

Distance and E-Learning Unit, ESD elearning@qmul.ac.uk. 020 7882 2816 FB 3.02, Mile End		
Document type: Briefing paper	Author: Eoin McDonnell, Senior Learning Technologist	Date: 08/12/2009
Virtual Learning Environment Description of Service 1.0		
For: QMUL Staff	Status: QMUL-only	Contact: Eoin McDonnell
Summary: This document gives an overview of how the VLE is situated at QMUL		

Introduction and Scope of this Document.....	1
First Principles of the VLE at QMUL.....	1
How is the VLE situated at QMUL?.....	1
Lines of Support and Responsibilities.....	1
The VLE is refreshed annually	3
Summative Assessment	3
Downtime.....	3
Weekly downtime	3
Annual downtime.....	4
Irregular downtime	4
Copyright and Intellectual Property	4
Data Protection	4
Production of E-Learning materials.....	4
Revision History	4

1. Introduction and Scope of this Document

Blackboard CE8 (formerly 'WebCT') is currently the College's centrally supported Virtual Learning Environment (VLE).

Any member of staff at QM can make use of Blackboard. It can be accessed from any computer with a web browser and an Internet connection. There are, at the time of writing, over 1000 online course areas on Blackboard being used across the College in a variety of different ways. Use ranges from simply making lectures notes available online through to course areas which actively support collaboration between campus-based and distance-learning students.

This document provides an overview of how the VLE is situated at QMUL and how it is run. It does not provide comprehensive detail of procedures - this can be found in other documentation. It is a top-level description. The description of service is broad in scope and will be applicable to future VLEs.

Specific questions should be addressed to Eoin McDonnell at e.mcdonnell@qmul.ac.uk. Eoin McDonnell has operational management responsibility for the VLE and should be considered the first point of contact for any questions on this document.

2. First Principles of the VLE at QMUL

The VLE is a live environment provided as a tool for learning and teaching, and for aspects of course management.

1. It is refreshed annually. This means that, while teaching materials can be kept on the system from year-to-year, student-generated data (including assessment information such as grades and exam submissions) is removed
2. The VLE reflects the structure of the Academic Model at QMUL.
3. The VLE is provided as a service for members of QMUL.
4. The VLE is not an alternative nor a substitute for an SIS, a remote working system, staff intranet, student portal, CMS or other system.

3. How is the VLE situated at QMUL?

DELU (the Distance and E-Learning Unit) oversees the VLE across QMUL, and report to the E-Learning Project Board and the Information Services Board on VLE matters. They are responsible for devising and implementing strategy for e-learning which includes the following areas as they relate to the VLE: recommending upgrades, changes, doing evaluations, all course and user administration, user support and the development of staff and students who are interested in using the VLE effectively.

The multiple servers that the VLE runs on, the database and of course the network infrastructure are all maintained by IT Services (ITS). While the DELU are sponsors of the system, they rely on IT Services to run the servers, to perform upgrades and maintenance, maintain the networks and the College computers that people use to access the VLE. IT Services also liaise with Blackboard over product developments, plug-ins, upgrades, licenses and bugs.

3.1 Lines of Support and Responsibilities

3.1.1 Strategic Management

DELU evaluates usage of the VLE, reports on it to Senior Management, and is responsible for monitoring trends on the use of VLEs and e-learning applications across UKHE and internationally. DELU are also responsible for providing strategic guidance on future VLE progression.

3.1.2 User Support

Application support for users will be delivered by the DELU. This involves the administration of course creation, fulfilling user access requests, troubleshooting user problems and making service announcements.

DELU provides user support for staff and students. This is delivered in the form of extensive online materials and email-based technical support. Users are encouraged to submit support queries via a web form. Any queries sent to DELU will be answered within two working days (College closure days excepted). In practice a reply is commonly sent within a few hours. However, there is an expectation that users will consult the online support pages before submitting a help request.

There are regular VLE service announcements on the DELU website, which also appear on the log in page of the VLE and as announcements inside the VLE itself. Users can also subscribe to these via RSS feed.

