# MOODLE 2.8 UPGRADE PLAN

Moodle 2.7 and above requires at least PHP 5.4. PHP will need to be upgraded on moodle-d/e/f and moodle-admin. The upgrade to Moodle 2.8 is dependent on deployment of the archive as the archive will also act as a backup of production Moodle and can be used if we need to roll back. The best date to create the archive is on the last day of term (before courses are reset but before course admins take annual leave) Copying data from production Moodle to archive will take about 22 hours so assuming that copying the data for Moodle archive starts on Friday 17th July 2015, 5pm, the upgrade will start on the following morning.

Archive preparation guidelines can be found at <https://wiki.ucl.ac.uk/display/ISMoodle/Moodle+archive+preparation+guidelines>

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| **√** | **Date** | **Task** | **Who** | **comments** | | **Duration** |
| **Moodle Archive Preparation** | | | | | | |
|  | 29/05 | Advertise Moodle outage in isd-news, Moodle homepage, Week@UCL | ELE |  | |  |
|  | 12/06 | Copy the software | LTA | From production to Moodle-archive/14-15. This can be done a couple of weeks in advance | | 30 mins |
|  | 12/06 | Create an empty moodle archive database | DBA | Create database moodle\_archive\_1415 default character set utf8;  grant all privileges on moodle.\* to 'moodleuser'@'localhost' identified by 'yourpassword';  flush privileges; | | 10 mins |
|  | 12/06 | Change db and server settings |  | Modify local\_settings.php local  $LS->dbhost='localhost';  $LS->dbname=moodle\_archive\_1415'; $LS->dbuser='moodleuser'; $LS->dbpass=’\*\*\*\*\*';  $LS->wwwroot='https://moodle-archive.ucl.ac.uk/14-15';  $LS->dataroot='/data/moodle/14-15'; | | 10 mins |
|  | 12/06 | Ensure emails cannot be sent out | LTA | Modify config.php  $CFG->noemailever | | 10 mins |
|  | 12/06 | Disable the Portico enrolment block | LTA | Otherwise you’ll get errors when you turn editing on | |  |
|  | 12/06 | Add archive banner | LTA | Go to https://moodle-archive.ucl.ac.uk/14-15/admin/settings.php?section=theme\_ucl\_generic  Add the following to the custom css field for the ucl theme:  div#archivetopstrap{  background: url(https://moodle-archive.ucl.ac.uk/14-15/theme/ucl/pix/banner.jpg);  height: 60px;  }  Copy the banner image to /data/apache/htdocs/moodle/14-15/theme/ucl/pix  Update /data/apache/htdocs/moodle/14-15/theme/ucl/layout/includes/header.php to include:  <div id ='archivetopstrap'></div> | | 10 mins |
|  | 12/06 | Modify site name. | LTA | Goto <https://moodle-archive.ucl.ac.uk/14-15/admin/settings.php?section=frontpagesettings>  Update the ‘Full site name’ to UCL Moodle Snapshot 14-15 | |  |
|  | 12/06 | Ensure latex filter displays text correctly | LTA | Go to course 4083  If it doesn’t display correctly change the file permissions on /data/apache/htdocs/moodle/14-15/filter/tex/mimetext.linux to 0755 | |  |
|  | 12/06 | Fix search courses block | LTA | Modify /theme/ucl/layout/mydashboard.php  Replace:  <form method="get" action/course/search.php" …">  With:  <form method="get" action="/14-15/course/search.php … "> | |  |
|  | 12/06 | Purge theme cache | LTA | Go to <https://moodle-archive.ucl.ac.uk/14-15/theme/index.php> and select clear theme cache. | | 1mins |
|  | 25/06 | Copy /data/moodle/filedir from Moodlevm-nfs to /data/Moodle/14-15 on Moodle-archive (~ 2Tb) | DCS | An incremental rsync will then be required on 17/07 but shouldn’t take very long as only modified files will need changing | | ? hrs |
|  | 16/07  8am | Start restore of moodle production db backup, of 16th July 03:00 hrs, into moodle-archive (moodle\_archive\_1415) db.  Once restore complete start replication from LIVE moodle-db-a into moodle-archive. | DBA | This will avoid the need for a 12 hr backup and restore of the moodle prod db for moodle archive on 17th July because both the database will be sync’d with prod. | |  |
