





001:2013

# Information Security Management System ISO/IEC 27001:2013

## SOURCE CODE MANAGEMENT POLICY **POLISI PENGURUSAN KOD SUMBER (PROGRAM)**



<b>For PTM Use Only</b>	<b>Version 1.1</b>	<b>Date: 7<sup>th</sup> June 2017</b>
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 <b>UNIVERSITI MALAYA</b>	<b>SOURCE CODE MANAGEMENT POLICY</b>  <b>POLISI PENGURUSAN KOD SUMBER (PROGRAM)</b>	
<b>Doc No :</b> <b>UM-ISMS-POL-APP-001</b>	<b>Version 1.1</b>	<b>Effective Date :</b> <b>25<sup>th</sup> July 2017</b>

### Revision History

No	Date of Change	Description	Page	Version	Approved By
1	7 Jun 2017	Modified Item 1.0 Item 2.0 Item 3.1 Item 3.2 Item 3.3	2    3	1.1	Asiah Abu Samah

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## 1.0 Purpose

The purpose of this policy is to maintain and guarantee the security of information systems and applications.

## 2.0 Scope

This policy applies to all software development project across the board started from 1st August 2017.



## 3.0 Policy

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

### 3.1 Organisation Role and Responsibility

Role	Responsibility
<b>Head of MIS (HMIS)</b>	1. Approve related application team members/developers /coders to access the identified server.
<b>Project Officer</b>	1. Review the source code 2. Validate and review the source code before it is being deployed into the production server. 3. Control and record the changes of the source codes in production server
<b>Developer</b>	1. Get approval from Project Officer to deploy the modified code into the UM production server.
<b>Network Administrator</b>	2. Grant the privilege or access control to the related developers to access the identified server.

### 3.2 Source Code Management

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3.2.1 Software developers must adhere to the regulatory guidance as follows:

- i) Changes or modifications to the systems and applications must be controlled and recorded. Changes or amendments to the source code is subject to the requirement that has been approved.
- ii) New system/application or changes or amendments to the source code must go through the testing process and must be verified by the system owner.
- iii) Source code will not be released into production upon verification by the Project Officer for new software development and major changes (more than 30% module/system). Project officer needs to complete and endorse the Source Code Verification Form.
- iv) Critical applications should be reviewed and tested when there are changes to the operating system to ensure there is no adverse effect on the operation. HMIS or Project Officer should be responsible for monitoring improvements and corrections made by the developers;
- v) Access to the source codes must be restricted to authorized users only; and
- vi) Prevent any chance of information leakage where all employees, Consultant, and third parties who have an access to UM intellectual property must complete a UM Non- Disclosure agreement prior to receiving the access.

### 3.3 Best Practice

3.3.1 Software developers are required to adopt the best practices in writing source code. Below are the best practices shall be followed:

- i) Commenting & Documentation
- ii) Consistent Indentation
- iii) Avoid Obvious Comments

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- iv) Code grouping
- v) Consistent Naming Scheme
- vi) Don't Repeat Yourself (DRY) Principle
- vii) Avoid Deep Nesting
- viii) Limit Line Length
- ix) Consistent Temporary Names
- x) Capitalize SQL Special Words
- xi) Separation Code and Data

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