# symmetri

Symmetri provides website and web application hosting services via a custom server implementation platform constructed via Amazon Web Services (AWS), which delivers a highly scalable cloud computing platform with high availability and reliability, and the flexibility to enable customers to build a wide range of applications.

Infrastructure

We recommend building and deploying sites using the Drupal development and content management framework. Drupal is an extremely powerful world-class platform that is considered best in class among open source applications. Drupal is optimized for the Linux server environment and so the bulk of our client sites utilize LAMP elements hosted in Linux instances on the AWS network. We also provide the capacity to host in a Windows application server and SQL Server database architecture.

Our servers are established at multiple geographical locations to maximize access time by end-users. This ensures faster downloads and lower latency connections no matter where your site users might be located. This dispersed deployment can also support client regulatory restrictions that require data locality and ensure compliance.
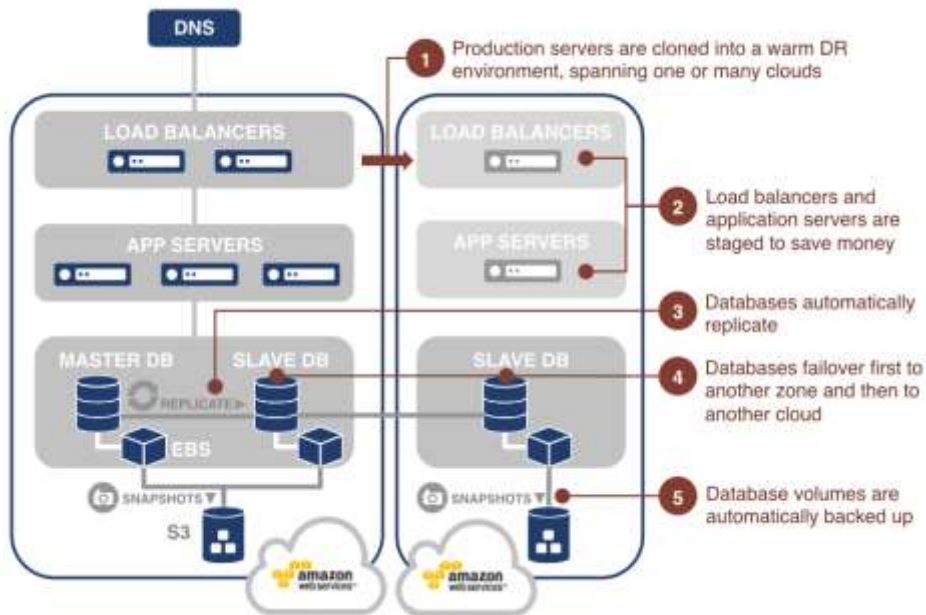
High Availability

Websites are automatically deployed in a load-balanced A/B configuration which includes synchronously replicated secondary application servers and database servers, each located in different data centers. Any network or hardware failure automatically triggers failover to the mirrored instance, with service interruption of no more than milliseconds. The downed component is then rebuilt immediately in a new location, to restore the mirrored configuration and ensure complete protection.

Disaster Recovery

Server files and databases are synchronized consistently and databases are also periodically copied to a centralized repository that is encrypted and with limited external access. Failover access is instantaneous, as described above, and restoration of archived data can be done in a matter of hours, not days.

Maximized Scalability

The availability of high scale, utility computing removes the constraints of traditional infrastructure, where capacity is no longer a barrier to delivering results of complex questions, in a short time frame. Provision the compute capacity you need, as and when you need it.

We provide the following three tiers of service:

- shared hosting (multi-customer web server and database)
- dedicated hosting in a single region (single-client server deployment)
- multi-region fail-over (backup servers located in geographically distinct areas)

We can also meet customized computing power needs, providing high CPU capacity, larger memory size, or more data storage as needed.

Security

In order to provide end-to-end security and end-to-end privacy, AWS builds services in accordance with security best practices, provides appropriate security features in those services, and documents how to use those features.

Physical Security. Amazon has many years of experience in designing, constructing, and operating large-scale data centers. AWS infrastructure is housed in Amazon-controlled data centers throughout the world. Only those within Amazon who have a legitimate business need to have such information know the actual location of these data centers, and the data centers themselves are secured with a variety of physical controls to prevent unauthorized access.

Secure Services. Each of the services within the AWS cloud is architected to be secure and contains a number of capabilities that restrict unauthorized access or usage without sacrificing the flexibility that customers demand.

Data Privacy. AWS enables users to encrypt their personal or business data within the AWS cloud and publishes backup and redundancy procedures for services so that customers can gain greater understanding of how their data flows throughout AWS.