| Start of upgrade  Start of Archive.  No access to production Moodle between Friday 17/07/15, 5pm until Wednesday 22/07/15, 9am | | | | | | |
|  | Friday17th 5pm | Put Moodle into maintenance mode and enable .htaccess\_maint.  Stop the cron job on moodle-admin  Remove moodle-e/f from SLB farm (stop Apache) | LTA  DCS | | * Site administration->Server -> Maintenance mode * Set ‘Maintenance mode’ to ‘enable’   In /data/apache/htdocs/moodle\_v2610\_scp7903  And  /data/apache/htdocs/moodle\_v286   * Rename .htaccess as .htaccess\_live * Rename .htaccess\_maint as .htaccess   Users visiting Moodle.ucl.ac.uk will see message similar to:  “*The Moodle 2.8 Upgrade has begun. Moodle will be unavailable from 5pm on 17/07/15 until 9am 22/07/15.*  *However a read only copy will be available from noon on Saturday 18th July at Moodle-archive.ucl.ac.uk/14-15*” |  |
|  | Friday17th 5pm | * Stop replication from moodle-db-a moodle\_live database to moodle-archive moodle\_archive\_1415 * Backup moodle\_live * Truncate the mdl\_log file on moodle-db-a, moodle\_live database. | DBA | |  | 8hrs |
|  | Friday17th 5pm | Rsync the data /data/Moodle/14-15 | DCS | | On moodle-archive  Shouldn’t take too long as only modified files need to be copied | 6 hrs |
| Archive ready for customising. The following instructions apply to moodle-archive.ucl.ac.uk/13-14 | | | | | | |
|  | Sat  18th  9 a.m. | Change cookie prefix to prevent session clashes | LTA | as more than 1 Moodle instance on same server admin->server->session handling. Change it to uclmoodle1415 | |  |
|  | Sat 18th | Add google analytics tracking code to header | LTA | Site admin>appearance>themes>ucl>google analytics  Add the following to ‘your tracking id’:  UA-41333975-7 | |  |
|  | Sat 18th | Change the url in the footer for ‘ucl moodle policy and guidelines’ | LTA | Goto site admin>settings>appearance>themes>ucl>footerlinks1  Edit the html source.  Replace <https://moodle.ucl.ac.uk/file.php/1/policies/Policy2010.html>  With  “https://moodle-archive.ucl.ac.uk/14-15/file.php/1/policies/Policy2010.html" | |  |
|  | Sat  18th | Remove the guest login button | ELE | Settings > site administration > plugins > authentication > Manage authentication > Guest login button = Hide | | 5 mins |
|  | Sat  18th | Create roles - student (read only) and tutor (read only). | ELE | See the [wiki page](https://wiki.ucl.ac.uk/display/ISMoodle/Archive+and+year-end+process+-+actions+required#Archiveandyear-endprocess-actionsrequired-Createthenewreadonlyroles) for more info  Steps to create role:  Note to carry out the following instructions, use a firefox browser with selenium plug-in installed.  1) Log-in as admin to newly created Moodle archive.  2) Go to Site Administration -> Users -> permissions -> define roles  3) Duplicate student role and rename to Student (read-only)  4) Click pencil icon to edit the new role  5) Ensure the 'advanced' button is clicked so it shows 'hide advanced'  6) Ensure that the capability list is not filtered i.e that the page shows all permisssions  7) Ensure the following check boxes for context are ticked: user, category, course, activity module and block  8) Select ‘Create this role’.  9) Edit the newly created role so that the correct page is displayed for the selenium script  10) Run the selenium script <https://wiki.ucl.ac.uk/download/attachments/14611543/selenium_student_read_only2.html>  to modify all relevant permissions: note to do this you'll need to use a firefox browser with selenium plug-in installed  Repeat steps 2 – 10 for the tutor (read only) role | | 1 h |