ITS provide second-tier support, troubleshooting, diagnosis and issue resolution via the vendor. DELU provide first line support and may escalate an issue to ITS. If necessary, the issue can be then be taken up with the vendor. Direct user support, via the ITS Helpdesk, is limited to addressing issues with user College IT accounts and network connectivity. ITS will not address any issues with the application, its integration into other College systems (e.g. the current Student Record System) in regards to enrollment issues, or any issues students may encounter accessing the VLE (or content via the VLE) on the Teaching Service.

3.1.3 Training and Development

Training and development of staff will be delivered by the DELU. This consists of technical training, educational development, and advice about good practice. DELU offers face-to-face training in the form of a programme for staff at QMUL (details are available on ESD's course booking system) and bespoke sessions arranged to suit the needs of staff and academic departments, including, for example, student inductions. Just-in-time technical training is delivered by self-directed web-based materials such as printable pdf's and videos. Requests for support and training materials for students or staff are to be directed to the DELU so that they can be provided centrally and trends in support needs can be monitored across College. DELU may work in tandem with staff employed in departments to give local ICT Support.

3.1.4 Hardware and system-level application support

ITS are responsible for installing and maintaining the hardware necessary to run Blackboard CE8. This includes application and database servers, with sufficient attached storage. The servers have UPS attached to reduce the risk of data loss during power outages. Nightly tape backups are performed to protect against data loss in the event of hardware failure. There is identical hardware provided for both test and live systems. The test system can therefore fulfill a role as a fall-back platform in the event of a catastrophic failure of the live system.

ITS install, upgrade and perform 'system level' configuration of the application and database software (Oracle). When upgrades or patches are released by the vendor, they are applied to the test system by ITS for user acceptance testing by DELU. These upgrades are then applied to the live system at a time agreed with DELU. Every effort is made to minimise down-time, typically doing the work out outside office hours. Periodically maintenance also needs to be carried out on the operating systems, database software and network infrastructure. Any interruption of service is agreed between ITS and DELU and announced to users in advance.

ITS configure and / or adapt the system to be integrated with other College systems. Notably the VLE is integrated with the current Student Record System (SRS) and the central College authentication service. Data from these systems (e.g. enrollment information and user account details) is refreshed nightly. It is also configured to use third-party services provided by Wimba (Wimba Voice Tools), Echo360 and Submit.ac.uk (TurnItInUK service). The existing integration into the SRS will be duplicated for SITS, the new SIS (Student Information System) going live in August 2010 .

3.1.5 Teaching using the system

Existing IT Regulations are extant for users of the VLE.

A primary contact is assigned to each course area. DELU will consider this member of staff as the first point of contact for a course area. They will be considered to have authority over the course area. A name and email address for this individual will be requested annually during Rollover. This member of staff is responsible for monitoring access-rights for students and colleagues.

Teaching staff using the system have a responsibility to ensure that any materials distributed through the system are current, correct and accessible by their students. Staff are expected to alert DELU to any technical needs their students or colleagues may have in a timely fashion.

Staff are also expected to accept responsibility for some aspects of course management - reading and taking heed of service announcements and the archiving student-generated data before Rollover.

3.1.6 Students using the system

Existing IT Regulations are extant for users of the VLE.

Students have a responsibility to use the support pages prior to submitting a technical request. They should read and take heed of service announcements. They should also ensure that they have access to necessary course areas in good time (e.g. well in advance of a coursework submission).

4. The VLE is refreshed annually

This process is termed 'Rollover'. Rollover is essentially 'cleaning house' on the VLE. Existing course areas are backed-up, deleted from the system and replaced with fresh versions for the new year. These fresh areas will have the files and structure of the previous ones but all student-generated data will be removed to make room for the new cohort. After Rollover staff will no longer have access to old course areas. This process will take place during the summer vacation, typically on the week following resits. We do not archive course areas on the VLE, nor do we archive exam papers, exam results, coursework submissions or other student data from past years. As with traditional paper scripts and coursework submissions, it is the responsibility of the department to store these in a secure fashion.

