## A Look Inside: Liquid Web

Liquid Web, located in Lansing, Michigan, is a Managed Hosting & Data

Center company that provides a variety of services. Liquid Web serves over 20,000

clients all across the world. They have three Datacenters located within Lansing that
provide all of the computing power and capacity needed to serve their clients.

Liquid web offers cloud-based services, web hosting, and even disaster recovery for
their clients. Liquid web also provides a Content Delivery Network that allows sites
to be distributed among many servers in various locations to reduce load and
increase site availability. Lets take a deeper look into how Liquid Web has the ability
to provide all of these services.

Hardware within Liquid Web's Infrastructure is comprised of proprietary hardware that varies based on what users are willing to pay for. Liquid Web provides both rack servers and tower servers, all of which have varying hardware configurations depending on device and need. Configurations for dedicated servers vary from Dual-core Xeon processors, Core i5 Processors, to even AMD Quad Opteron processors. In a top-level configuration, users can get up to 64 available cores for processing. Dedicated servers can hold up to 3TB in capacity to accommodate back-ups or dedicated storage. RAM can be configured from 1GB to just over 252GB. This allows Liquid Web to provide hosting to tremendously large sites and small single sites.

Liquid Web uses various Operating System configurations in their hosting environment. Many servers are typically deployed with CentOS. CentOS provides enterprise level security in a free platform for clients to utilize. Liquid Web is

flexible and able to meet any client's needs when it comes to OS's. They offer most variations of Linux such as, Debian, Ubuntu, etc., as well as Windows Server options. Liquid Web utilizes a unique tool called Plesk to allow for a user-friendly interface in Windows Server environments when it comes to administering user accounts and updating DNS entries. This software increases the ability for Liquid Web to easily manage client's as well as allowing client's to easily manage their own services.

Liquid Web makes many standard software applications available to their hosting clients. MySQL is the standard for their hosting environment databases, but Liquid Web is flexible to meet the needs of the customer. Liquid Web provides numerous web platforms for use. The list includes Ruby on Rails and WordPress, as well as content management software like Joomla and Drupal. Whatever software clients may need, Liquid Web provides.

Open-source is an important integration into the infrastructure at Liquid Web. It is estimated that 80% of their infrastructure is hosted on Linux platforms. Liquid Web's own website is hosted on open source Operating System, CentOS, and their website hosted on the open-source Apache web server. Liquid Web strongly prefers open source software in their environment to provide a more universal support experience.

With a constantly growing client base, it is important for Liquid Web to be able to evolve their infrastructure. The step Liquid Web has taken to deploy more resources is the creation of more datacenters. Liquid Web has three datacenters within the Lansing area and has recently deployed a fourth location in Arizona. With the increasing number of customers in the Western U.S., Liquid Web wants to

enhance service to them by making their data close by. The location added geographic redundancy that Liquid Web did not previously have which can ensure the redundancy and availability of the information stored in their datacenters.

Security is crucial to the upkeep and uptime of the Liquid Web hosting environment. With websites being barraged by distributed denial of service attacks and defacements, being on the cutting edge with security is one of Liquid Web's top missions. A recent one million dollar investment by Liquid Web made improvements to its infrastructure to prevent DDoS attacks. The diverse skill set of the staff at Liquid Web also ensures security with each piece of the infrastructure from the network to the software.

Liquid Web has established a vast infrastructure that supports a large client base. They provide a vast array of software and hardware options tailored to meet any customer's needs. They have made large investments in expanding their infrastructure, and beefing up security to ensure a top-notch level of service. Liquid Web is establishing their company as a leader in web hosting with their premier infrastructure.