





Information Security Management System

ISO/IEC 27001:2013

SOURCE CODE MANAGEMENT POLICY

POLISI PENGURUSAN KOD SUMBER (PROGRAM)



For PTM Use Only	Version 1.0	Date: 25 th Nov 2014
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Doc No : UM-ISMS-POL-APP-001	Version 1.0	Effective Date : 1st Dec 2014

Revision History

No	Date of Change	Description	Page	Version	Approved By

ORIGINAL COPY

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1.0 Purpose

The purpose of this policy is to ensure that developers within Center for Information Technology (PTM), consultant and third party resource follow a proper management of the source codes in the processes of developing the software projects.



2.0 Scope

This policy applies to any software development project being developed internally, by the developer in PTM, consultant or third party programming resource. The intent of the policy is to enforce effective source code management for critical systems as listed below.

No	System Name	Effective Date
1	Integrated Human Resource Information System (iHRIS)	1 Feb 2015
2	eProcurement	1 March 2016
3	Integrated Student Information System (iSIS) Web Applications <ul style="list-style-type: none"> - Autonomi - Undergraduate / Postgraduate Admin 	1 Feb 2015 1 Feb 2015
4	Research Projects Management System	1 April 2016
5	Staff Portal	1 September 2016
6	Student Portal	1 November 2016

3.0 Policy

This policy consists of the following sections, namely organisation role and responsibility and policy statement.

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3.1 Organisation Role and Responsibility



Head of MIS	<ol style="list-style-type: none"> 1. Agreed on the software tools to be used in PTM 2. Validate and review source code before system store into the production server. 3. Approve Intellectual Property (code) to be taken off UM premises 4. Approve consultant or third party resources to remove source code from PTM server
Project Officer	<ol style="list-style-type: none"> 1. Assist Head of MIS (HMIS) to validate and review code
Developer	<ol style="list-style-type: none"> 1. Get approval from HMIS/ officer to store the code into the UM production server. 2. Use revision control tool to push the code into the UM production server
Administrator	<ol style="list-style-type: none"> 1. Give privilege or access control to the identified server. 2. Monitor and administrator the software

3.2 Source Code Control

3.2.1 Best Practice

Adopt best practices regarding Source Code Version Management.

1. Commenting & Documentation
2. Consistent Indentation
3. Avoid Obvious Comments
4. Code grouping
5. Consistent Naming Scheme

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6. Don't Repeat Yourself (DRY) Principle
7. Avoid Deep Nesting
8. Limit Line Length
9. Consistent Temporary Names
10. Capitalize SQL Special Words
11. Separation Code and Data

3.2.2 Versioning Tools

Use approved Source Code Control Tool to retain source code that is in development is required. Programming resources are required to retain source code versions periodically. These versions must, at a minimum, be associated with production release of the compiled code.

3.2.4 Secure Source Code

The business logic embedded within source code of production application released in University of Malaya (UM), is considered the intellectual property of UM. As such, source code is subject to the following policies:

3.2.4.1 Non Disclosure

All employees, consultant and third parties which will have access to UM intellectual property must complete an UM Non Disclosure agreement prior to receiving access to the source code.

3.2.4.2 Security

All source code need to be encoded before upload into production server.

3.2.4.5 Source Code Verification

No compiled source code will be released into production without first being verify for production by the Head of MIS or Project Officer for new software development and major changes (more than 30% module/system). Head of MIS / Project officer need to fill in and endorse the Source Code Verification Form.