

INFORMATION SECURITY CHECKLIST

Software Application Security Checklist

Introduction

- 1. Complete this checklist for all new or substantially modified applications that store or access <u>Medium</u>, <u>High</u> or <u>Very High</u> <u>Risk Information</u> prior to storing or accessing <u>UBC Electronic Information</u>.
- 2. This checklist has been issued by the <u>Chief Information Officer</u> to supplement the <u>Development and Modification of Software Applications</u> standard. Questions about this checklist may be referred to <u>information.security@ubc.ca</u>.

Security Requirements Checklist

1.	 A Data-Flow Map must be constructed to clearly identify <u>UBC Electronic Information</u> at rest and in transit: a. information at rest, whether being stored for use/archive or exported for reporting/analysis, must comply with the <u>Encryption Requirements</u> standard; and b. information in transit must comply with the <u>Transmission and Sharing of UBC Electronic Information</u> standard.
2.	Where possible, applications must authenticate <u>Users</u> through central authentication systems such as UBC's Enterprise Active Directory (EAD) or CWL. If authentication will not be done through CWL or EAD then user account passwords must not be stored in clear text (see the <u>User Account Management</u> standard for more information).
3.	 University IT Support Staff must implement access controls to servers as follows: a. Users must be given the minimum access privileges required to perform their job function following the Principle of Least Privilege, and procedures must be enforced to authorize, add, remove, and modify user access, in accordance with the Securing User Accounts standard; b. Passphrases must be required for all accounts and must meet the requirements of the Passphrase and Password Protection standard; and c. wherever possible, access to servers should be logged in accordance with the Logging and Monitoring of UBC Systems standard.
4.	Applications resident on <u>UBC Systems</u> that are <u>Internet-facing</u> must be setup in compliance with the <u>Internet-facing Systems and Services</u> standard.
5.	To avoid data loss and ensure the availability and integrity of UBC Electronic Information stored on UBC Systems, the Administrative Head of Unit must ensure that this information is backed up regularly (typically daily or weekly) in accordance with the Backup guideline . These backups must be stored in a secure location with appropriate user access and any required encryption controls, as described in the Encryption Requirements standard.
6.	If the application will be outsourced and make use of <u>Service Providers</u> then the <u>Administrative Head of Unit</u> must ensure that the application will be compliant with the <u>Outsourcing and Service Provider Management</u> standard prior to going into production.
7.	The application must be hardened and pass vulnerability assessments as described in the <u>Vulnerability</u> <u>Management</u> standard.



Related Documents

Policy SC14, Acceptable Use and Security of UBC Electronic Information and Systems

Backup guideline

Development and Modification of Software Applications standard

Encryption Requirements standard

Internet-facing Systems and Services standard

Logging and Monitoring of UBC Systems standard

Outsourcing and Service Provider Management standard

Passphrase and Password Protection standard

Securing User Accounts standard

Transmission and Sharing of UBC Electronic Information

User Account Management standard

Vulnerability Management standard