|  | Sat  18th | Change location of Site policy | ELE | Settings>site admin> security > Site policies >  ‘Change Site policy’ and ‘site policy url for guests’ to https://Moodle-archive.ucl.ac.uk/13-14/policy/about\_the\_archive.html | | 5 mins |
|  | Sat  18th | For the student (read only) role ensure the graded role is read-only | ELE | Grades>general settings  Untick all graded roles.  Tick student (read only) role | |  |
|  | Sat 18th | Remove the latest news block | ELE | Site admin>plugins>blocks>manage blocks  Hide latest news block | |  |
|  | Sat  18th | Prevent enrolment on courses.  Don’t think we need to do this anymore as the selenium script takes care of it. Rod will confirm | ELE | We used to do this by executing some sql but an easier option might be to hide all enrolment methods in enrolments>manage enrolment plugins and make them all hidden | |  |
|  | Sat  18th | update mdl\_user set policyagreed=0 | LTA | reset site policy flag for users | |  |
|  | Date yet to be agreed | Map Tutor, Non-editing tutor, Course administrator, Course creator, UCL Support staff and administrator into the Staff (read only) role. | LTA | See the [wiki page](https://wiki.ucl.ac.uk/display/ISMoodle/Archive+and+year-end+process+-+actions+required#Archiveandyear-endprocess-actionsrequired-Mapstudentstothereadonlystudentrole) for the queries to execute. Backup the table first:  mysqldump --add-drop-database -umoodleuser -p moodle\_archive\_1415 mdl\_role\_assignments > mdl\_role\_assignments.sql | | 30 mins |
|  | Sat  18th | Map Student and participant into Student (read only) role. | LTA | See the [wiki page](https://wiki.ucl.ac.uk/display/ISMoodle/Archive+and+year-end+process+-+actions+required#Archiveandyear-endprocess-actionsrequired-Mapstudentstothereadonlystudentrole) for the queries to execute | | 30 mins |
|  | Sat  18th | Modify links from moodle.ucl.ac.uk to moodle-archive.ucl.ac.uk/14-15Using admin/replace.php | LTA | links to files and resources are replaced with the archive location and not the live. The search/replace file is in admin/tool/replace/  The following tables need to be altered/dropped before this script will work:  alter table mdl\_course\_sections modify column summary longtext;  alter table mdl\_email\_mail modify column body longtext;  alter table mdl\_resource\_old modify column intro longtext; | | 30 mins |
|  | Sat  18th | Modify Moodle-archive/index.php | LTA | Add url of new instance. Urls of archives should be displayed with the most recent at the top. | |  |
|  | Sat  18th | Redirect users visiting Moodle.ucl.ac.uk to Moodle-archive | LTA | Message on Moodle-archive/index will display similar to:  “Moodle is being upgraded and will be unavailable until 22/07/15. However, a read- only archive can be accessed from the links below…” | |  |
| Moodle-archive is available to users from noon on Saturday 18th July. | | | | | | |

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| SLB Farm name: | moodle.ucl.ac.uk |
| App Server : | Moodle-d.ucl.ac.uk , moodle-e.ucl.ac.uk, moodle-f.ucl.ac.uk |
| Database Server: | Master: moodle-db-a.ucl.ac. Slave: moodledb-c.ucl.ac.uk |
| Data Server: | moodlevm-nfs.ucl.ac.uk |
| Path to code: | /data/htdocs /moodle |
| Path to data directory: | /data/moodle |
| Database: | moodle\_live |
| Date of Upgrade: | 17/07/2015 – 22/07/2015 |

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| Moodle 2.8.6 Upgrade begins , assumes archive deployed | | | | | |
|  | Fri 17th | Check that we have maintenance mode enabled and login is redirected as per .htaccess at root level | LTA | * <https://moodle.ucl.ac.uk> * Maintenance mode message should be displayed   “*The Moodle 2.8 Upgrade has begun. Moodle will be unavailable from 5pm on 17/07/15 until 9am 22/07/15.*  *However a read only copy will be available from noon on Saturday 18th July at https://moodle-archive.ucl.ac.uk/14-15*” |  |
