

Configuration Manual

MSc. Industry Internship
Msc. In Cyber Security

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MSc Project Submission Sheet



School of Computing

Student Name:	Abhishek Shetty		
Student ID:	21176078		
Programme:	Msc. In Cyber Security	Year:	2022-23
Module:	Industry Internship		
Supervisor:	Prof. Vikas Sahni		
Submission Due Date:	04/09/2023		
Project Title:	Enhancing Information Security Management System using ISO controls-based framework		
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I hereby certify that the information contained in this (my submission) is information pertaining to research I conducted for this project. All information other than my own contribution will be fully referenced and listed in the relevant bibliography section at the rear of the project.

ALL internet material must be referenced in the bibliography section. Students are required to use the Referencing Standard specified in the report template. To use other author's written or electronic work is illegal (plagiarism) and may result in disciplinary action.

Signature: Abhishek Shetty

Date: 01/09/2023

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Configuration Manual

Abhishek Shetty
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1. Introduction

This manual has detailed information on the requirements for the research and implementation conducted and the steps that must be followed to implement this project.

2. Software Requirements

The project is a combination of manual gap analysis and web-based framework gap analysis. The manual analysis was conducted using Microsoft Excel and the web-based framework was built using the React JS code on the Visual Studio Code. As it's a website. Below is the list of software used:

- Visual Studio Code - Version: 1.81.1 (user setup)
- Nodejs - v20.5.1.
- Microsoft Excel for Microsoft 365 MSO (Version 2307 Build 16.0.16626.20170) 64-bit
- Github – version: Free

3. System Requirements

- Processor - AMD Ryzen 5 4600H with Radeon Graphics
- Memory - Installed RAM 12.0 GB (11.9 GB usable)
- System Type - Windows 11 64-bit operating system, x64-based processor
- Edition - Windows 11 Home Single Language
- Version - 22H2
- OS build - 22621.2215

4. Installation

- Windows has a simple installation process and MS Visual Studio code has a very basic installer. The setup and installation can be found in this link: [Running Visual Studio Code on Windows](#)
- Node JS has to be installed which is a JavaScript runtime server environment. In this project, it has been used for server-side web development of the ISO web framework. The setup file can be found downloaded from the below link: [Download | Node.js \(nodejs.org\)](#)

5. Implementation

The manual gap analysis framework and the React JS code used for website are present in the zip file.

- File name: ISO27001_2022 - Manual Gap Analysis Framework
This file consists of the framework used for manual gap analysis and implementation.
- File Name: ISO_Web
This file consists of the React JS code used to develop the web UI for gap analysis
There are two ways to access this website:
 1. The website has been hosted on GitHub and is publicly accessible using this URL: [ISO27001:2022 Web Framework](https://github.com/236Abhishek/ISO_Web.git)
 2. The second approach to accessing the web framework is to clone the git project and run the project locally. To do so, perform the steps below:

- Install node js on your machine (link for download shared in software requirements)
- Open the command prompt and go to the drive you wish to save the project in and type:

git clone https://github.com/236Abhishek/ISO_Web.git and hit Enter

```
D:\>git clone https://github.com/236Abhishek/ISO_Web.git
Cloning into 'ISO_Web'...
remote: Enumerating objects: 99, done.
remote: Counting objects: 100% (99/99), done.
remote: Compressing objects: 100% (73/73), done.
remote: Total 99 (delta 34), reused 82 (delta 23), pack-reused 0Receiving objects: 65% (65/99)
Receiving objects: 100% (99/99), 917.05 KiB | 5.43 MiB/s, done.
Resolving deltas: 100% (34/34), done.
```

- On completion of cloning, go to the location of the project where you saved it, copy the path, and open it on cmd. Following that, type npm install. Below screenshot is for reference, please ignore the warnings:

```
D:\>cd ISO_Web
D:\ISO_Web>npm install
npm WARN deprecated stable@0.1.8: Modern JS already guarantees Array#sort() is a stable sort, so this library is deprecated. See the compatibility table on MDN: https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array/sort#browser_compatibility
npm WARN deprecated rollup-plugin-terser@7.0.2: This package has been deprecated and is no longer maintained. Please use @rollup/plugin-terser
npm WARN deprecated sourcemap-codec@1.4.8: Please use @jridgewell/sourcemap-codec instead
npm WARN deprecated w3c-hr-time@1.0.2: Use your platform's native performance.now() and performance.timeOrigin.
npm WARN deprecated workbox-cacheable-response@6.6.0: workbox-background-sync@6.6.0
npm WARN deprecated svgo@1.3.2: This SVGO version is no longer supported. Upgrade to v2.x.x.

added 1563 packages, and audited 1564 packages in 1m

254 packages are looking for funding
  run 'npm fund' for details

6 high severity vulnerabilities

To address all issues (including breaking changes), run:
  npm audit fix --force

Run 'npm audit' for details.
D:\ISO_Web>
```

