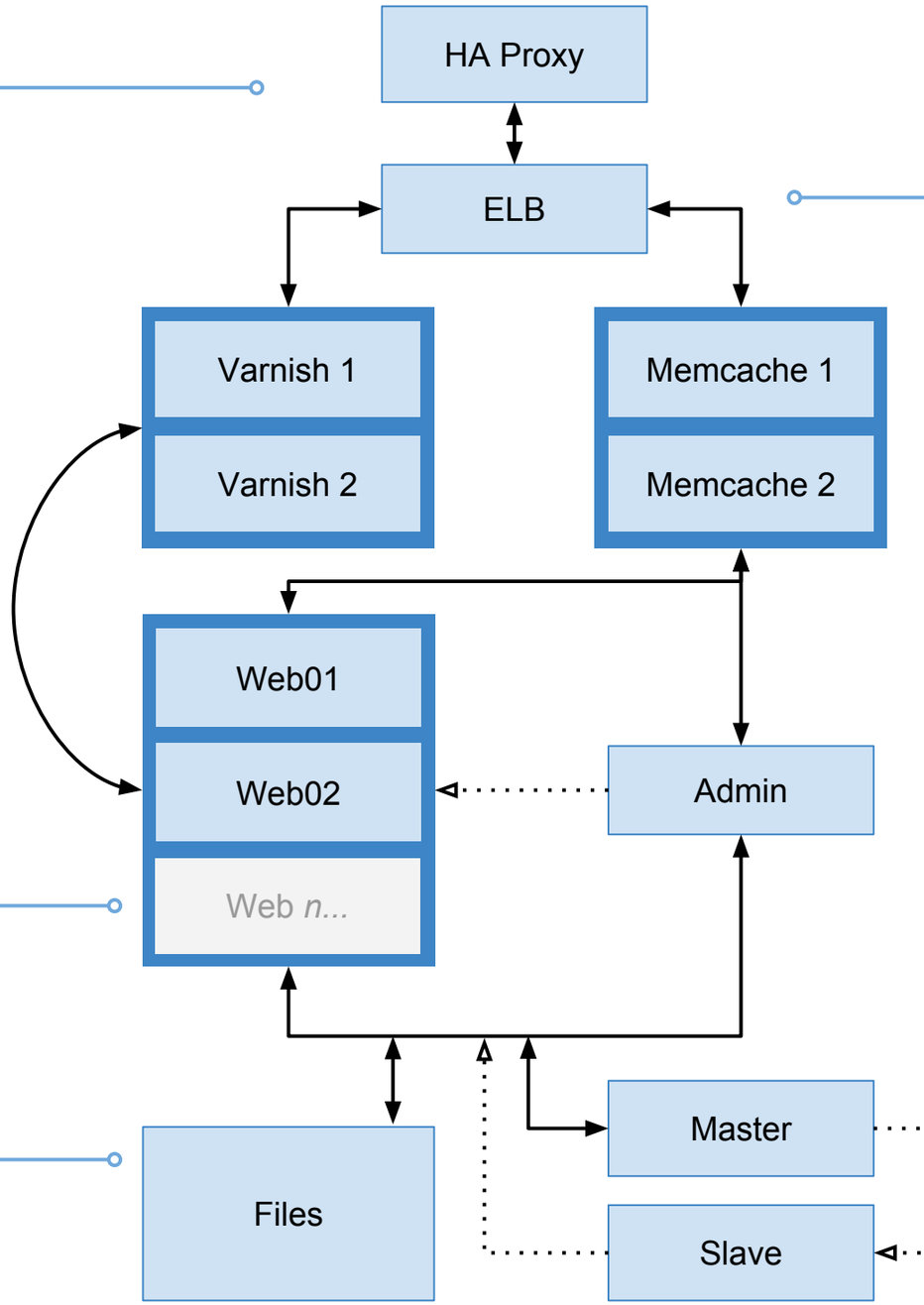
The "High Availability" balancer, or **HAProxy**, makes sure the site can accommodate high levels of traffic.

The **Varnish caches** create a "snapshot" of pages that visitors commonly request and present the snapshot instead of calling back to the server over and over.

Varnish refreshes itself roughly every ten minutes. The Admin layer is not subject to Varnish caching.

As traffic increases, **"auto-scaling"** goes into effect, generating entirely new web servers to handle the load. Web01 and Web02 are always present.

Images, videos, documents (PDFs, Word docs, etc.) and other files are stored here. This is a separate server (currently GlusterFS, soon to be Amazon S3).



The **Elastic Load Balancer** distributes traffic evenly so the site doesn't become overtaxed. It is part of the Amazon Web Services (AWS) suite.

Memcache stores database queries so that the master database doesn't have to answer redundant requests.

These are the webservers - **Web01, Web02, and Admin**. They hold the **Drupal** application. This layer is where content creators access Drupal and generate their content for the site. Admin is only accessible on the AAAS network, including VPN.

These are the **Master** and **Slave** databases. Data can be written to Master by the Admin layer, but data can only be read from the Slave. Site admins can choose which areas of the site read from Slave and which read from Master.