INFORMATION SECURITY CHECKLIST

Software Applications Security Requirements Checklist

Introduction

1. Complete this checklist for all new or substantially modified applications that store or access Medium, High or Very High Risk Information prior to storing or accessing UBC Electronic Information.

2. This checklist has been issued by the Chief Information Officer to supplement the Development and Modification of Software Applications standard. Questions about this checklist may be referred to information.security@ubc.ca.

Security Requirements Checklist

☐ 1. A Data-Flow Map must be constructed to clearly identify UBC Electronic Information at rest and in transit:
   a. information at rest, whether being stored for use/archive or exported for reporting/analysis, must comply with the Encryption Requirements standard; and
   b. information in transit must comply with the Transmission and Sharing of UBC Electronic Information standard.

☐ 2. Where possible, applications must authenticate Users 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 User Account Management 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 Password and Passphrase 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 UBC Systems that are Internet-facing must be setup in compliance with the Internet-facing Systems and Services 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 Service Providers then the Administrative Head of Unit must ensure that the application will be compliant with the Outsourcing and Service Provider Access standard prior to going into production.

☐ 7. The application must be hardened and pass vulnerability assessments as described in the Vulnerability Management standard.
Related Documents

Policy 104, 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 Access standard
Password and Passphrase Protection standard
Securing User Accounts standard
Transmission and Sharing of UBC Electronic Information
User Account Management standard
Vulnerability Management standard