- Next, type npm start. This command will now open the page in your browser or should be accessible by link: http://localhost:3000/ISO_Web

```
D:\ISO_Web>npm start

> iso-web@0.1.0 start
> react-scripts start

(node:54724) [DEP_WEBPACK_DEV_SERVER_ON_AFTER_SETUP_MIDDLEWARE] DeprecationWarning: 'onAfterSetupMiddleware' option is deprecated. Please use the 'setupMiddlewares' option.
(Use 'node --trace-deprecation ...' to show where the warning was created)
(node:54724) [DEP_WEBPACK_DEV_SERVER_ON_BEFORE_SETUP_MIDDLEWARE] DeprecationWarning: 'onBeforeSetupMiddleware' option is deprecated. Please use the 'setupMiddlewares' option.
Starting the development server...
```

localhost:3000/ISO_Web

ISO27001:2022 CONTROL CHECKLIST



Monthly Internship Activity Report

The Internship Activity Report is a 1-page monthly summary of the activities performed by you and what you have learned during that month. The Internship Activity Report must be signed off by your Company and included in the configuration manual as part of the portfolio submission.

Student Name: Abhishek Shetty

Student number: x21176078

Company: Data Resolve Technologies

Commencing: 29/05/2023

In the month of June, the following activities were performed:

- Meeting with the CISO and goal discussion
- Initiated the training of the company's Data Loss Protection Tool
- Understood the manual and automatic installation DLP
- Video training on the DLP advanced dashboard
- A tracker was created and shared with the CISO

Employer comments:

Above points were taken up by Abhishek, based on a discussion with me. Outcomes obtained were as per my expectation.

Student Signature: Abhishek Shetty	Date: 29/06/2023
Industry Supervisor Signature: Nagarjun Kota	Date: 30/062023

Monthly Internship Activity Report

The Internship Activity Report is a 1-page monthly summary of the activities performed by you and what you have learned during that month. The Internship Activity Report must be signed off by your Company and included in the configuration manual as part of the portfolio submission.

Student Name: Abhishek Shetty

Student number: x21176078

Company: Data Resolve Technologies

Commencing: 1/07/2023

In the month of July, the following activities were performed:

- Access Provisioned to the DLP tool for hands-on training
- Meeting with the CISO to achieve ISO27001:2022 for the organization
- Goal settings for the ISO27001:2022
- Discussed and companies IT documents shared, and NDA was signed
- Initiated the process of understanding the ISO compliance and ISMS structure
- Discussed the plan on the journey to implement the controls of ISO
- Initiated with the GAP analysis of the existing IT security policy structure with ISO controls

Employer comments:

The above points were taken up by Abhishek, based on the discussion with me. These are work-in-progress tasks, but the progress made so far has been satisfactory.

Student Signature: Abhishek Shetty	Date: 30/07/2023
Industry Supervisor Signature: Nagarjun Kota	Date: 31/07/2023

Monthly Internship Activity Report

The Internship Activity Report is a 1-page monthly summary of the activities performed by you and what you have learned during that month. The Internship Activity Report must be signed off by your Company and included in the configuration manual as part of the portfolio submission.

Student Name: Abhishek Shetty

Student number: x21176078

Company: Data Resolve Technologies

Commencing: 1/08/2023

- Continued the Gap analysis of ISO27001:2022
- Shared the missing aspects as compared with the ISO controls.
- Gap analysis of client IT guidelines with RBI requisites for IT outsourcing
- Team discussion with CISO and organizations IT on the process to initiate the evidence gathering for the controls.
- Received approval on initiating the ISO implementation.
- Initiated the process documentation of ISO controls

Employer comments:

The above points were taken up by Abhishek, based on the discussion with me. These are work-in-progress tasks for the company, but the progress submitted so far has been satisfactory.

Student Signature: Abhishek Shetty	Date: 25/08/2023
Industry Supervisor Signature: Nagarjun Kota	Date: 26/082023