|  | Fri 17th (or anytime before) | Prepare v286 Release tag on moodle-d/e/f  (<https://svn.ucl.ac.uk/repos/isd/moodle28/trunk> ):   * Copy svn v286 trunk code/release tag to /data/apache/htdocs/moodle\_v286 * Create local\_settings.php from local\_setting\_template.php and edit related settings * Chmod 0755 filter/tex/mimetex.linux * Enable .htaccess\_maint | LTA | - Following parameters to be changed in local\_settings.php -  $LS->dbhost = 'moodle-db-a.ucl.ac.uk';  $LS->dbname = ‘moodle\_live';  $LS->dbuser = 'moodleuser';  $LS->dbpass =  $LS->wwwroot = 'https://moodle.ucl.ac.uk';  $LS->dataroot = '/moodlevm-nfs';   * Rename .htaccess as .htaccess\_old   Rename .htaccess\_maint as .htaccess | 15 mins |
|  | Sat 18th | Truncate mdl\_log table in the moodle\_live database | LTA | Delete\* from mdl\_log |  |
|  | Sat  18th | Enable v286 Release tag on moodle-d | LTA | Change target of ‘moodle’ symlink to point to moodle\_v286 | 15  mins |
|  | Sat 18th | Compare $CFG->wwwroot/config.php file with current config file | LTA |  |  |
|  | Sat 18th | Tail php error log | LTA | tail –f /var/log/httpd/error\_log |  |
|  | Sat  18th  12:30pm | Start upgrade from web browser | LTA | <https://moodle.ucl.ac.uk> | 2 hrs |
|  | Sat 18th  04:30pm | Purge cache after upgrade | LTA | Site administration->development-> Purge all Caches | 5 min |
|  | Sat 18th July 2014  5:00pm | Post upgrade Sanity Testing | LTA | Create courses  Create some activities within course  Create some resources within course  Check cache configuration, site admin-> plugins-> caching-> configuration |  |
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| Post-upgrade Tasks | | | | | |
|  | Sun  19th  10am | Final live testing | ELE | When upgrade script has completed. | 8 hrs |
|  | Mon  20th  8am | - Enable v286 release code on moodle-e/f  - Start apache | LTA | Change target of ‘moodle’ symlink to point to moodle\_v286 on moodlevm-e/f | 15 min |
|  | Mon  20th | Start Cron job on moodle-admin | DCS |  | 15  min |
|  | Mon  20th | Disable .htaccess\_maint | LTA | On moodle-d/e/f  - rename .htaccess to .htaccess\_maint  - rename .htaccess\_live to .httaccess | 15  min |
|  | Mon  20th | Disable Moodle maintenance Mode | LTA | [https:/moodle.ucl.ac.uk/admin](https://moodle-dr.moodle-loadtest.ucl.ac.uk/admin)  Settings > Site administration > Server > Maintenance Mode | 15  min |
| Moodle 2.8.6 available to users from 9am on 22/07/15 | | | | | |

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| Rollback Plan | | | | |
| 1 | Restore pre-upgrade database backup to moodle\_live | DCS |  | ? |
| 2 | Update symlink ‘moodle’ under /data/apache/htdocs on moodle-d | DCS | * Point to moodle\_v2610 codebase instead of moodle\_v286 |  |
| 3 | Data directory(/data/moodle) restore won’t be necessary on moodlevm-nfs | DCS | * We will restore latest data folder backup only if something goes wrong on moodlevm-nfs during Sanity Testing after rollback. This should not take too long. Folders that might have been changed while upgrading are as below,   /data/moodle/localcache  /data/moodle/cache  /data/moodle/sessions  /data/moodle/temp  /data/moodle/lang | ? |
| 4 | Check local\_settings.php script configuration on moodle-d | LTA | $LS->dbhost ='moodledb.ucl.ac.uk';  $LS->dbname = 'moodle\_live'; $LS->dbuser = 'moodleuser'; $LS->dbpass = ;  $LS->wwwroot = 'https://moodle.ucl.ac.uk';  $LS->dataroot = '/moodlefs';  $LS->noemailever = false; | 5 mins |
| 5 | moodle.ucl.ac.uk within webbrowser should point to moodle-v2.6.10 | LTA |  | 10 mins |
| 6 | Sanity Testing | LTA | * Create courses * Create some activities within course * Create some resources within course * Check cache configuration, site admin-> plugins-> caching-> configuration | 30 mins |
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