

# **Scalability issues for an institution-wide implementation of WebCT**

by Dr Lisa Wise, Information Technology Services, Monash University, Clayton 3800  
Refer queries to: [lisa.wise@its.monash.edu.au](mailto:lisa.wise@its.monash.edu.au)

## **INTRODUCTION**

WebCT began as a set of Web Course Tools for a single server in a department. It was developed, administered, maintained and used by a team of technically-savvy academics to deliver course material to their students.

This poster looks at how well the WebCT concept scales across a large institution where:

- 1) WebCT software is developed by the vendor,
- 2) WebCT as a service is administered and maintained by a central IT service group using data from central Admin service group
- 3) WebCT is used by academic staff across the institution teaching diverse student populations
- 4) WebCT training and support is required to show people how to use the course tools to achieve their teaching and learning goals.

## **1. WebCT Campus Edition Software**

- WebCT SE software architecture does not scale well to CE.
- Load-balancing and splitting of software and data across servers was not successful.
- The file-system-based “global database” severely overreached its limits.

Scalability of WebCT software requires a complete re-architecting of the entire WebCT system and requires a true underlying database and a content management system.

## **2. WebCT Administration**

- Single admin account and no database “record” locking, preclude safe delegation of administrative duties.

- LDAP authentication to an external data source places account management beyond the control of the WebCT.
- No system-level customisation for sub-groups without using separate servers.

### **3. Academics using WebCT**

- WebCT allows academics to create course websites with communication and quiz tools quickly, easily and with little support.
- Assumes that everybody understands the context in which each academic is working.

Context does not scale well in a diverse institution and central support staff need to understand specific contexts for WebCT users.

### **4. WebCT training and support**

- Large scale training for WebCT moves away from how an individual course might be enhanced by WebCT towards how to fit generic courses into standardised template-based WebCT structures.
- Major WebCT support issues centre on accounts and passwords (now a central IT or admin issue) or access to materials within courses (behind passwords).

As support services are centralised, the requisite local knowledge is lost and a new layer of bureaucracy exists between the academic, their course material and their students.

## **CONCLUSION**

WebCT Campus Edition exposes scalability limitations of WebCT software (hopefully addressed in Vista).

Administration, maintenance, training and support for WebCT at an institutional level require formalised structures and communication channels not required by smaller implementations.

Large scale implementations can improve overall reliability and professionalism of a Learning Management System service but at the cost of flexibility and autonomy for the individual user groups.

