Case Study: Virtual Desktop Infrastructure for Engineering CAD / CAE

Ahmedabad based Project and Construction Management Company providing professional services in architectural design, interior design, engineering and urban planning relies heavily on Computer Aided Design (CAD) and Engineering (CAE) software primarily comprises of Adobe Suite & Archicad- a collection of graphic design & video editing, to give them a competitive edge.

Until now, the engineers were using traditional high-end costly workstations for their CAD software, difficult to be kept up to date. Data Security was a primary concern.

So, this company was looking for a solution to virtualize these desktops, to give engineers access to the right desktop session & resources without delay.

Challenge

When Covid-19 pandemic hits, sudden expansion of work-from-home, shifting & running applications on company owned workstations individually, become a big pain-point. To maintain the complete confidentiality of the companies critical, sensitive & knowledge data from storing, sharing & controlling becomes real challenge.

Solution

Silver Touch team delivered a best-in-class solution: VMware Horizon for Desktop virtualization to support CAD workloads. These workloads are running on VMware vSphere virtualization in a customer's off-premise datacentre with high-performance SSD storage, containerizing critical data at central location with controlled access to end users.

Server including built-in engine to provide VM scheduling and management in hardware, results in workstation-grade 2D and 3D graphics acceleration.

A separate high-end render node to meet high demand of rendering task now completes in record time in minutes, what used to take hours.

Results

The customer was super happy with the design enabling them to deploy virtual desktops depending on the different profiles, allowing desktop sessions sharing with only screens over a network, instead entire files.

VDI technology & solution subsequently provided high performance processing of large size engineering data, locally. The design effectively implemented much need centralize data control with sharing control for scattered workforce.

It helps improve data security reducing risk of data leakage, substantially reduced rendering time and eliminate operational overhead to regularly patch operating systems of individual workstations.