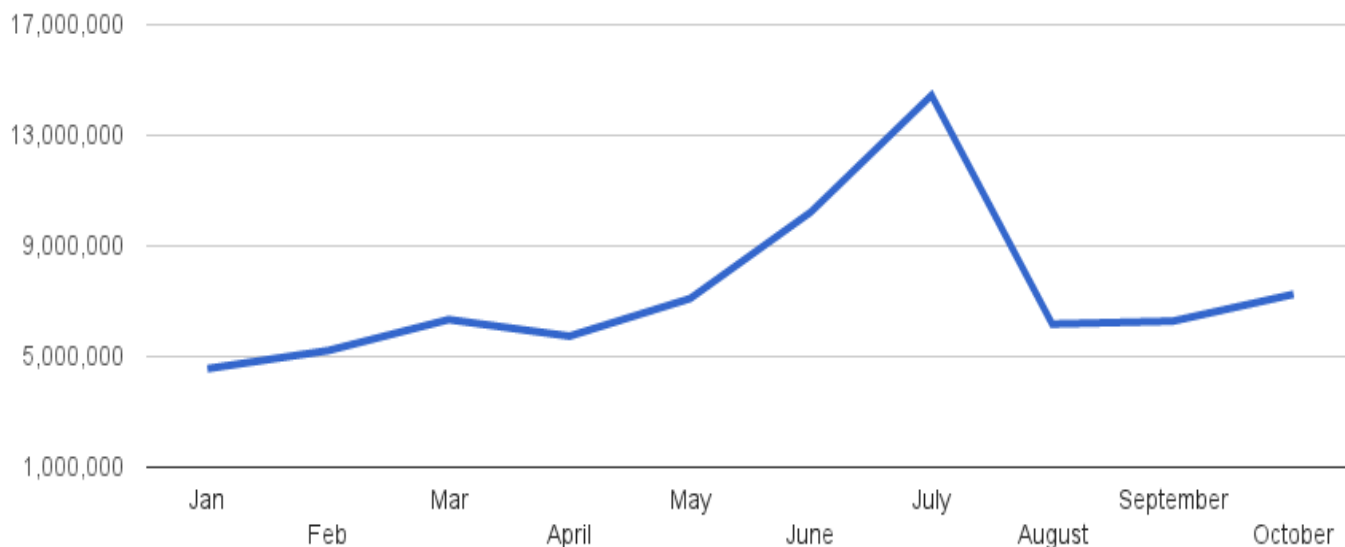


Update on Drupal Infrastructure

Drupal.Admins@cern.ch

9th November 2012

- We are hosting nearly 350 sites
- All sites are running Drupal version 7.16
- Drupal 7.17 update coming soon
- Site management procedures well established
- Drupal infrastructure traffic by number of hits:



Number of visits since 1-Jan-2012:



We have investigated some solutions to improve performance.

- One of the bottlenecks is the network-attached storage (NAS)
 - This is a problem for logged-in users, especially site developers when the caching is not used
 - We will move part of the Drupal code shared among all the sites to a RAM disk (tmpfs) which is extremely fast
 - Drupal core + centrally managed modules will be moved
 - This will be synchronized from a master copy on NAS to a local copy held in RAM memory on all web frontends
 - All files hosted in your local site directory (for example locally managed modules) will still be hosted on NAS
 - Another reason to use centrally managed modules!!



- We are also looking at improving the load balancer performance
 - Currently we are using Apache mod_proxy_balancer
 - This is a stable solution, but there are other solutions which would allow us to handle more connections
 - We are investigating: Nginex, Varnish and HAProxy
 - Native SSL support has been added to the latest release of HAProxy
 - Varnish would allow us to cache pages, in case of MySQL unavailability we would be still able to serve anonymous http requests
 - This is an area for improvement, but we will not introduce any changes that could affect the stability of the service, therefore more testing is needed.



Candidates for centrally managed modules:

libraries – 68 sites (installed on 20% of all sites, stable version)

views_slideshow - 45 sites (actively maintained, stable version)

entityreference – 39 sites (actively maintained, rc version)

recaptcha – 35 sites (actively maintained, stable version)

field_permissions – 35 sites (actively maintained, beta version)



The lists of your locally installed and all centrally managed modules always available at: http://yoursite.web.cern.ch/_site/

Site management interface

INFRASTRUCTURE	SERVICE STATUS
<ul style="list-style-type: none"> • File access (Web DAV client direct link: https://greg.web.cern.ch/_site/files or: webdavs://greg.web.cern.ch/_site/files) • Database Administration • Memcache Administration • E-groups Administration • Web site statistics • Log Viewer • Error display setting • Staged updates • Locally installed modules report • List of centrally installed modules • Back to drupal site administration 	<ul style="list-style-type: none"> • Service Level Status ■ Up • Lemon Monitoring (web servers) • Lemon Monitoring (database servers) <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Drupal CMS - Site Hosting Infrastructure</p> <p>availability: </p> <p>percentage: 100%</p> <p>status: available</p> </div> <p>See more at Service Level Status Overview</p>
INFRASTRUCTURE SUPPORT	COMMUNITY SUPPORT FOR CONTENT MANAGEMENT
<ul style="list-style-type: none"> • Request new drupal site • Request deletion of existing drupal site • Submit a general request • Report an incident 	<ul style="list-style-type: none"> • ENTICE web site • drupal-users e-group

[Back to infrastructure management](#)

Note: this site management interface is independent of drupal site state and configuration.

European Organization for Nuclear Research, CH-1211, Genève 23, Switzerland



- We continue working with the IT/DB colleagues on improving the stability of the database service
- Drupal database was split into two instances: production and development (03-Oct). During the intervention sites were in read-only mode for 2 hours
- Several service interruptions due to MySQL database crashes (caused by the Oracle VM instabilities)
- Databases migrated to physical machines (production DB on 10-Oct, development DB on 26-Oct)
- MySQL service has been stable since the migration



Questions?

