



VMware Solution Brief

Why Liqid

Liqid unlocks cloud-like flexibility for on-prem infrastructure, accelerating time-to-value and improving the efficiency of new and existing VMware virtualized environments.

Key Advantages

- » Accelerate VM time to results with rightsized VMware hosts that can be deployed in minutes.
- » Be change-ready, with VMware hosts that adapt real-time to evolving business needs.
- » Reduce costs with an as-a-service VMware host model and maximized resource utilization.

Bare Metal Composability with VMware

Increase the End-to-End Value of Virtualization with Liqid and VMware

Overview

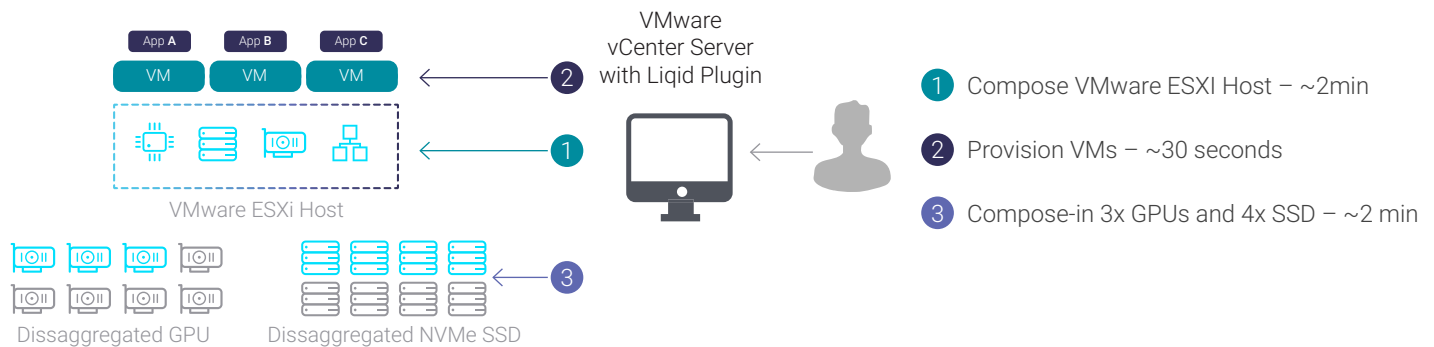
IT and DevOps teams have leveraged VMware virtualization for years to optimize infrastructure delivery and operations. During that same time period stakeholder expectations for quick application delivery have steadily increased, while, as always, both capital and operational budgets remain tight.

With VMware maximizing utilization of the entire physical host, the question becomes, where can more flexibility, agility, and efficiency be injected into virtualized environments? The only logical place to look would be at the physical host itself. The limitations of bare metal server architecture have always been a foregone conclusion of IT. Deployments are time consuming, configurations are space and port limited, scaling is painful, and they are inefficient both from a resource utilization and management perspective. This is regardless of what OS or hypervisor sits on top.

Liqid Matrix™ delivers many of the benefits of public cloud virtualization to on-prem datacenters, with a new approach to server design called Composable Disaggregated Infrastructure (CDI), where software is used to "compose" bare metal servers, or scale existing ones, in seconds. Compute, storage, and accelerator (GPU) resources are disaggregated from each other and connected over high-speed data fabric such as PCIe, Ethernet, and InfiniBand, and then dynamically connected via Liqid Matrix.

This allows VMware customers to accelerate time-to-value and increase the agility and efficiency of new and existing deployments. The Liqid vCenter Plug-in brings the power of Liqid Matrix composability directly into the VMware vCenter Web Client user interface to simplify bare metal infrastructure management to create hosts that meet the exact requirements of virtual server, desktop and hyperconverged infrastructure environments using both new and existing compute, storage, and accelerator resources. Finally, Liqid's VMware integration is included at no extra charge.

Realize New Levels of VMware Speed and Efficiency



Accelerate Host Deployment Time

Liquid Matrix CDI for VMware enables organizations to accelerate the value of their virtualized environments by allowing them to spend less time configuring and deploying VMware host servers. Now bare metal hosts can be composed in minutes from pools of disaggregated elements interconnected over a high-speed data fabric with Liquid Matrix software. Simply spin-up physical hosts from VMware vCenter as quickly as VMs to meet real-time requirements via Liquid's VMware vCenter Plug-in, or Liquid's UI, API or CLI.

Increase Virtualization Agility

Eliminate conventional form factor limitations that hinder VMware host deployment options with Liquid Matrix. With compute, storage and GPU resources interconnected across the Liquid fabric, host configuration options are unconstrained. For example, for GPU heavy workloads, a 1U host server with 16 GPUs and 8 SSDs can be composed in minutes. Host servers can quickly adapt to new requirements, with the ability to add or remove physical resources, without even touching a server.

Improve Datacenter Efficiency

Improve VMware capital and operational efficiency with Liquid. Eliminate wasteful overprovisioning by compose hosts via software to meet current workload requirements and then scale as needed. The inability of conventional servers to house large GPU quantities means several servers must be purchased to accommodate them, thus increasing VMware licensing costs. With Liquid, large quantities of GPUs can be composed to a single host server, which drastically reduces VMware licensing and associated server costs. Decouple GPU and server purchase cycles, by simply recomposing GPUs from old servers to new ones.

Unlock Your Dynamic Datacenter With Liquid and VMware

For organizations utilizing VMware virtualization to drive maximum value from their on-premises infrastructure, Liquid CDI for virtualized environments unlocks the flexibility of VMware for ESXi host servers. With Liquid, organizations can accelerate time-to-value and increase the agility and efficiency of their new and existing VMware virtual server, desktop and hyperconverged infrastructure environments from VMware vCenter.

[Learn More at Liquid.com](https://www.liqid.com)