Rollover is an essential process for these reasons:

1. The VLE is a live teaching environment; data that must be kept for a longer period of time than the academic year must be archived off the VLE. This means that exams, assignment submissions, etc. must be kept locally by departments under the same regulations that govern paper copies, and that final examination marks are stored in the Student Information System.
2. There are direct lines of ownership and responsibility for course areas. This information is refreshed each year to insure that the contact for a course area is current and to ensure that staff who may no longer teach on a course do not retain access to student information.
3. As the system grows in size unused content must be removed. The VLE is a live system with thousands of users logging on each day. A system with such heavy use inevitably needs close monitoring and it is regularly serviced to insure it remains secure and available. We try to keep servicing to out of hours, but the more content there is the longer it takes to perform maintenance tasks, which means more downtime for users.
4. We need to minimise the problem of obsolete courses which have not been accessed in a long time. These courses sometimes have students enrolled on them but have no staff involvement. This happens easily when a staff member leaves the College, or has set up a course as an experiment and has forgotten about it. The annual refresh prevents course areas atrophying over the years.

5. Summative Assessment

Existing policies regarding the storage of exam information are extant. The VLE is a live environment and critical student data should be exported and stored in a secure fashion.

Where the VLE is used to publish grades to students it should be noted that the Student Information System (SIS) is the definitive source of student data. Any data, for example exam grades, distributed through the VLE should always be considered provisional.

Summative exams may take place using the VLE as an assessment tool. Any department doing so must follow the guidelines provided by DELU which are reviewed annually.

6. Downtime

6.1 Weekly downtime

The VLE is restarted on a weekly basis for basic and routine application maintenance. The VLE is automatically restarted at midnight every Sunday. Typically this takes ten to fifteen minutes. There are two reasons for this taking place on Sunday evening:

1. It does not interrupt SRS integration which runs on Friday and Saturday nights

2. In the unlikely event of a failure to restart someone can investigate on Monday morning.

6.2 Annual downtime

The VLE is brought offline for one week each year. In practice this is often reduced to four working days. This takes place the week after resits according to the central College calendar. This is to allow for Rollover (as described above) to take place and also for any major upgrades.

6.3 Irregular downtime

The VLE will occasionally need to be brought offline for maintenance or upgrades. DELU and ITS will endeavour to give two weeks notice of these events but in some cases this will not be possible.

7. Copyright and Intellectual Property

College policies and procedures are extant in this area. Queen Mary holds the intellectual property rights, expressed as copyright of all lecture materials, delivered by Queen Mary staff who hold terms and conditions of service that make reference to the Code of Practice on the Exploitation of Intellectual Property (see http://www.qmul.ac.uk/corp_docs/research/CoPintellectualProperty.html).

Users have a responsibility to ensure that they comply with any issues regarding the copyright of any content which they may use in their course areas. Users are encouraged to take advantage of Creative Commons materials when producing learning materials.

8. Data Protection

College policies and procedures are extant in this area. Note that the staff who support the system at QMUL reserve the right to access any course area and any data contained therein to carry out support tasks. Staff should take special note of this when describing access (e.g. to a patient who has given rights to teaching staff to use their image for learning materials within the NHS Trust but has not explicitly stated that staff outside of the Trust may view materials in a technical support capacity).

9. Production of E-Learning materials

DELU does not provide a production service. Production of e-learning materials is the responsibility of course providers, whether they are built in-house or purchased from a third party. DELU can provide consultancy on their production and also facilities and equipment (e.g. software and video equipment).

DELU will not interfere with, adapt or change the content in any course area. For example, if staff create broken links or upload inaccessible files - it is their responsibility to rectify these for their students. DELU can advise on how to do so.

If a third-party provider has been contracted by an academic department to provide either content or services, DELU cannot provide support for these services.

Revision History

Version	Date	Author	Comments
1.0	08/12/2009	Eoin McDonnell	