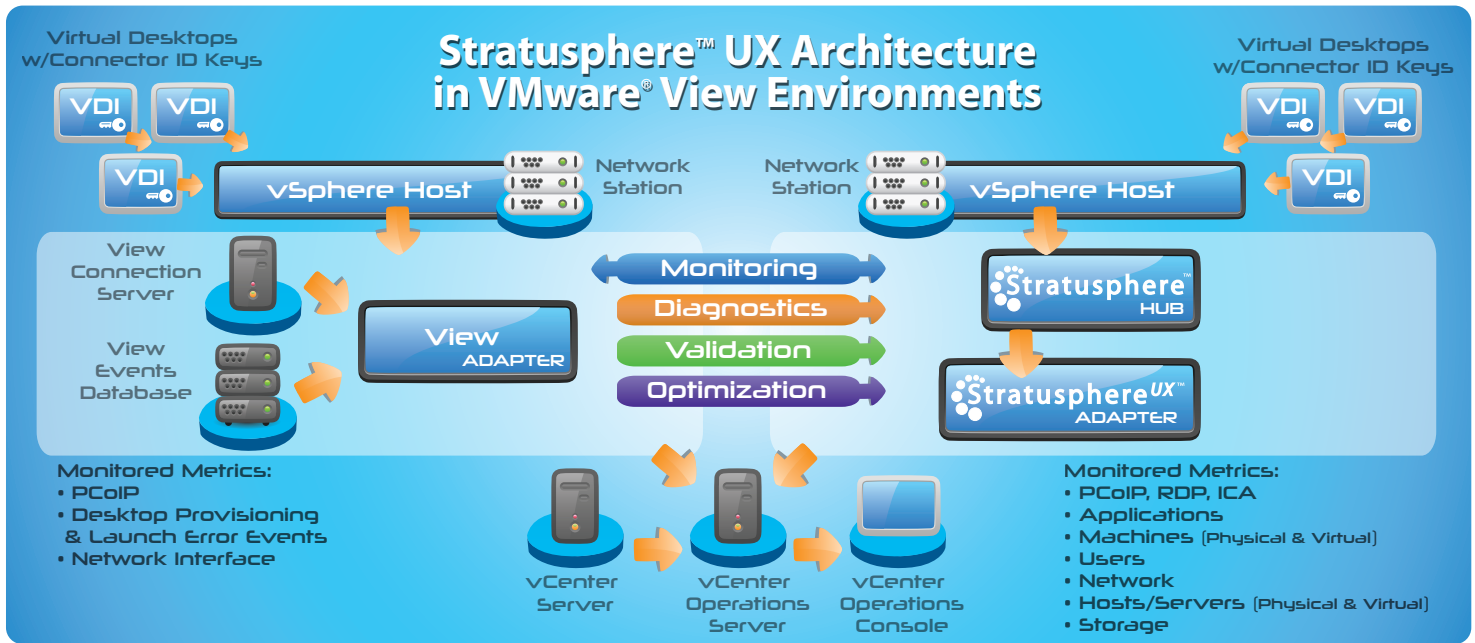
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## Liquidware Labs Stratusphere UX Adapter Enables Customers to:

- Leverage vCenter Operations Manager Infrastructure Root Cause Analysis based on groups' User Experience
- Create published dashboards for Desktop Administrators and Data Center teams
- Relate User Experience KPI's and Total/Avg Consumption by Microsoft® Active Directory Group "View Pool Entitlement Groups"
- Provide desktop administrators with process level inspection inside the desktop
- Utilize a 'Rolling Assessment' of Physical/Virtual users to supply "resource pool/cloud resource" needs
- Combine desktop centric metrics with infrastructure visibility
- Correlate existing AD Group metrics / roll forward existing management process inside of vCenter Operations Manager
- Assess, correlate, trend, forecast and alert on breach of Stratusphere UX KPI's across Physical and Virtual Desktops tied to AD Credentials



Root Cause Analysis.



groups' experience. Stratusphere UX KPIs are analyzed by vCenter Operations Manager and anomalous events are fingerprinted and written to an event timeline. A relationship tie-in with the Stratusphere UX KPIs then maps user experience to critical events within the infrastructure, thus delivering fast root-cause analysis for physical and virtual desktop users. Outside of vCenter Operations Manager, Stratusphere UX can be used for detailed drill-down and reporting of user, machine, network, and desktop application workloads within the solution's web interface.

The Stratusphere Adapter utilizes approximately 40 key, time-based metrics for desktop user experience and resource utilization (from consumption to constraints) across all desktops — physical and virtual — in the enterprise. These standardized, pre-defined metrics can be further correlated into overall FIT and UX Ratings that can provide at-a-glance indications of Good, Fair and Poor desktops with simple Green/Yellow/Red displays on screen to alert administrators to potential issues.

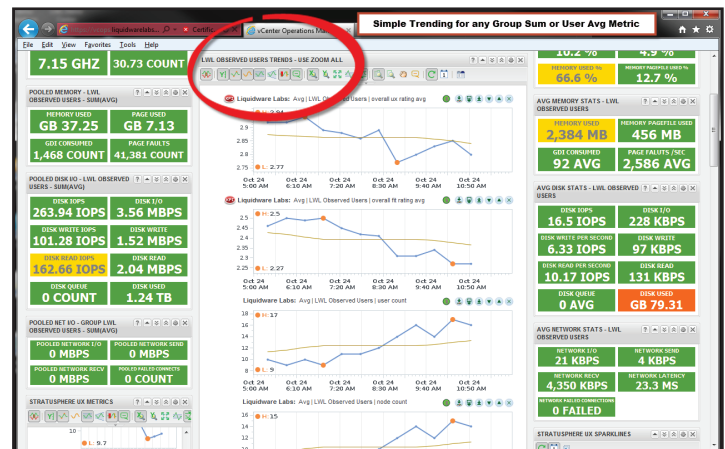
Users' desktops are observed by Stratusphere UX, which once installed in the organization's environment, provides an independent agnostic platform separate from vCenter for an additional drill down into end user experience, application usage, resource consumption and constraints. Stratusphere UX uses lightweight Connector ID (CID) keys and optional Network Stations to capture user experience. The Stratusphere Adapter installed inside vCenter Operations Manager interfaces with the Stratusphere UX virtual appliance to pull these metrics. The Adapter has been specially designed for large scale environments, helping to minimize load on the vCenter Operations server and is compatible with a wide variety of Windows® and select Linux® distributions.

Stratusphere UX can connect to Microsoft® Active Directory® for "Read-Only" User/Group correlation within vCenter Operations

Manager and leverages the Stratusphere Web UI to enable/disable User Group feeds.

Stratusphere UX provides over 40 metrics to vCenter Operations Manager from physical or virtual windows desktops, along with several unique KPI's not available in other competing solutions including:

- Login Delay
- Application Load Time
- Non-Responding Applications
- GPU Utilization
- CPU Queue Length
- Disk Queue Length
- Disk Read vs. Write IOPS
- Network Latency
- Network Failed Connections



Green, Yellow, Red Status